ARCADIS Design & Consultancy for natural and built assets

Mr. Brian Bastek
RCRA Corrective Action and Permitting Section
RCRA Cleanup and Brownfields Branch
U.S. Environmental Protection Agency, Region 4
Sam Nunn Atlanta Federal Center
61 Forsyth Street SW
Atlanta, Georgia 30303-8960

Arcadis U.S., Inc.
10352 Plaza Americana Drive
Baton Rouge
Louisiana 70816
Tel 225 292 1004
Fax 225 218 9677
www.arcadis.com

ENVIRONMENT

Subject:
Vapor Intrusion Assessment Report
Grenada Manufacturing, LLC, Grenada, Mississippi

Date:
June 1, 2016

Contact:
John Ellis

Extension:
208

Email:
john.ellis@arcadis.com

Our ref:
LA003307.0001.00008

Dear Mr. Bastek:

Arcadis U.S., Inc., on behalf of Grenada Manufacturing, LLC, is submitting the Vapor Intrusion Assessment Report as required by the approved Interim Measures Work Plan, dated September 11, 2015.

Please contact me if you have any questions regarding the attached report.

Sincerely,

Arcadis U.S., Inc.

John Ellis
Senior Project Manager

Copies:
Grenada Manufacturing, LLC

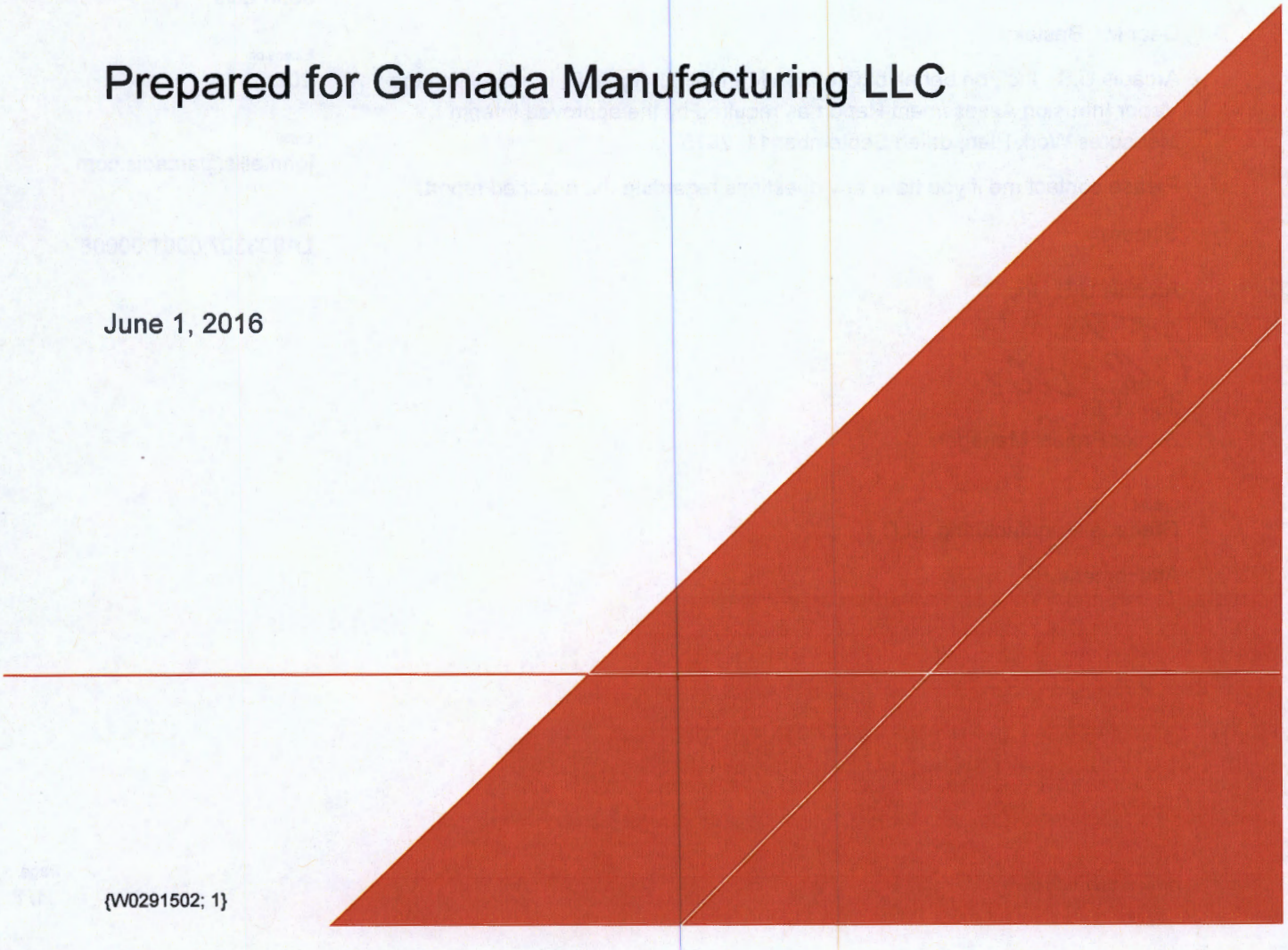
Attachment

ARCADIS Design & Consultancy for natural and built assets

VAPOR INTRUSION ASSESSMENT REPORT

Prepared for Grenada Manufacturing LLC

June 1, 2016



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VAPOR INTRUSION ASSESSMENT REPORT

I have reviewed this document in sufficient depth to accept full responsibility for its contents.

George E. Cook, RPG
Staff Geologist
Mississippi Registration Number 0889



John Ellis
Associate Vice President/Certified Project Manager

Prepared for:
Grenada Manufacturing, LLC
635 Highway 332
Grenada, Mississippi 38901

Prepared by:
Arcadis U.S., Inc.
10352 Plaza Americana Drive
Baton Rouge
Louisiana 70816
Tel 225 292 1004
Fax 225 218 9677

Our Ref.:
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June 1, 2016

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E Laboratory Analytical Data Reports – Soil Gas, Indoor Air, Sub-Slab Vapor, Groundwater, and Soil (provided on CD)

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EXECUTIVE SUMMARY

Arcadis U.S., Inc., has prepared this Vapor Intrusion (VI) Assessment Report on behalf of Grenada Manufacturing, LLC, for the facility located at 635 MS-332, Grenada, Mississippi (facility). The VI assessment focused on a residential area north of the facility in a neighborhood known as Eastern Heights and, more specifically, on six houses located along Lyon Drive. These six houses are herein referred to as the VI Focus Area. Components of the VI assessment included sampling and analysis of indoor air, ambient air, sub-slab vapor, soil gas, groundwater, and soil, as well as collection of geotechnical samples. Additionally, potential receptors, exposure routes, and migration pathways were assessed.

The VI assessment and scope of work were detailed in the revised Interim Measures Work Plan (IMWP) dated August 28, 2015 (subsequent final revision dated September 11, 2015), and conditionally approved by U.S. Environmental Protection Agency (USEPA) Region 4 in their September 4, 2015, letter. The constituents of concern (COC) list was detailed in the revised IMWP and also approved by the USEPA. The scope of work included the following:

- Installation and two rounds of sampling of eight soil gas ports (SG-1 through SG-8) in the vicinity of the VI Focus Area.
- Collection and analysis of two rounds of ambient air, indoor air, and sub-slab vapor samples from the six homes in the VI Focus Area.
- Installation of ten vertical aquifer profiling borings located in the vicinity of the VI Focus Area and collection and analysis of soil and groundwater samples from these borings. These samples were analyzed for a wider range of constituents, beyond the VI COC list, including volatile organic compounds (VOCs), semivolatile organic compounds, and metals.

Field activities were conducted in September 2015, October 2015, and March 2016. The laboratory results of the samples collected were evaluated against the USEPA residential Vapor Intrusion Screening Levels (VISLs) to screen for potential impacts to residential homes in the VI Focus Area. Additionally, data collected during the assessment activities were used in the "multiple lines of evidence" approach discussed in the USEPA OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air (USEPA 2015) (OSWER Technical Guide).

Based on the VI assessment conducted in the VI Focus area and its vicinity, the following key findings have been identified:

- Indoor air detections of trichloroethene (TCE) and some other VOCs during the September 2015 sampling event were similar to ambient air concentrations, indicating the typical exchange of indoor air with ambient air.
- Other VOCs detected in the indoor air samples appear to be from background sources because most of these VOCs were not detected in either shallow groundwater or sub-slab vapor samples.
- Utility corridors (from leakage or transport within the corridor) and shallow soils are potential sources of the other VOCs that are not related to VI from a groundwater source.

- TCE concentrations observed in shallow groundwater above the groundwater-to-vapor VISL were limited and sporadic in this assessment and in past investigations.
- The surficial soil is primarily silt and clay with a high moisture content and low air-filled porosity. The geotechnical properties demonstrate that the surficial soils have a low potential for vapor migration.
- The VI pathway is incomplete.

1 INTRODUCTION

Arcadis U.S., Inc. (Arcadis) has prepared this Vapor Intrusion (VI) Assessment Report on behalf of Grenada Manufacturing, LLC for the facility located at 635 MS-332, Grenada, Mississippi (facility). This VI Assessment Report documents the performance of the scope of work agreed upon by Grenada Manufacturing, LLC, and U.S. Environmental Protection Agency (USEPA) Region 4 in the revised Interim Measures Work Plan (IMWP) dated August 28, 2015 (subsequent final revision dated September 11, 2015) and included in Appendix A. The revised IMWP was conditionally approved by USEPA Region 4 in a letter dated September 4, 2015, which is also included in Appendix A.

The VI assessment focused on a residential area north of the facility and, more specifically, on six houses located along Lyon Drive. These six houses are referred to as the VI Focus Area. The location of the facility and VI Focus Area are shown on Figures 1 and 2. The VI assessment included sampling and analysis of indoor air, ambient air, sub-slab vapor, soil gas, groundwater, and soil, as well as collection of geotechnical samples. Additionally, potential receptors, exposure routes, and migration pathways were assessed.

2 BACKGROUND

Based on monitoring results from groundwater sampling conducted at Monitoring Well MW-20 located north of the facility, 17 soil gas monitoring probes (VP-1 through VP-17) were installed and sampled to further assess this area. Groundwater samples also were obtained from sample locations WL-1, WL-2, WL-6, WL-10, WL 11, WL-12, WL-13, WL-15, WL-16, WL-17, and TW-18S/D. The groundwater sample locations correspond to the soil gas monitoring probes (VPs) with the same number. Subsequently, six additional soil gas monitoring probes (VP 101, VP-103, VP-108, VP-110, VP-112, and VP-114) were installed and sampled. Sample locations are shown on Figure 2.

Given the construction of the soil gas monitoring probes, groundwater is sometimes encountered in probes; therefore, water samples were collected from the following monitoring probes: VP-1, VP-2, VP-4, VP-5, VP-6, VP-7, VP-8, VP 10, VP-11, VP-12, VP-14, VP-15, VP-16, VP-17, VP 101, VP-103, VP-106, VP 107, VP-108, VP-110, VP-112, and VP-114. The data and a preliminary evaluation from the sampling were submitted to USEPA Region 4 in a letter dated January 17, 2014. A figure summarizing the groundwater data obtained from the soil gas monitoring probes is provided in Appendix B.

More recently, additional groundwater evaluations were conducted in several areas around the facility. A report entitled Moose Lodge Road Area Additional Investigation Report: Comprehensive Study Area Groundwater Evaluation was submitted to the USEPA in February 2016 (T&M 2016). This report provided a summary of recent and historical investigations and monitoring work completed throughout the study area.

2.1 Facility Location

The facility is located in Grenada County in Grenada, Mississippi. It is bounded by Grenada Railroad tracks to the north, beyond which is the Eastern Heights residential neighborhood , by Grenada Railway

railroad tracks and a stoneyard to the east/northeast, and by vegetated land to the west and south, beyond which is the Yalobusha River.

2.2 Climate

Based on the Grenada, Mississippi, weather station (KMSGRENA5), the average daily temperature in Grenada, Mississippi, over the last 5 years is 63.4 degrees Fahrenheit (°F). The average annual daily low temperature over the last 5 years is 32.2°F in January. The average annual daily high temperature over the last 5 years is 91.6°F in August. The total annual precipitation over the last 5 years is 46.37 inches. Winds are typically from the west-southwest (http://www.wunderground.com).

2.3 Land Use

The approximately 24-acre facility is zoned for industrial use and is surrounded by a mixture of industrial/commercial, residential, and agricultural use (Grenada County Assessor's Office). The future use of the facility is expected to remain consistent with the current land use.

2.4 Surface Water Hydrology

There are surface water bodies on the boundary and in the immediate vicinity of the facility. The nearest major surface water body is Riverdale Creek, which is located on the west/northwestern facility boundary and flows in a southwestwardly direction into the Yalobusha River. The Yalobusha River is located approximately 0.6 mile south and east of the facility property boundaries and flows southwest, west and northwest in the general vicinity of the facility. Grenada Lake is located northeast of the facility and discharges into the Yalobusha River by a spillway controlled by the U.S. Army Corps of Engineers. A storm water retention pond is located on the north side of the facility.

Storm water in the vicinity of the facility is collected by a series of ditches and culverts that ultimately discharge into Riverdale Creek. Storm water in the vicinity of the VI Focus Area is collected by a series of surface grates above subsurface catch basins and diverted to underground storm water lines and aboveground culverts that discharge to a storm water ditch south of the Grenada Railway railroad tracks, ultimately discharging into Riverdale Creek.

2.5 Geology and Hydrogeology

This VI assessment focuses on the surficial silt and clay layer and the first encountered water-bearing unit (the Upper Aquifer). Subsurface stratigraphy in the VI Focus Area consists of a silty clay layer, which extends from the ground surface to approximately 6 to 12 feet below the ground surface (ft bgs). This silty clay layer is underlain by approximately 30 to 50 feet of silty sand, which is then underlain by a thick clay unit at depth. The shallowest water-bearing unit is the silty sand layer, with groundwater encountered approximately 10 to 15 ft bgs.

Regional groundwater flow in the upper groundwater-bearing unit is generally west/northwest toward Riverdale Creek. This description of the local potentiometric surface in the upper groundwater-bearing unit is based on depth-to-water measurements collected in May 2014 by T&M Associates (T&M 2014a). A more comprehensive discussion of the facility geology and hydrogeology is provided in the Moose Lodge

Road Area Additional Investigation Report: Comprehensive Study Area Groundwater Evaluation (T&M 2016).

2.6 Water Use

To determine water uses near the facility, Arcadis contacted the City of Grenada Water/Sewer Department, which confirmed that the facility and the Eastern Heights neighborhood are supplied by municipal water.

2.7 Community Outreach

On September 1, 2015, the USEPA conducted an outreach meeting with community members in the VI Focus Area. The purpose of this outreach was to disseminate information regarding facility history, constituents being assessed, VI information, and the sampling process, and to obtain access to their homes for sampling purposes. The USEPA obtained approval and signed access agreements from the six property owners in the VI Focus Area at the meeting and/or in the subsequent days. The USEPA continues to provide community outreach through meetings and fact sheets.

3 CONSTITUENTS OF CONCERN

The constituents of concern (COCs) for the VI assessment were cis-1,2-dichloroethene (cis-1,2-DCE), TCE and Vinyl Chloride (VC), based on groundwater monitoring work completed in the period from 2012 through 2015. Following initial review of the IMWP, USEPA added compounds to the list and provided conditional IMWP approval in a letter dated September 4, 2015. The full list of compounds approved for sampling and analysis in the VI Focus Area by USEPA in the IMWP approval letter included the following volatile organic compounds (VOCs):

- 1,1-Dichloroethene (1,1-DCE)
- 1,2-Dichloroethane (1,2-DCA)
- cis-1,2-Dichloroethene (cis-1,2-DCE)
- trans-1,2-Dichloroethene (trans-1,2-DCE)
- Tetrachloroethene (PCE)
- 1,1,2-Trichloroethane (1,1,2-TCA)
- TCE
- Vinyl chloride
- Benzene
- Toluene
- Ethylbenzene*
- Xylenes*

- 1,2,4-Trimethylbenzene (1,2,4-TMB)
- Chloroform
- Methylene chloride

*Ethylbenzene and xylenes were analyzed at the USEPA's request to evaluate background concentrations in the structures that were sampled.

Soil and groundwater samples were analyzed for the following parameters as required by USEPA:

- VOCs
- Semivolatile Organic Compounds (SVOCs)
- Resource Conservation and Recovery Act (RCRA) Metals
- Hexavalent Chromium

4 VAPOR INTRUSION ASSESSMENT

Based on TCE concentrations detected in groundwater above the calculated groundwater-to-indoor-air VI screening level (VISL) at Monitoring Well MW-20, a potential VI risk was identified in a portion of the Eastern Heights neighborhood. See OSWER Technical Guide. Six houses along Lyon Drive located above the TCE groundwater plume were proposed and approved as the VI Focus Area. MW-20 is located between the VI Focus Area and the facility. Potentiometric surface maps prepared by T&M Associates suggest that shallow groundwater flows toward the west-northwest in this area (T&M 2014b and T&M 2016).

The VI assessment included sampling and analysis of indoor air, ambient air, and sub-slab vapor in the VI Focus Area and soil gas, groundwater, and soil in the vicinity of the VI Focus Area. Additionally, potential receptors, exposure routes, and migration pathways were assessed. This assessment is consistent with approaches described in the OSWER Technical Guide, and generated information for use in a "multiple lines of evidence" evaluation. The following sections provide further details regarding the VI assessments completed in September/October 2015 and March 2016.

4.1 Potential Receptors and Exposure Routes

The VI assessment addressed potential receptors in the VI Focus Area. Potential receptors in the VI Focus Area could be exposed to vapors in indoor air that partition from impacted groundwater from the plume identified beneath the southern portion of the Eastern Heights neighborhood. Potential receptors in the VI Focus Area also could be exposed to vapors occurring along utility corridors or other preferential vapor migration pathways. Moreover, potential receptors off the facility property and outside the areas of the affected groundwater could be exposed to constituents in indoor air due to the migration of vapors along utility corridors or other preferential vapor migration pathways.

4.2 Vapor Intrusion Screening Criteria

The USEPA Vapor Intrusion Screening Level (VISL) Calculator, Version 3.4 (a look-up table for screening values used by USEPA), provides screening levels for residential indoor air, ambient air, sub-slab vapor, soil gas, and the groundwater to indoor air pathway. These VISLs are based on the lower of either a target cancer risk of 1E-6 or target hazard index of 1, and are further based on current USEPA toxicological risk evaluations utilizing sensitive receptor populations. The VISLs are shown in Table 1. The VISL for groundwater to indoor air was derived from sampling events at MW-20.

4.3 Vapor Intrusion Laboratory Analysis

Sampling media were ordered from Eurofins Air Toxics, Inc., in Folsom, California, using proper quality assurance/quality control (QA/QC) and chain-of-custody protocols. Air samples (soil gas, ambient air, indoor air, and sub-slab vapor) were analyzed using USEPA Compendium Method TO-15 for the COC and non-COC list previously identified

4.4 Soil Gas Assessment

Eight shallow soil gas ports (SG-1 through SG-8) were installed in proximity to the existing deeper soil gas monitoring probes (VP-2 through VP-6, VP-13, and VP-17) because these earlier probes indicated TCE concentrations above the VISLs. As discussed in Section 2.5, Geology and Hydrogeology, there is a silty clay layer that extends from the ground surface to approximately 6 to 12 ft bgs, which is underlain by approximately 30 to 50 feet of silty sand in the VI Focus Area. The existing soil gas ports were screened at the clay/sand interface or deeper within the water-bearing sand layer. The soil gas ports installed as part of this VI assessment were installed within the surficial clay layer to evaluate the potential migration of VOCs from the potential groundwater source to indoor air.

4.4.1 Soil Gas Port Installation

On September 15 and 16, 2015, eight soil gas ports (SG-1 through SG-8) were installed in the vicinity of the VI Focus Area. The locations are shown on Figure 2. A track-mounted Geoprobe® was used to create an open borehole, and a 2.25-inch-diameter Macro-Core® sampler was used to remove soil from the boring. As part of the reconnaissance, a utility locate identified buried utilities in the vicinity of the structures in the VI Focus Area and soil gas ports prior to installation.

Soil was classified in the field by a geologist. Each soil gas port installed for the VI assessment was screened near the bottom of the surficial clay layer (generally about one foot above the clay-sand interface) to determine potential vapor migration from vapor partitioning from impacted groundwater. Soil gas ports SG-1 through SG-4 and SG-6 were installed to a depth of 6 ft bgs and screened from 5.5 to 6 ft bgs. Due to variations in the depth of the surficial clay layer, some of the soil gas ports were installed shallower to stay within the surficial clay unit. SG-5 was installed to a depth of 5.5 ft bgs and screened from 5 to 5.5 ft bgs, SG-7 was installed to a depth of 3.25 ft bgs and screened from 2.75 to 3.25 ft bgs, and SG-8 was installed to a depth of 3.5 ft bgs and screened from 3 to 3.5 ft bgs.

Soil gas ports were constructed of 0.25-inch Teflon tubing with 6-inch stainless steel screens. Each screen was installed with filter pack sand placed around the screen to 6 inches above the screen.

Granular bentonite was used to fill the remainder of the borehole above the screen filter pack to the surface and was hydrated during installation. At the surface, the end of the tubing was equipped with a Swagelok® fitting and a stainless steel gas-tight valve. Upon completion of the installation and sealing of each soil gas port, the volume of air in the sand pack was calculated and approximately three times this volume of air was purged using a 60-milliliter (mL) syringe with a three-way valve at a rate of approximately 100 mL per minute (mL/min). A protective cover was installed at the surface. Boring logs and construction logs for the soil gas ports are provided in Appendix C.

4.4.2 Soil Gas Port Sampling

September/October 2015 Event

On September 16 and 17, 2015, approximately 24 hours after installation, each soil gas port was sampled using 1-liter stainless steel SUMMA® canisters with calibrated flow controllers that were cleaned and certified by the laboratory. The flow controllers were calibrated for a sampling duration of 10 minutes (≈ 80 mL/min). Approximately one to three times the volume of air in the filter pack/tubing was purged at a rate of 100 mL/min using a 60-mL syringe with a three-way valve prior to sampling. The amount and rate of volumes purged were measured and recorded in the field and remained consistent among sample locations. The sampling procedure consisted of connecting the purge syringe to the soil gas port, then opening the syringe valve, then opening the soil gas port valve to purge the tubing. At completion of purging, the valve on the soil gas port was closed, the purge syringe was removed, and then the sampling canister and flow controller were connected to the soil gas port. The sampling canister was opened, and then the valve on the soil gas port was opened. At the completion of sampling, the canister was closed first and then the soil gas port valve. A final canister vacuum on the flow controller ranging from 2 to 5 inches of mercury signified that sample collection was complete. At the completion of sampling, the canister was closed and the valve on the soil gas port was closed. The canister and flow controller were removed from the soil gas port.

Due to variability in flow controller gauges, the canisters were gauged with a calibrated independent gauge and the final vacuum recorded. The canisters were closed and sealed with a brass Swagelok® cap. Final soil gas canister vacuums from the independent gauge ranged from 3.5 to 6.5 inches of mercury. Due to a laboratory error, the soil gas samples collected at soil gas ports SG-4, SG-7, and SG-8 during the September 2015 sampling event were not analyzed. Arcadis returned to the VI Focus Area on October 7, 2015, to collect new samples from these three soil gas ports, following the procedures detailed above. Final soil gas canister vacuums from the independent gauge ranged from 5 to 6 inches of mercury.

Meteorological data (temperature, precipitation, humidity, barometric pressure, and wind speed/direction) were collected before and during sampling activities and are provided as Appendix D.

March 2016 Event

As specified in the conditionally approved IMWP, a second sampling event was performed on March 2, 2016, in the opposite season from the initial sampling event. This seasonal sampling event followed the same procedures as the September/October 2015 event. However, water was encountered in soil gas ports SG-1, SG-2, SG-4, and SG-5 during purging and sampling; therefore, soil gas samples from these soil gas ports could not be collected and submitted for analysis. Geotechnical analysis of the localized

surficial clay layer in October 2015 indicates mostly water-filled porosity with minimal air-filled porosity. The water encountered in the soil gas ports likely is due to the migration of water from the clay into the more permeable sand pack around the screens of the soil vapor probes. There was no indication that surface water had entered the soil gas ports. The presence of water in SG-1, SG-2, SG-4 and SG-5 likely indicates saturation conditions in the silty-clay soil surrounding the probes. After sampling the remaining soil gas ports (SG-3, SG-6, SG-7, and SG-8), the final soil gas canister vacuums from the independent gauge ranged from 5 to 12 inches of mercury.

4.4.3 Soil Gas Port Leak Testing

In accordance with USEPA guidance, leak testing initially was performed on the soil gas ports prior to the September 2015 sampling event. Leak testing was accomplished by enriching the atmosphere in the immediate vicinity of the area where the port intersects the ground with tracer gas helium and measuring a vapor sample from the port for the presence of high concentrations (>10 percent) of the helium. A shroud consisting of a 1-gallon container equipped with two gas valves was placed over the soil gas ports. The tubing assembly was passed through the shroud to the outside through a hole that was then sealed with modeling clay. Then the shroud was sealed to the ground with modeling clay. A cylinder of laboratory-grade compressed helium gas was connected to one gas valve, and helium was introduced to the shroud at a slow rate in order to not pressurize the shroud.

A Dielectric MGD-2002 Helium Detector was used to measure the amount of helium in the shroud by inserting the detector probe into the second gas valve in the shroud. Once a minimum of 60 percent helium was detected in the shroud, the soil gas port was then purged and the purged air collected in a Tedlar® bag. The helium detector then was used to screen the sample aliquot in the Tedlar® bag. If less than 10 percent helium was detected in the Tedlar® bag, a SUMMA® canister was attached to the tubing assembly and the sample collected while the helium concentration within the shroud was maintained at a minimum of 60 percent. At the completion of sample collection, an aliquot of air was purged again from the port and screened for helium. If less than 10 percent helium was detected in the Tedlar® bag, the sample was submitted to the laboratory for analysis. If greater than 10 percent helium was detected in the Tedlar® bag, the sample was not analyzed. All of the soil gas ports passed the helium leak test procedure.

4.4.4 Soil Gas Data Results

Soil gas data are summarized in Table 2 and are depicted on Figure 3. Copies of the laboratory reports are provided in Appendix E.

<u>September/October 2015 Event</u>

The following constituents were detected above the exterior soil gas VISLs:

- Benzene (SG-6)
- Chloroform (SG-3, SG-5, SG-6, SG-7)

The following constituents were detected below the exterior soil gas VISLs:

- Benzene (SG-2, SG-3)
- Ethylbenzene (SG-1, SG-5, SG-6)

- Toluene (SG-5, SG-6)
- TCE (SG-8)
- 1,2,4-TMB (SG-5, SG-6, SG-7)
- m,p-Xylenes (SG-1, SG-5, SG-6, SG-7)
- o-Xylenes (SG-5, SG-6, SG-7)

March 2016 Event

There were no constituents detected above the exterior soil gas VISLs.

The following constituents were detected below the exterior soil gas VISLs:

- TCE (SG-8)
- m,p-Xylenes (SG-7)

4.5 Residential Home VI Assessment

The residential home VI assessment conducted in September 2015 and March 2016 included indoor air and sub-slab vapor sampling from the six residential structures (House #1 through House #6) within the VI Focus Area, and ambient air sampling upwind and downwind of these six structures (Figure 3). The six residential structures were selected based on their relative proximity to known groundwater impacts (MW-20) and potential soil gas impacts (VP-2, VP-3, VP-5, VP-6). Only four of these structures (House #2 through House #4) are within 100 feet of the known groundwater or potential soil gas impacts. The other two properties, east and west of the potentially impacted area, were assessed as a conservative measure.

The sample IDs and corresponding physical addresses are summarized below.

House Number	Sample IDs	Physical Address
House #1	1-IA/1-SS	(b) (6)
House #2	2-IA/2-SS	(b) (6)
House #3	3-IA/3-SS	(b) (6)
House #4	4-IA/4-SS	(b) (6)
House #5	5-IA/5-SS	(b) (6)
House #6	6-IA/6-SS	(b) (6)

Redaction(s) subject to Exemption 6 (Personal Privacy Information)

4.5.1 Ambient Air

4.5.1.1 Sampling

September 2015 Event

On September 22, 2015, ambient air sampling equipment consisting of 6-liter stainless steel SUMMA® canisters with calibrated flow controllers that were cleaned and certified by the laboratory were deployed, and sampling was initiated. The ambient air canisters were securely positioned at a level equivalent to the breathing zone and located on the northwest side of House #1 (Location 1-AA) and on the southeast side of House #6 (Location 2-AA). The canisters utilized flow controllers calibrated for a 24-hour sample collection. The ambient air sampling was completed on September 23, 2015, approximately 24 hours after deployment. The canister was collected when the final canister vacuum on the flow controller was measured at between 2 and 5 inches of mercury. At the completion of sampling, the canister was closed and the flow controller removed. Due to variability in flow controller gauges, the canisters were gauged with a calibrated independent gauge and the final vacuum recorded. The canisters were closed and sealed with a brass Swagelok® cap. Final ambient air canister vacuums from the independent gauge ranged from 7.25 to 9.0 inches of mercury. The ambient air sample locations are shown on Figure 2. The wind direction was from the northeast during the sampling event, as determined by Weather Underground (http://www.wunderground.com); therefore, "1-AA" was placed in the downwind position and "2-AA" was placed in the upwind position.

Three wind roses (Appendix D) were prepared from meteorological data obtained from the Greenwood Regional Airport, which is approximately 25 miles southwest of Grenada. One wind rose depicts the conditions during the day of sampling, a second wind rose depicts the conditions one week prior to sampling, and the third wind rose depicts the conditions for one year prior to sampling. The wind rose for the day of sampling documents that the winds were from the northeast. The winds one week prior to sampling were primarily from the north and east. The winds for one year prior to sampling were primarily from the north and south, with some winds from the northeast and southwest.

March 2016 Event

The second sampling event was performed on March 2 and 3, 2016, in the opposite season from the initial sampling event. This seasonal sampling event followed the same procedures as the September 2015 event, and ambient air canisters were placed in the same locations as for the previous event. During the sampling event, wind was primarily from the northwest; however, there was some variability with the wind direction (wind was from the east when rain was present). After sampling, the final ambient air canister vacuums from the independent gauge ranged from 6 to 6.5 inches of mercury.

The wind rose for the day of sampling documents that the winds were variable, but primarily from the east. The winds one week prior to sampling were primarily from the southwest. The winds for one year prior to sampling were primarily from the north and south, with some winds from the northeast and southwest.

4.5.1.2 Results

Ambient air data are summarized in Table 3 and are depicted on Figure 3. Copies of the laboratory reports are provided in Appendix E.

September 2015 Event

Ambient air analytical results were compared to residential indoor air VISLs. The following constituent was detected above the residential indoor air VISL:

- TCE (1-AA and 2-AA)

March 2016 Event

Ambient air analytical results were compared to residential indoor air VISLs. No VOCs were detected above the VISLs. The following constituents were detected below the residential indoor air VISLs or do not have established residential indoor air VISLs:

- Benzene (1-AA and 2-AA)
- cis-1,2-DCE (1-AA and 2-AA)
- Ethylbenzene (2-AA)
- Toluene (1-AA and 2-AA)
- Vinyl chloride (1-AA and 2-AA)
- m,p-Xylenes (1-AA and 2-AA)
- o-Xylenes (1-AA and 2-AA)

4.5.2 Indoor Air

4.5.2.1 Reconnaissance of Structures

A reconnaissance of the six residential structures was performed on September 21, 2015, prior to conducting sampling activities, as specified in the approved IMWP. A visual inspection of the structures' interiors and exteriors was performed to identify potential preferential pathways (such as utilities) for vapor migration into the structures, and to identify any background sources or other factors that could affect indoor air quality. Another reconnaissance was conducted prior to the seasonal sampling event performed on March 2, 2016, to confirm that conditions had not changed from the initial sampling event.

As part of the reconnaissance, information was gathered from the homeowner/occupant on potential sources within each structure, ventilation systems, and building construction. Copies of the indoor air building survey and sampling forms are provided in Appendix F. Potential background sources that were identified were removed from the structure during the VI sampling event.

4.5.2.2 Sampling

The indoor air sample locations are included in the completed indoor air building and sampling surveys provided in Appendix F. Samples collected from the residential structures were given a unique identification to conceal the identity of the sample locations.

September 2015 Event

On September 22, 2015, indoor air sampling equipment consisting of 6-liter stainless steel SUMMA® canisters with calibrated flow controllers cleaned and certified by the laboratory was deployed. The ambient air canisters were securely positioned at a level equivalent to the breathing zone for the most sensitive exposed population and located near the center of the structure. Because all six of the structures sampled are single-story, slab-on-grade construction and are less than 1,500 square feet in size, one indoor air sample was collected at each structure. The canisters utilized flow controllers calibrated for a 24-hour sample collection.

All indoor air samples were collected under normal home conditions. The indoor air sampling was completed on September 23, 2015, approximately 24 hours after deployment. A final canister vacuum on the flow controller between 2 and 5 inches of mercury signified that sample collection was complete. At the completion of sampling, the canister was closed and the flow controller removed. Due to variability in flow controller gauges, the canisters were gauged with a calibrated independent gauge and the final vacuum recorded. The canisters were closed and sealed with a brass Swagelok® cap. Final indoor air canister vacuums from the independent gauge ranged from 7 to 9.5 inches of mercury.

A duplicate indoor air sample canister was deployed; however, due to a malfunction in the flow controller, the duplicate indoor air canister did not collect a sample. Thus, a duplicate sample was not available for laboratory analysis.

March 2016 Event

A second sampling event was performed on March 2 and 3, 2016, in the opposite season from the initial sampling event. This seasonal sampling event followed the same procedures as the September 2015 event, and indoor air canisters were placed in the same locations as the previous event. After sampling, the final ambient air canister vacuums from the independent gauge ranged from 5.5 to 14 inches of mercury.

4.5.2.3 Results

Indoor air data are summarized in Table 3 and are depicted on Figure 3. Copies of the laboratory reports are provided in Appendix E. Indoor air analytical results were compared to residential indoor air VISLs.

September 2015 Event

The following constituents were detected above the residential indoor air VISLs:

- Benzene (1-IA, 2-IA, 4-IA, 5-IA)
- Chloroform (1-IA, 2-IA, 3-IA, 4-IA, 5-IA, 6-IA)
- 1,2-DCA (1-IA, 2-IA, 4-IA, 5-IA)

- TCE (1-IA, 2-IA, 4-IA, 5-IA, 6-IA)

The following constituents were detected below the residential indoor air VISLs or do not have established residential indoor air VISLs:

- cis-1,2-DCE (1-IA, 2-IA, 4-IA, 5-IA, 6-IA)
- Ethylbenzene (1-IA, 2-IA, 4-IA, 5-IA, 6-IA)
- Toluene (1-IA, 2-IA, 3-IA, 4-IA, 5-IA, 6-IA)
- m,p-Xylenes (1-IA, 2-IA, 4-IA, 5-IA, 6-IA)
- o-Xylenes (1-IA, 2-IA, 4-IA, 5-IA, 6-IA)

March 2016 Event

The following constituents were detected above the residential indoor air VISLs:

- Benzene (1-IA, 4-IA, 6-IA)
- Chloroform (1-IA, 4-IA, 6-IA)
- 1,2-DCA (1-IA, 2-IA)

The following constituents were detected below the residential indoor air VISLs:

- Benzene (5-IA)
- Ethylbenzene (1-IA, 2-IA, 4-IA)
- Toluene (1-IA, 2-IA, 3-IA, 4-IA, 5-IA, 6-IA)
- m,p-Xylenes (1-IA, 2-IA, 3-IA, 4-IA, 6-IA)
- o-Xylenes (1-IA, 2-IA, 4-IA)

4.5.3 Sub-Slab Air

4.5.3.1 Port Installation

On September 21, 2015, in accordance with USEPA guidance, a permanent sub-slab vapor port was installed in the concrete floor near the center of each structure for collecting sub-slab vapor samples. The sub-slab ports were placed in an unobtrusive location within each home to minimize disturbance of the residents. The ports were installed after conducting the indoor air building and sampling survey, and approximately 24 hours prior to collection of the indoor air sample from that structure. The sub-slab vapor ports lie flush on the upper surface of the concrete floor and "float" in the slab to enable collection of vapors from sub-slab material in direct contact with the slab or from a pocket of air directly beneath the slab created by sub-slab material subsidence. New stainless steel Vapor Pins™ were utilized. The Vapor Pins™ were preassembled for each installation prior to drilling through the floor to minimize exposure time of the sub-slab soils to an open hole.

To install the sub-slab vapor ports, a rotary hammer drill was used to drill a 1.125-inch-outer-diameter hole approximately 2 inches into the floor. The inside of the 1.125-inch-outer-diameter hole was cleaned

with a damp towel, and then a 0.625-inch-outer-diameter hole was drilled through the remainder of the concrete. Once through the concrete, the drill was allowed to penetrate an additional 2 to 3 inches into the sub-slab material. The outer-diameter hole was cleaned once more with a damp towel. The Vapor Pins™ were pressed into the concrete slab and sealed with the supplied non-VOC silicone sleeve. After the sub-slab vapor port was set, a small aliquot of air was purged into a Tedlar® bag so as not to introduce potential vapors to the building interior. A protective cap was placed on the end of the Vapor Pin™ and finished with a stainless steel thread-on flush-mount cover. Once the sub-slab vapor port was installed, it was allowed to set for approximately 48 hours prior to sampling. These sub-slab vapor ports will remain in place until no longer needed; they will then be removed, the holes patched, and the home returned to its original condition to the extent possible.

4.5.3.2 Sampling

September 2015 Event

On September 23, 2015, the sub-slab vapor samples were collected immediately after obtaining the indoor air samples. The sub-slab vapor samples were collected using 1-liter stainless steel SUMMA® canisters that were cleaned and certified by the laboratory with a calibrated flow controller. The flow controller was calibrated for a sampling duration of 10 minutes (≈80 mL/min). The sub-slab samples were collected by assembling a short (≈16 inches) length of 0.25-inch-diameter Teflon tubing fitted with stainless steel Swagelok® tube connectors at one end that connected directly to the sampling canister and non-VOC silicone tubing that connected directly to the sub-slab vapor port. A stainless steel gas-tight valve was installed near the canister end of the sample tubing. The sample assembly was connected to the sub-slab vapor port, and approximately three volumes of air from the sample assembly were purged at a rate of approximately 100 mL/min prior to sampling, using a 60-mL syringe into a Tedlar® bag so as not to introduce potential vapors to the building interior. The sampling canister was then connected and opened, and then the valve on the sample assembly was opened. A final canister vacuum on the flow controller reading between 2 and 5 inches of mercury signified that sample collection was complete. At the completion of sampling, the canister was closed first followed by the sample assembly to the sub-slab vapor port valve. Due to variability in flow controller gauges, the canisters were gauged with a calibrated independent gauge and the final vacuum recorded. The canisters were closed and sealed with a brass Swagelok® cap. The final canister vacuums from the independent gauge ranged from 4.5 to 7 inches of mercury.

Each sub-slab vapor port was leak tested following the procedures outlined in Section 4.3.3 of this report. All sub-slab ports passed the helium leak test with the exception of the aliquot of purged air collected after sampling at sub-slab port SS-2, with 20 percent helium detected in the Tedlar® bag. The sub-slab sample collected at SS-2 was analyzed, and results were similar to sub-slab results from neighboring houses, as further discussed in the next section of this report.

March 2016 Event

A second sampling event was performed on March 3, 2016, in the opposite season from the initial sampling event. This seasonal sampling event followed the same procedures as the September 2015 event. After sampling, the final canister vacuums from the independent gauge ranged from 4.5 to 5.75 inches of mercury.

4.5.3.3 Results

Sub-slab data are summarized in Table 3 and are depicted on Figure 3. Copies of the laboratory reports are provided in Appendix E. Sub-slab analytical results were compared to residential sub-slab vapor VISLs.

September 2015 Event

The following constituents were detected above the sub-slab vapor VISLs:

- Chloroform (6-SS)
- TCE (1-SS/duplicate sample)

The following constituents were detected below the sub-slab vapor VISLs:

- Toluene (2-SS and 6-SS)
- trans-1,2-DCE (3-SS)
- PCE (4-SS)
- 1,2,4-TMB (5-SS)

March 2016 Event

The following constituent was detected above the sub-slab vapor VISL:

- Chloroform (6-SS)

No other constituents were detected in sub-slab vapor samples collected in March 2016.

4.6 Groundwater Assessment

At the request of the USEPA, 10 Vertical Aquifer Profiling (VAP) boring locations (VAP-1 through VAP-10) were selected in the residential neighborhood to delineate potential constituent concentrations and to further evaluate the stratification of constituent concentrations in the groundwater of the Upper Aquifer. Only the samples from the first encountered groundwater at each location were evaluated in the VI assessment because only groundwater at the interface with the overlying unsaturated soils is relevant when evaluating VI potential. These locations were included in the September 11, 2015, IMWP and approved by the USEPA (Figure 2). The Sample/Core Logs for these VAP borings are included in Appendix G.

4.6.1 Sampling

A track-mounted Geoprobe® rig was used to advance the 10 VAP borings (VAP-1 through VAP-10) to a depth of approximately 50 ft bgs. This depth is the approximate base of the Upper Aquifer. The samples were collected using a Geoprobe® SP-16 water sampler tool. Beginning at the first encountered groundwater, Arcadis collected a grab groundwater sample at the first encountered water-bearing zone and then at 5-foot intervals to a total depth of approximately 50 ft bgs. After the samples were collected, the Geoprobe® boreholes were properly abandoned.

The VAP grab groundwater samples were collected in a manner that minimized interference and/or cross impacts from the various vertical water-bearing zones within the Upper Aquifer. Duplicate, trip blank, and matrix spike/matrix spike duplicate samples were collected during the sampling event for QA/QC purposes.

4.6.2 Results

While groundwater samples were collected from the first encountered water-bearing zone to approximately 50 ft bgs, only the shallowest interval is relevant to the VI assessment and evaluated in this report. The deeper groundwater sample results are not germane to the VI assessment, but are summarized in the data tables provided.

Groundwater VOC data from the first encountered groundwater interval from each VAP location are summarized in Table 4. The residential groundwater VISLs are also provided in Table 4. All groundwater VOC data are summarized in Table 5. Table 6 summarizes all groundwater SVOC data, and Table 7 summarizes all groundwater metals data. QA/QC data are summarized in Table 8. Copies of the laboratory reports are provided in Appendix E.

Analytical results from the VAP groundwater samples collected in October 2015 document that TCE was the only VOC detected above the residential groundwater-to-vapor VISL (Table 4). TCE was detected above the VISL of 1.5 µg/L in five of the ten locations:

- VAP-2 (15 to 16 ft bgs)
- VAP-5 (15 to 16 ft bgs)
- VAP-6 (12 to 13 ft bgs)
- VAP-7 (13 to 14 ft bgs)
- VAP-8 (18 to 19 ft bgs)

TCE and cis-1,2-DCE shallow groundwater concentrations are shown on Figure 4.

The following constituents were either detected in shallow groundwater samples below their respective residential groundwater-to-vapor VISLs or do not have an established groundwater-to-vapor VISL.

- 2-Butanone (VAP-1-GW [12-15] and VAP-9-GW [15-16])
- Carbon disulfide (VAP-3-GW [15-16])
- cis-1,2-DCE (VAP-2-GW [15-16], VAP-4-GW [15-16], VAP-5-GW [15-16], VAP-6-GW [12-13], VAP-7-GW [13-14], VAP-8-GW [18-19])
- Toluene (VAP-10-GW [16-17])
- TCE (VAP-4-GW [15-16])

4.7 Soil Assessment

At the request of the USEPA, soil samples were collected during the groundwater assessment activities. As specified in USEPA's correspondence of September 4, 2015, a lithologic description was prepared for

all borings and an organic vapor analyzer (OVA) was used to field screen soil from the boreholes. A single soil sample was collected from each borehole, corresponding to the interval with the highest measured OVA readings. If no OVA readings were detected in a given soil boring within the vadose zone, a soil sample was collected from the upper five feet of the boring.

4.7.1 Sampling

The soil sampling activities were conducted with the track-mounted Geoprobe® unit utilized during the VAP sampling. The soil borings were installed adjacent to the VAP locations. A soil coring device with a new acetate sleeve was driven into the ground by the Geoprobe® unit and retrieved to the surface. Upon retrieval of the soil core and removal from the acetate sleeve, a qualified geologist conducted a visual inspection of the core. The following information was recorded on Sample/Core Logs, which were prepared for each location and are provided in Appendix G.

- Major soil type and percentage;
- Composition of the soil;
- Moisture, texture, and color of the soil;
- Other geologic observations such as bedding characteristics, structure and orientation, and primary and secondary permeability/porosity (if possible); and
- Observations on drilling progress including sample interval loss and recovery.

The soil intervals from the borings were screened in the field using an OVA (e.g., photoionization detector) to document the levels of organic vapors present. To collect volatile organic headspace readings, a portion of the soil core was placed in a sealed plastic bag. The bag was placed in a dry area and allowed to warm to an ambient temperature. After a minimum of 10 minutes, the OVA was inserted into the bag to measure the vapors that had accumulated. OVA readings were recorded on the Sample/Core Log (Appendix G). The soil interval in the zone above the water table (vadose zone) exhibiting the highest OVA reading in each borehole was selected for sampling.

Duplicate, trip blank, and matrix spike/matrix spike duplicate samples were collected during the sampling event for QA/QC purposes.

Geotechnical samples also were collected from three of the VAP locations (VAP-6, VAP-8, and VAP-9). Sampling was completed by installing a separate adjacent boring for each of the three locations. A soil coring device with a new acetate sleeve was driven into the ground by the Geoprobe® unit and retrieved to the surface. Upon retrieval of the soil core, the 6- to 8-foot interval was cut and capped with the acetate sleeve intact. The soil core was submitted to Core Labs in Wisconsin for geotechnical analysis for the following parameters:

- Moisture content
- Total porosity
- Air-filled porosity
- Water-filled porosity

4.7.2 Results

Soil samples were analyzed for VOCs, SVOCs, and metals. Only constituents relevant to VI potential are evaluated in this report. Soil analytical results for VOCs, SVOCs, and metals are presented in Tables 9 through 11. Copies of laboratory data reports are provided in Appendix E.

Analytical results from the soil samples collected in October 2015 document that the agreed list of expanded constituents were not detected, with the exception of benzene and toluene in VAP-2 in the 2-to 4-foot interval at estimated concentrations of 0.57 J micrograms per kilogram (µg/kg) and 0.49 J µg/kg, respectively.

The geotechnical laboratory tests from VAP-6 (6 to 8 ft bgs), VAP-8 (6 to 8 ft bgs), and VAP-9 (6 to 8 ft bgs) show high moisture content and zero-to-low air-filled porosity, which severely restricts vertical vapor migration within the silty-clay soil between the aquifer and ground surface. Moisture content within this soil unit ranged from 20.9 to 25.4 percent, and air-filled porosity ranged from 0.0 to 1.9 percent. Total porosity ranged from 36.0 to 41.6 percent, with water-filled porosity ranging from 36.0 to 39.7 percent.

In July 2015, T&M Associates also collected geotechnical samples from three intervals adjacent to Boring ST219 (ST-219A, ST-219B, and ST-219C) within the interval of 6 to 8 feet bgs. These geotechnical laboratory tests determined permeabilities of 3.46 x 10-9 centimeters per second (cm/sec), 1.32 x 10-7 cm/sec, and 3.12 x 10-9 cm/sec, respectively, within this interval. Total porosity ranged from 38 to 40 percent, with 95 to 100 percent saturation of the pore space. These geotechnical samples further demonstrate the low potential for vertical vapor migration, based on the low hydraulic conductivity and the near complete saturation of the soil. When, as here the pore space in the soil is filled with water (saturated conditions), air flow is not likely to occur and vapor migration from groundwater or soil gas beneath the soil layer to the ground surface or to structures is not likely to occur. Results from the geotechnical soil samples are shown in Table 12.

4.8 Data Validation

A comprehensive data validation was conducted on all VI samples by the laboratory. Overall, the laboratory system performance was determined to be acceptable. Appropriate qualifiers were applied based on the validation. All data were deemed useable; no data were rejected. Data validation reports for the VI samples are provided in Appendix H.

Soil and groundwater data verification was conducted in accordance with the procedures described in the Quality Assurance Project Plan for the facility monitoring program. No qualifiers were applied to these data.

4.9 Data Evaluation

As specified in the approved IMWP and the USEPA OSWER Technical Guide, multiple lines of evidence were evaluated to determine if the vapor intrusion pathway was complete. The multiple lines of evidence that were used in the evaluation included groundwater, soil gas, sub-slab, indoor air, and ambient air data, area geology and geotechnical properties, data trends (from the two seasonal air sampling events), and the construction of the six homes in the VI Focus Area.

4.9.1 September 2015 Event

During the September 2015 sampling event, benzene, chloroform, 1,2-DCA, and TCE concentrations were detected in indoor air above their VISLs in one or more of the six homes. Other constituents, primarily ethylbenzene, toluene, and xylenes, also were detected but at concentrations below the indoor air VISLs. These latter compounds typically were not found in the soil gas, sub-slab, or shallow groundwater samples in the VI Focus Area. Soil gas sampling locations SG-3, SG-4, SG-5, and SG-6 and groundwater sampling locations VAP-6, VAP-7, and VAP-8 are within the VI Focus Area.

TCE was detected in shallow groundwater from the VAP-6, VAP-7, and VAP-8 locations, with the highest concentration detected at VAP-6. A review of the soil gas (SG-3) and sub-slab (6-SS) sampling data from this area clearly reveals that neither volatilization from the groundwater plume nor migration upward in the soil column is occurring, as there are no detections of TCE in these samples.

Review of the constituents found in the indoor air reveals that these compounds typically also were found in the ambient air samples. This pattern indicates that concentrations found in the indoor air samples are the result of the typical exchange of ambient air with indoor air. Data indicate that background sources within the houses also may be contributing to the constituents found in indoor air. In Section 6.3.5 of the USEPA OSWER Technical Guide (Identification and Evaluation of Contributions from Indoor and Ambient Air Sources), the following statements are made concerning this evaluation:

> Results indicating indoor vapor sources as primarily responsible for indoor air concentrations. If a vapor-forming chemical is present with an elevated concentration in indoor air, but not present or is negligibly present in sub-slab soil gas samples (or representative samples of the subsurface vapor source), then the presence of this contaminant in indoor air may not arise from the vapor intrusion pathway, but rather from indoor sources or other background sources (e.g., ambient air).
>
> Results indicating outdoor vapor sources as primarily responsible for indoor air concentrations. If a vapor-forming chemical(s) is(are) detected in outdoor air and indoor air at similar concentrations, but is(are) not present in the sub-slab soil gas samples (or representative samples of the subsurface vapor source), then the presence of this contaminant(s) in indoor air may not arise from the vapor intrusion pathway, but rather from outdoor sources (i.e., ambient air).

A review of the background air concentrations presented in the Background Indoor Air Concentrations of Volatile Organic Compounds in North American Residences (1990-2005): A Compilation of Statistics for Assessing Vapor Intrusion (USEPA 2011) (Compilation) reveals that concentrations of many of the compounds detected are within the typical background ranges identified in the study. Although the background values presented were not specifically from a study conducted in Mississippi, the values are a compilation of data from 15 studies selected by both USEPA and external reviewers that reported summary statistics for distribution of indoor air concentrations measured in residences that are not expected or known to be located over contaminated soil or groundwater. These studies sampled indoor air in residences across the United States between 1990 and 2005 and are expected to represent typical background concentrations encountered in most homes. For common chemicals, between 475 and 2,615 data points were included in the analysis of background concentrations. The table below summarizes the

background statistics from the Compilation for those constituents detected in the indoor air samples from the VI Focus Area.

Compound	Max of 50th Percentile ($\mu g/m^3$)	Max of 90th Percentile ($\mu g/m^3$)	Percent Detection
Benzene	4.7	15	91.1
Chloroform	2.4	6.2	68.5
1,2-DCA	(<RL of 0.08 – 2.0)	0.4	13.8
cis-1,2-DCE	(<RL of 0.25 – 2.0)	(<RL of 0.25 – 2.0)	4.9
Ethylbenzene	3.7	13	85.7
Toluene	24	77	96.4
TCE	1.1	2.1	42.6
m,p-Xylenes	14	56	92.9
o-Xylenes	3.6	16	85.7

The VOCs detected in the indoor air in the VI Focus Area are constituents commonly found in background sources such as consumer products (cleaners, solvents, plastic products, nail polish, gasoline), building materials (carpet, insulation, paint, wood-finishing products), combustion processes (smoking, cooking, home heating), occupant activities (craft hobbies), and chlorinated water (USEPA 2011). The Agency for Toxic Substances and Disease Registry also lists typical background sources for these VOCs. Benzene is found in gasoline and other common household sources such as cigarette smoke. 1,2-DCA is found in products such as cleaning products, pesticides, and adhesives used to glue wallpaper and carpets. Chloroform is a trihalomethane found in chlorinated drinking water, and also is formed through the use of household bleach. TCE is found in adhesives, paint removers, spot removers, and gun cleaners.

Several factors indicate that the constituents detected in indoor air during the September 2015 sampling event are not a result of vapor intrusion, including the following:

- Inspection of the geologic logs from the borings in the VI Focus Area reveals a silt and clay layer at the surface that is 9 to 10 feet thick. Geotechnical analysis demonstrates that this interval has low permeability and air-filled porosity. The soil porosity is nearly or completely water-filled, which will prevent the upward migration of vapors.
- Sub-slab soil gas samples do not contain the constituents of interest present in groundwater in the VI Focus Area, namely TCE and cis-1,2-DCE,
- The constituents identified in indoor air in the VI Focus Area are common constituents found in indoor air in houses that are not in areas of groundwater or soil impact as indicated in the Compilation.

Thus, based on the September 2015 sampling results, the vapor intrusion pathway is not complete in the VI Focus Area.

4.9.2 March 2016 Event

During the March 2016 sampling event, benzene, chloroform, and 1,2-DCA concentrations were detected in indoor air above their VISLs in one or more of the six homes. Other constituents, primarily ethylbenzene, toluene, and xylenes, also were detected but at concentrations below the indoor air VISLs. These compounds typically were not found in the sub-slab or shallow groundwater samples in the VI Focus Area. Only benzene and toluene were detected in ambient air samples during the March 2016 event. There were no detections of TCE in the indoor air samples or the ambient air samples collected during this event. The detected compounds in indoor air during the March 2016 event appear to be indicative of an indoor background source.

Based on the foregoing sampling results and those discussed for the September 2015 event, the vapor intrusion pathway is not complete in the VI Focus Area.

A detailed evaluation of the data for each house is provided below.

4.9.3 Detailed Evaluation

House #1

The sample results pertaining to House #1 in September 2015 indicated TCE concentrations above the residential indoor air and sub-slab vapor (duplicate sample only) VISLs. The TCE indoor air sample 1-IA (1.1 µg/m^3) was similar to the ambient air results. TCE was not detected in the sub-slab sample. However, a duplicate sub-slab sample was collected at the same time as the parent sub-slab sample. The duplicate sample at 1-SS was above the sub-slab vapor VISL at 22 µg/m^3. Benzene, chloroform, and 1,2-DCA were detected in the indoor air sample above the residential indoor air VISLs at 3.8 µg/m^3, 0.75 µg/m^3, and 0.84 µg/m^3, respectively. Benzene, chloroform, and 1,2-DCA were not detected in the sub-slab vapor sample or shallow groundwater samples. Therefore, the detections in the indoor air appear to be associated with the ambient air exchange concentrations and/or background sources within the house. During the March 2016 event, House #1 had similar concentrations of benzene, chloroform, and 1,2-DCA detected in the indoor air sample above the residential indoor air VISL at 1.6 µg/m^3, 0.9 µg/m^3, and 0.58 µg/m^3, respectively. Benzene, chloroform, and 1,2-DCA were not detected in the sub-slab vapor sample or shallow groundwater samples. TCE was not detected in either the indoor air or sub-slab sample during the March 2016 event. The results from the fall and spring sampling events indicate that VI from a subsurface source is not occurring at House #1.

House #2

The sample results pertaining to House #2 in September 2015 indicated TCE concentrations above the residential indoor air VISL in 2-IA (1.1 µg/m^3) and similar to the ambient air TCE concentrations. TCE was not detected in the sub-slab sample. Benzene, chloroform, and 1,2-DCA were detected in the indoor air sample above the residential indoor air VISL at 0.81 µg/m^3, 0.91 µg/m^3, and 7.0 µg/m^3, respectively. Benzene, chloroform, and 1,2-DCA were not detected in the sub-slab vapor sample or shallow groundwater samples. Therefore, the detections in the indoor air appear to be associated with the ambient air exchange and/or background sources within the house. During the March 2016 event, House #2 had only a detection of 1,2-DCA in the indoor air sample above the residential indoor air VISL at 8.8 µg/m^3. 1,2-DCA was not detected in the sub-slab vapor sample or shallow groundwater samples. TCE was not in either the indoor air or sub-slab sample during the March 2016 event. The results from

the fall and spring sampling events indicate that VI from a subsurface source is not occurring at House #2.

House #3

The sample results pertaining to House #3 in September 2015 indicated only chloroform was detected above the residential indoor air VISL in 3-IA (4.2 µg/m^3). Chloroform was not detected in the sub-slab sample or groundwater samples. Therefore, the detections in the indoor air appear to be associated with background sources within the house. During the March 2016 event, House #3 had concentrations of benzene and 1,2-DCA detected in the indoor air sample above the residential indoor air VISL at 1.1 µg/m^3 and 0.36 µg/m^3, respectively. Benzene and 1,2-DCA were not detected in the sub-slab vapor sample or shallow groundwater samples. TCE was not detected in indoor air or sub-slab samples for either sampling event. The results of the fall and spring sampling events indicate that VI from a subsurface source is not occurring at House #3.

House #4

The sample results pertaining to House #4 in September 2015 indicated TCE concentrations above the residential indoor air VISL in 4-IA (0.99 µg/m^3) and similar to the ambient air TCE concentrations. TCE was not detected in the sub-slab sample. Benzene, chloroform, and 1,2-DCA were detected in the indoor air sample above the residential indoor air VISL at 1.8 µg/m^3, 0.94 µg/m^3, and 1.2 µg/m^3, respectively. Benzene, chloroform, and 1,2-DCA were not detected in the sub-slab vapor sample or in groundwater samples. Therefore, the detections in the indoor air appear to be associated with the ambient air exchange and/or background sources within the house. During the March 2016 event, House #4 had concentrations of benzene and chloroform detected in the indoor air sample above the residential indoor air VISL at 0.48 µg/m^3 and 4.9 µg/m^3, respectively. Benzene and chloroform were not detected in the sub-slab vapor sample or shallow groundwater samples. Therefore, the detections in the indoor air appear to be associated with the ambient air exchange and/or background sources within the house. TCE was not detected in either the indoor air or sub-slab sample during the March 2016 event. The results of the fall and spring sampling events indicate that VI from a subsurface source is not occurring at House #4.

House #5

The sample results pertaining to House #5 in September 2015 indicated TCE concentrations above the residential indoor air VISL in 5-IA (0.86 µg/m^3) and similar to the ambient air TCE concentrations. TCE was not detected in the sub-slab sample. Benzene, chloroform, and 1,2-DCA were detected in the indoor air sample above the residential indoor air VISL at 0.86 µg/m^3, 0.21 µg/m^3, and 0.18 µg/m^3, respectively. Benzene, chloroform, and 1,2-DCA were not detected in the sub-slab vapor sample or in groundwater samples. Therefore, the detections in the indoor air appear to be associated with the ambient air exchange and/or background sources within the house. During the March 2016 event, House #5 did not have constituents detected in the indoor air sample or sub-slab vapor sample above laboratory detection limits. Duplicate samples were collected of the indoor air and sub-slab vapor at this location and were also below laboratory detection limits. The results of the fall and spring sampling events indicate that VI from a subsurface source is not occurring at House #5.

House #6

The sample results pertaining to House #6 in September 2015 indicated TCE concentrations above the residential indoor air VISL in 6-IA (0.65 µg/m^3) and similar to the ambient air TCE concentrations. TCE was not detected in the sub-slab sample. Chloroform was detected in the indoor air sample above the residential indoor air VISL (0.56 µg/m^3). Chloroform was detected in the sub-slab vapor sample above the sub-slab VISL at 140 µg/m^3; however, chloroform was not detected in the groundwater samples. The detection of TCE in indoor air at a concentration similar to ambient air appears to be associated with ambient air exchange. The chloroform detection may be associated with a sub-slab source or a background source within the house, but it is not associated with groundwater. During the March 2016 event, House #6 only had a detection of benzene in the indoor air sample above the residential indoor air VISL at 0.57 µg/m^3. Benzene was not detected in the sub-slab vapor sample. The benzene detection in indoor air appears to be associated with ambient air exchange and/or a background source within the house. TCE was not detected above the laboratory reporting limits in either the indoor air or sub-slab sample during the later event. The results of the fall and spring sampling events indicate that VI from a subsurface source is not occurring at House #5.

4.10 Potential Migration Pathways

The main potential migration pathway for VI into structures is VOCs in groundwater volatilizing and migrating upward through permeable soils within the vadose zone through preferential pathways and eventually into buildings. However, other potential VI migration pathways are possible, such as vapors from shallow soil source soils and/or utility corridors volatizing directly into buildings. These various potential pathways for sub-surface vapor migration are further detailed in the following subsections.

4.10.1 Shallow Soil

Vapors can migrate into unsaturated soils directly from a soil source. Surface water infiltration can flush through a soil source, transporting water and contaminants from the surface to deeper soils. Vapors can migrate horizontally as well as vertically during rain events or high atmospheric pressure.

Benzene and toluene at VAP-2 were the only VOCs detected in any of the shallow soil samples. However, benzene, ethylbenzene, toluene, xylenes, and 1,2,4-TMB were detected in soil gas, but not in shallow groundwater. This indicates a potential shallow soil localized petroleum source or sources or the utility corridor within the VI Focus Area, and not VI migrating from the groundwater.

4.10.2 Utility Corridors

Utility corridors can provide pathways for vapor or water transport. Impacted material from utilities can enter high-conductivity backfill through cracks in utility pipes or joints. Soil gas can sometimes migrate farther in high-conductivity backfill of utility trenches than in native soil and can travel in the direction of the utility trench. Impacted water in high-conductivity backfill also can migrate in opposite directions from natural groundwater flow due to elevation changes at the base of the utility trench.

Several subsurface utilities have been identified in the VI Focus Area. Water lines and sanitary sewer lines are present northeast-southwest along Lyon Drive. A sanitary sewer line also is present northwest-southeast between House #5 and House #6 and is connected to a lift station located in the southwest

corner of the House #6 property. A second lift station is located in the southwest corner of the House #1 property and is connected to the lift station behind House #5 by a sanitary sewer line present northeast-southwest along the gravel road to the south of Lyon Drive. Natural gas lines have been identified as present northeast-southwest along Lyon Drive.

The chloroform detected in the sub-slab sample at House #6 (6-SS) and in soil gas samples collected at SG-3, SG-4, SG-5, and SG-7 appears to be associated with utilities because chloroform was not detected in the shallow groundwater. Chlorinated water is supplied to the homes in the vicinity of the VI Focus Area. Chloroform can be a by-product of chlorinated water. A water relief valve located approximately 90 feet northwest of SG-6 was observed to be draining onto the ground.

4.10.3 Shallow Groundwater

The main potential migration for VI into structures is VOCs in groundwater volatilizing and migrating upward through permeable soils within the vadose zone through preferential pathways and eventually into buildings. However, this transport pathway was not observed in the VI Focus Area. The presence of the low-permeability and saturated soils identified in the surficial clay layer impedes vertical migration of vapors though the soil column. Therefore, any VI from the shallow groundwater likely would be limited to geologic preferential pathways and/or utility corridors. This evaluation identified no evidence of VI from groundwater via a direct pathway through the surficial soil or the utility corridors.

5 SUMMARY

At the request of the USEPA, a VI assessment was conducted in September/October 2015 to include indoor air, sub-slab vapor, soil gas, groundwater, and soil sampling in the VI Focus Area and vicinity. Additionally, a second sampling event was performed in March 2016 (the opposite season of the initial sampling event) that included resampling four of the eight soil gas ports (SG-3, SG-6, SG-7 and SG-8) and resampling the six residential structures in the VI Focus Area. The VI Focus Area is shown on Figure 2. The VI assessment and scope of work were detailed in the revised IMWP dated September 10, 2015, and conditionally approved by the USEPA Region 4 in their September 4, 2015 letter. The agreed list of compounds to be analyzed was detailed in the revised IMWP and also approved by the USEPA. The scope of work included the following:

- Installation and two rounds of sampling of eight soil gas ports (SG-1 through SG-8) in the vicinity of the VI Focus Area.
- Collection and analysis of two rounds of ambient air, indoor air, and sub-slab vapor samples from the six homes in the VI Focus Area.
- Installation of ten VAP borings located in the vicinity of the VI Focus Area, and collection and analysis of soil and groundwater samples. These samples were analyzed for a wider range of constituents beyond the agreed list for VI to include VOCs, SVOCs, and metals.

The laboratory results of the samples collected were evaluated against the USEPA residential VISLs to determine potential impacts to residential homes in the VI Focus Area. Additionally, data collected during the assessment activities were used in the "multiple lines of evidence" approach discussed in the OSWER Technical Guide. The results of the evaluation are as follows:

- Benzene and chloroform were detected above the VISLs for the soil gas port samples. Both of the compounds appear to be a result of either a localized petroleum source or utility corridors in the VI Focus Area, and are not related to VI from a groundwater source. Groundwater samples in and around the VI Focus Area do not contain chloroform or benzene.
- During the September 2015 sampling event, some compounds were detected in the background ambient air samples, with TCE detected above the VISL. During the March 2016 seasonal sampling event, neither TCE nor any other organic compounds were detected in the ambient air samples.
- During the September 2015 sampling event, no organic compounds were detected above the VISLs in the sub-slab vapor samples, with the exception of chloroform in 6-SS and TCE in the duplicate sample for 1-SS. Chloroform in 6-SS appears to be a result of utility corridors in the VI Focus Area, and is not related to VI from a groundwater source. The detection of TCE in the duplicate sample is suspect, given no detection of this compound in the primary sample. During the March 2016 seasonal sampling event, TCE was not detected above the VISL in any of the sub-slab vapor samples.
- During the September 2015 sampling event, benzene, chloroform, 1,2-DCA, and TCE were detected above the VISLs for the indoor air samples. Benzene, chloroform, and 1,2-DCA appear to be a result of either a localized petroleum source or the utility corridors in the VI Focus Area, and are not related to VI from a groundwater source. TCE does not appear to be migrating from the groundwater, but, rather, to be a result of ambient air exchange. During the March 2016 seasonal sampling event, benzene, chloroform, and 1,2-DCA were detected above the VISLs for the indoor air samples; TCE was not detected above the VISL in the indoor air samples.

Based on the VI assessment conducted in the VI Focus Area and its vicinity, the following key findings have been identified:

- Indoor air detections of TCE and some other VOCs during the September 2015 sampling event were similar to ambient air concentrations, indicating the typical exchange of indoor air with ambient air.
- Other VOCs detected in the indoor air samples appear to be from background sources because most of these VOCs were not detected in either shallow groundwater or sub-slab vapor samples.
- Utility corridors (from leakage or transport within the corridor) and shallow soils are potential sources of the other VOCs that are not related to VI from a groundwater source.
- TCE concentrations observed in shallow groundwater above the groundwater-to-vapor VISL were limited and sporadic in this assessment and in past investigations.
- The surficial soil is primarily silt and clay with a high moisture content and low air-filled porosity. The geotechnical properties demonstrate that the surficial soils have a low potential for vapor migration.
- The VI pathway is incomplete.

6 REFERENCES

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USEPA. 2011. Background Indoor Air Concentrations of Volatile Organic Compounds in North American Residences (1990-2005): A Compilation of Statistics for Assessing Vapor Intrusion. June.

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TABLES

Table 1
Summary of Vapor Intrusion Screening Levels for Indoor Air, Sub-Slab Vapor, Exterior Soil Gas, and Groundwater
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS Design & Consultancy for natural and built assets

Constituent	Indoor Air/ Ambient Air ($\mu g/m^3$)†	Sub-Slab Vapor/ Exterior Soil Gas ($\mu g/m^3$)†	Groundwater (µg/L)*
Benzene	0.36	12	2
Chloroform	0.12	4.1	1
Dichloroethane, 1,2-	0.11	3.6	2.9
Dichloroethene, 1,1-	210	7000	230
Dichloroethene, cis-1,2-	NL	NL	NL
Dichloroethene, trans-1,2-	NL	NL	NL
Ethylbenzene	1.1	37	4.7
Methylene chloride	100	3400	930
Tetrachloroethene	11	360	20
Toluene	5200	170000	2500
Trichlorothane, 1,1,2-	0.18	58	6.8
Trichloroethene	0.48	16	1.5
Trimethylbenzene, 1,2,4-	7.3	240	40
Vinyl chloride	0.17	5.6	0.17
m-Xylenes	100	3500	480
o-Xylenes	100	3500	660
p-Xylenes	100	3500	500
Xylenes	100	3500	660

Notes:

* USEPA VISL Calculator Version 3.4, June 2015 RSLs used to calculate target residential screening levels for indoor air, ambient air, sub-slab vapor, and exterior soil gas concentrations based on the lower of either a target cancer risk of 1E-06 or a target hazard index of 1. Screening levels assume 26-year exposure duration, 350 days per year, 24 hours per day.

† USEPA VISL Calculator Version 3.4, June 2015 RSLs used to calculate target residential screening levels for groundwater concentration based an average groundwater temperature of 20 degrees celsius and on the lower of either a target cancer risk of 1E-06 or a target hazard index of 1. Screening levels assume 26-year exposure duration, 350 days per year, 24 hours per day.

Acronyms:

µg/L	Micrograms per liter.
$\mu g/m^3$	Micrograms per cubic meter.
NL	No screening criteria calculated.
RSL	Regional Screening Level.
USEPA	U.S. Environmental Protection Agency.
VISL	Vapor Intrusion Screening Level.

Table 2
Summary of Exterior Soil Gas Analytical Results
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Sample Details			Constituent (µg/m³)															
Sample ID	Sample Date	Screened Interval (ft bgs)	Benzene	Chloroform	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	Ethylbenzene	Methylene Chloride	PCE	Toluene	1,1,2-TCA	TCE	1,2,4-TMB	Vinyl Chloride	m,p-Xylenes	o-Xylenes
	Exterior Soil Gas Screening Level*		12	4.1	3.6	7,000	NL	NL	37	3,400	360	170,000	58	16	240	5.6	3,500	3,500
SG-1	9/16/2015	5.5 - 6.0	< 4.0	< 6.0	< 5.0	< 4.9	< 4.9	< 4.9	7.6	< 43	< 8.4	< 4.7	< 6.8	< 6.7	< 6.1 UJ	< 3.2	15	< 5.4
SG-1	3/2/2016	5.5 - 6.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SG-2	9/16/2015	5.5 - 6.0	5.6	< 5.6	< 4.6	< 4.5	< 4.5	< 4.5	< 4.9	< 40	< 7.7	< 4.3	< 6.2	< 6.1	< 5.6 UJ	< 2.9	< 5.0	< 5.0
SG-2	3/2/2016	5.5 - 6.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SG-3	9/16/2015	5.5 - 6.0	9.4	9.1	< 4.7	< 4.6	< 4.6	< 4.6	< 5.1	< 41	< 7.9	< 4.4	< 6.4	< 6.3	< 5.8 UJ	< 3.0	< 5.1	< 5.1
SG-3	3/2/2016	5.5 - 6.0	<3.8	<5.7	<4.8	<4.6	<4.6	<4.8	<5.1	<41	<8	<4.4	<6.4	<6.3	<5.8	<3	<5.1	<5.1
SG-4	10/7/2015**	5.5 - 6.0	< 4.2	< 6.4	< 5.3	< 5.2	< 5.2	< 5.2	< 5.7	< 46	< 9.0	< 5.0	< 7.2	< 7.1	< 6.5	< 3.4	< 5.7	< 5.7
SG-4	3/2/2016	5.5 - 6.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SG-5	9/16/2015	5.0 - 5.5	8.3 J [6.8 J]	88 J [88 J]	< 5.2 UJ [< 5.0 UJ	< 5.1 UJ [< 4.9 UJ	< 5.1 UJ [< 4.9 UJ	< 5.1 UJ [< 4.9 UJ	13 J [13 J]	< 45 UJ [< 43 UJ]	< 8.8 UJ [< 8.4 UJ	30 J [30 J]	< 7.1 UJ [<6.8 UJ	< 7.0 UJ [< 6.7 UJ	21 J [20 J]	< 3.3 UJ [< 3.2 UJ	65 J [68 J]	24 J [25 J]
SG-5	3/2/2016	5.0 - 5.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SG-6	9/16/2015	5.5 - 6.0	23 J	97 J	< 5.3 UJ	< 5.2 UJ	< 5.2 UJ	< 5.2 UJ	8.5 J	< 46 UJ	< 8.9 UJ	21 J	< 7.2 UJ	< 7.1 UJ	15 J	< 3.4 UJ	48 J	16 J
SG-6	3/2/2016	5.5 - 6.0	<5 [<5.8]	<7.7 [<8.8]	<6.4 [<7.3]	<6.2 [<7.2]	<6.2 [<7.2]	<6.2 [<7.2]	<6.8 [<7.8]	<54 [<63]	<11 [<12]	5.9 [<6.8]	<8.6 [<9.8]	<8.4 [<9.7]	<7.7 [<8.9]	<4 [<4.6]	<6.8 [<7.8]	<6.8 [<7.8]
SG-7	10/7/2015**	2.75 - 3.25	< 4.3	17	< 7.3	< 5.3	< 5.3	< 5.3	< 5.8	< 47	< 9.1	< 5.1	< 7.3	< 7.2	14	< 3.4	13	8.1
SG-7	3/2/2016	2.75 - 3.25	<3.7	<5.6	<4.6	<4.6	<4.6	<4.6	<5.0	<40	<7.8	<4.3	<6.3	<6.2	<5.6	<2.9	6.5	<5.0
SG-8	10/7/2015**	3.0 - 3.5	< 4.2	< 6.4	< 5.3	< 5.2	< 5.2	< 5.2	< 5.7	< 46	< 9.0	< 5.0	< 7.2	8.7	< 6.5	< 3.4	< 5.7	< 5.7
SG-8	3/2/2016	3.0 - 3.5	<7.3	<11	<9.2	<9.1	<9	<9	<9.9	<79	<15	<8.6	<12	14	<11	<5.8	<8.9	<9.9

Notes:

* USEPA VISL Calculator Version 3.4, June 2015 RSLs used to calculate target residential screening levels for exterior soil gas concentrations based on the lower of either a target cancer risk of 1E-06 or a target hazard index of 1.0. Screening levels assume 26-year exposure duration, 350 days per year, 24 hours per day.

** Due to a laboratory error, the soil gas samples collected on 9/16/2015 were not analyzed. The soil gas port location was re-sampled on 10/7/2015.

[ ] Duplicate sample.

BOLD and SHADED Bold and shaded values exceed the applicable screening level based on the lower of either a target cancer risk of 1E-06 or a target hazard index of 1.0.

Acronyms:

bgs	Below ground surface.
DCA	Dichloroethane.
DCE	Dichloroethene.
ft	Feet.
HQ	Hazard quotient.
J	The compound was positively identified; however, the associated numerical value is an estimated concentration only.
µg/m³	Micrograms per cubic meter.
NL	Screening level not calculated due to no toxicity data.
NS	Not sampled.
PCE	Tetrachloroethene.
RSL	Regional Screening Level.
TCA	Trichloroethane.
TCE	Trichloroethene.
TMB	Trimethylbenzene.
UJ	The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
USEPA	U.S. Environmental Protection Agency.
VISL	Vapor Intrusion Screening Level.

Table 3
Summary of Residential Air Sampling (Indoor, Sub-Slab, and Ambient Air) Analytical Results
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Sample Details			Constituent (µg/m³)															
Sample ID	Sample Type	Sample Date	Benzene	Chloroform	1,2-DCA	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	Ethylbenzene	Methylene Chloride	PCE	Toluene	1,1,2-TCA	TCE	1,2,4-TMB	Vinyl Chloride	m,p-Xylenes	o-Xylenes
Indoor Air/Ambient Air Screening Level*			0.36	0.12	0.11	210	NL	NL	1.1	100	11	5200	0.18	0.48	7.3	0.17	100	100
Sub-Slab Vapor Screening Level*			12	4.1	3.6	7000	NL	NL	37	3400	360	170000	58	16	240	5.6	3500	3500
1-IA	Indoor Air	9/23/2015	3.8	0.75	0.84	< 0.18	0.61	< 1.8	1.0	< 3.2	< 0.62	5.4	< 0.50	1.1	< 2.2 UJ	< 0.12	2.6	0.95
1-IA	Indoor Air	3/2/2016	1.6	0.9	0.58	<0.14	<0.29	<1.4	0.5	<2.6	<0.5	2.8	<0.4	<0.4	<1.8	<0.094	1.2	0.39
1-SS	Sub-Slab Vapor	9/23/2015	< 3.9 [< 3.8]	< 6.0 [< 5.7]	< 4.9 [< 4.8]	< 4.8 [< 4.6]	< 4.8 [< 4.6]	< 4.8 [< 4.6]	< 5.3 [< 5.1]	< 42 [< 41]	8.5 [< 8.0]	< 4.6 [< 4.4]	< 6.6 [< 6.4]	< 6.6 [22]	< 6.0 [< 5.8]	< 3.1 [< 3.0]	< 5.3 [< 5.1]	< 5.3 [< 5.1]
1-SS	Sub-Slab Vapor	3/3/2016	<3.8	<5.8	<4.8	<4.7	<4.7	<4.7	<5.1	<41	<8	<4.5	<6.5	<6.4	<5.8	<3	<5.1	<5.1
2-IA	Indoor Air	9/23/2015	0.81	0.91	7.0	< 0.17	0.57	< 1.7	0.85	< 3.0	< 0.59	7.9	< 0.48	1.1	< 2.0 UJ	< 0.11	1.9	1.1
2-IA	Indoor Air	3/2/2016	<0.87	<0.53	8.8	<0.22	<0.43	<2.2	0.52	<3.8	<0.74	7.4	<0.59	<0.58	<2.7	<0.14	1.5	0.64
2-SS	Sub-Slab Vapor	9/23/2015	< 3.7	< 5.7	< 4.7	< 4.6	< 4.6	< 4.6	< 5.1	< 41	< 7.9	6.9	< 6.4	< 6.3	< 5.8	< 3.0	< 5.1	< 5.1
2-SS	Sub-Slab Vapor	3/3/2016	<3.8	<5.8	<4.8	<4.7	<4.7	<4.7	<5.1	<41	<8	<4.5	<6.5	<6.4	<5.8	<3	<5.1	<5.1
3-IA	Indoor Air	9/23/2015	< 2.8	4.2	< 1.4	< 0.69	< 1.4	< 6.9	< 1.5	< 12	< 2.4	5.6	< 1.9	< 1.9	< 8.6 UJ	< 0.45	< 3.0	< 1.5
3-IA	Indoor Air	3/2/2016	1.1	<0.33	0.36	<0.13	<0.26	<1.3	<0.29	<2.3	<0.45	11	<0.36	<0.36	<1.6	<0.085	0.61	<0.29
3-SS	Sub-Slab Vapor	9/23/2015	< 3.6	< 5.6	< 4.6	< 4.5	< 4.5	12	< 4.9	< 40	< 7.7	< 4.3	< 6.2	< 6.1	< 5.6	< 2.9	< 5.0	< 5.0
3-SS	Sub-Slab Vapor	3/3/2016	<3.7	<5.7	<4.7	<4.6	<4.6	<4.6	<5.0	<40	<7.9	<4.4	<6.4	<6.3	<5.7	<3	<5.0	<5.0
4-IA	Indoor Air	9/23/2015	1.8	0.94	1.2	< 0.071	0.58	< 0.71	0.43	< 1.2	< 0.24	2.7	< 0.20	0.99	< 0.88 UJ	0.079	1.1	0.56
4-IA	Indoor Air	3/2/2016	0.48	4.9	<0.14	<0.067	<0.13	<0.67	0.4	<1.2	<0.23	1.7	<0.18	<0.18	<0.82	<0.043	0.95	0.34
4-SS	Sub-Slab Vapor	9/23/2015	< 3.7	< 5.7	< 4.7	< 4.6	< 4.6	< 4.6	< 5.0	< 40	7.9	< 4.4	< 6.4	< 6.3	< 5.7	< 3.0	< 5.0	< 5.0
4-SS	Sub-Slab Vapor	3/3/2016	<3.8	<5.7	<4.8	<4.6	<4.6	<4.6	<5.1	<41	<8	<4.4	<6.4	<6.3	<5.8	<3	<5.1	<5.1
5-IA	Indoor Air	9/23/2015	0.86	0.21	0.18	< 0.076	0.65	< 0.76	0.55	2.0	< 0.26	2.6	< 0.21	0.86	< 0.94 UJ	0.062	1.6	0.56
5-IA	Indoor Air	3/2/2016	0.31 [0.3]	<0.16 [<0.15]	<0.13[<0.12]	<0.064[<0.06]	<0.13[<0.12]	<0.64[<0.6]	<0.14[<0.13]	<1.1[<1]	<0.22[<0.2]	0.39[0.36]	<0.18[<0.16]	<0.17[<0.16]	<0.8[<0.74]	<0.041[<0.038]	<0.28[<0.26]	<0.14[<0.13]
5-SS	Sub-Slab Vapor	9/23/2015	< 3.8	< 5.8	< 4.8	< 4.7	< 4.7	< 4.7	< 5.2	< 41	< 8.1	< 4.5	< 6.5	< 6.4	6.6	< 3.0	< 5.2	< 5.2
5-SS	Sub-Slab Vapor	3/3/2016	<3.6 [<3.7]	<5.5 [<5.7]	<4.6 [<4.7]	<4.5 [<4.6]	<4.5 [<4.6]	<4.5 [<4.6]	<4.9 [<5.1]	<39 [<41]	<7.6 [<7.9]	<4.2 [<4.4]	<6.1 [<6.4]	<6.0 [<6.3]	<5.5 [<5.8]	<2.9 [<3]	<4.9 [<5.1]	<4.9 [<5.1]
6-IA	Indoor Air	9/23/2015	< 0.70	0.56	< 0.35	< 0.17	0.38	< 1.7	0.63	< 3.0	< 0.59	3.9	< 0.48	0.65	< 2.2 UJ	< 0.11	2.1	1.0
6-IA	Indoor Air	3/2/2016	0.57	<0.22	<0.18	<0.091	<0.18	<0.91	<0.20	<1.6	<0.31	4	<0.25	<0.25	<1.1	<0.058	0.47	<0.20
6-SS	Sub-Slab Vapor	9/23/2015	< 3.7	140	< 4.7	< 4.6	< 4.6	< 4.6	< 5.1	< 41	< 7.9	4.7	< 6.4	< 6.3	< 5.8	< 3.0	< 5.1	< 5.1
6-SS	Sub-Slab Vapor	3/3/2016	<3.8	38	<4.9	<4.8	<4.8	<4.8	<5.1	<41	<8	<4.5	<6.5	<6.4	<5.8	<3	<5.1	<5.1
1-AA	Ambient Air	9/23/2015	0.30 J	< 0.19	< 0.15	< 0.076	0.85	< 0.76	< 0.16	< 1.3	< 0.26	0.66	< 0.21	1.2	< 0.94 UJ	0.10	0.52	0.29
1-AA	Ambient Air	3/2/2016	0.34	<0.16	<0.13	<0.063	<0.13	<0.63	<0.14	<1.1	<0.22	0.56	<0.17	<0.17	<0.79	<0.041	<0.28	<0.14
2-AA	Ambient Air	9/23/2015	0.32	< 0.18	< 0.15	< 0.072	0.67	< 0.72	0.24	< 1.3	< 0.25	0.89	< 0.20	1.0	< 0.90 UJ	0.046 J	0.83	0.36
2-AA	Ambient Air	3/2/2016	0.3	<0.15	<0.12	<0.060	<0.12	<0.60	<0.13	<1.0	<0.20	0.34	<0.16	<0.16	<0.74	<0.038	<0.26	<0.13

Notes:

* USEPA VISL Calculator Version 3.4, June 2015 RSLs used to calculate target residential screening levels for indoor air, ambient air, and sub-slab vapor concentrations based on the lower of either a target cancer risk of 1E-06 or **target hazard index of 1.0**. Screening levels assume 26-year exposure duration, 350 days per year, 24 hours per day.

[ ] Duplicate sample.

BOLD and SHADED Bold and shaded values exceed the applicable screening level based on the lower of either a target cancer risk of 1E-06 or a target hazard index of 1.0.

Acronyms:

DCA Dichloroethane.
DCE Dichloroethene.
J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
µg/m³ Micrograms per cubic meter.
NL Screening level not calculated due to no toxicity data.
PCE Tetrachloroethene.
RSL Regional Screening Level.
TCA Trichloroethane.
TCE Trichloroethene.
TMB Trimethylbenzene.
UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
USEPA U.S. Environmental Protection Agency.
VISL Vapor Intrusion Screening Level.

Table 4
Summary of Shallow Groundwater VOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trichlorobenzene	1,2-Dibromo-3-Chloropropane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3-Dichlorobenzene
USEPA Residential Groundwater VISLs (µg/L)†			**9,300**	**4.4**	**1,800**	**6.8**	**9.4**	**230**	**52**	**0.04**	**3,700**	**2.9**	**3.1**	**NL**
Well/Sample Details														
VAP-1-GW	12-13	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-2 GW	15-16	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-3-GW	15-16	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-4-GW	15-16	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-5-GW	15-16	10/7/2015	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 16 U	< 8 U	< 8 U	< 8 U	< 8 U
VAP-6-GW	12-13	10/8/2015	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 10 U	< 10 U	< 10 U	< 10 U
VAP-7-GW	13-14	10/9/2015	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 4 U	< 2 U	< 2 U	< 2 U	< 2 U
VAP-8-GW	18-19	10/8/2015	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.7 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U
VAP-9-GW	15-16	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-10-GW	16-17	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U

Notes:

*	Laboratory control sample or laboratory control sample duplicate is outside acceptable limits
‡	Groundwater samples collected by vertical aquifer profile method. Analyzed by Method 8260B; presented in µg/L.
†	USEPA VISL Calculator Version 3.4, June 2015 RSLs used to calculate target residential screening levels for groundwater concentration based an average groundwater temperature of 20 degrees Celsius and on the lower of either a target cancer risk of 1E-06 or a target hazard index of 1. Screening levels assumes 26-year exposure duration, 350 days per year, 24 hours per day.
BOLD and SHADED	Bold values in the shallowest groundwater interval exceed the calculated target residential VISLs for groundwater to vapor based on the lower of either a target cancer risk of 1E-06 or a target hazard index of 1.0.

Acronyms:

B	Compound was found in the blank and sample.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.
µg/L	Micrograms per liter.
NL	No screening criteria calculated.
RSL	Regional Screening Level.
U	Indicates the analyte was analyzed for but not detected.
USEPA	U.S. Environmental Protection Agency.
VISL	Vapor Intrusion Screening Level.
VOC	Volatile organic compound.

Table 4
Summary of Shallow Groundwater VOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	1,4-Dichlorobenzene	2-Butanone (MEK)	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene	Bromoform	Bromomethane	Carbon Disulfide	Carbon Tetrachloride	Chlorobenzene	Chlorodi-bromomethane
USEPA Residential Groundwater VISLs (µg/L)†			**3.6**	**2,800,000**	**11,000**	**730,000**	**1,100,000**	**2**	**160**	**20**	**1,500**	**0.52**	**540**	**NL**
Well/Sample Details														
VAP-1-GW	12-13	10/2/2015	< 1 U	0.72 J	< 10 U	< 10 U	2.9 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-2 GW	15-16	10/5/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-3-GW	15-16	10/6/2015	< 1 U	< 10 U	< 10 U	< 10 U	1.6 J	< 1 U	< 1 U	< 1 U	0.56 J	< 1 U	< 1 U	< 1 U
VAP-4-GW	15-16	10/6/2015	< 1 U	< 10 U	< 10 U	< 10 U	1.3 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-5-GW	15-16	10/7/2015	< 8 U	< 80 U	< 80 U	< 80 U	< 80 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U
VAP-6-GW	12-13	10/8/2015	< 10 U	< 100 U	< 100 U	< 100 U	< 100 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
VAP-7-GW	13-14	10/9/2015	< 2 U	< 20 U	< 20 U	< 20 U	< 20 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
VAP-8-GW	18-19	10/8/2015	< 3.3 U	< 33 U	< 33 U	< 33 U	< 33 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U
VAP-9-GW	15-16	10/1/2015	< 1 U	1.3 J	< 10 U	< 10 U	8.3 J B	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-10-GW	16-17	10/20/2015	< 1 U	0.64 J	< 10 U	< 10 U	2.2 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U

Notes:

*	Laboratory control sample or laboratory control sample duplicate is outside acceptable limits
‡	Groundwater samples collected by vertical aquifer profile method. Analyzed by Method 8260B; presented in µg/L.
†	USEPA VISL Calculator Version 3.4, June 2015 RSLs used to calculate target residential screening levels for groundwater concentration based an average groundwater temperature of 20 degrees Celsius and on the lower of either a target cancer risk of 1E-06 or a target hazard index of 1. Screening leve assumes 26-year exposure duration, 350 days per year, 24 hours per day
BOLD and SHADED	Bold values in the shallowest groundwater interval exceed the calculated target residential VISLs for groundwater to vapor based on the lower of either a target cancer risk of 1E-06 or a target hazard index of 1.0.

Acronyms:

B	Compound was found in the blank and sample.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.
µg/L	Micrograms per liter.
NL	No screening criteria calculated.
RSL	Regional Screening Level.
U	Indicates the analyte was analyzed for but not detected.
USEPA	U.S. Environmental Protection Agency.
VISL	Vapor Intrusion Screening Level.
VOC	Volatile organic compound.

Table 4
Summary of Shallow Groundwater VOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Cyclohexane	Dichloro-bromomethane	Dichloro-difluoromethane	Ethylbenzene	Ethylene Dibromide	Isopropyl-benzene	Methyl Acetate
USEPA Residential Groundwater VISLs (µg/L)†			**NL**	**1**	**300**	**NL**	**NL**	**1,300**	**NL**	**9.4**	**4.7**	**NL**	**NL**	**3,300**
Well/Sample Details														
VAP-1-GW	12-13	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
VAP-2 GW	15-16	10/5/2015	< 1 U	< 1 U	< 1 U	0.74 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
VAP-3-GW	15-16	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
VAP-4-GW	15-16	10/6/2015	< 1 U	< 1 U	< 1 U	0.47 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
VAP-5-GW	15-16	10/7/2015	< 8 U	< 8 U	< 8 U	220	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 80 U
VAP-6-GW	12-13	10/8/2015	< 10 U	< 10 U	< 10 U	170	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 100 U
VAP-7-GW	13-14	10/9/2015	< 2 U	< 2 U	< 2 U	44	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 20 U
VAP-8-GW	18-19	10/8/2015	< 3.3 U	< 3.3 U	< 3.3 U	85	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 33 U
VAP-9-GW	15-16	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
VAP-10-GW	16-17	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U

Notes:

*	Laboratory control sample or laboratory control sample duplicate is outside acceptable limits
‡	Groundwater samples collected by vertical aquifer profile method. Analyzed by Method 8260B; presented in µg/L.
†	USEPA VISL Calculator Version 3.4, June 2015 RSLs used to calculate target residential screening levels for groundwater concentration based an average groundwater temperature of 20 degrees Celsius and on the lower of either a target cancer risk of 1E-06 or a target hazard index of 1. Screening level assumes 26-year exposure duration, 350 days per year, 24 hours per day
BOLD and SHADED	Bold values in the shallowest groundwater interval exceed the calculated target residential VISLs for groundwater to vapor based on the lower of either a target cancer risk of 1E-06 or a target hazard index of 1.0.

Acronyms:

B	Compound was found in the blank and sample.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.
µg/L	Micrograms per liter.
NL	No screening criteria calculated.
RSL	Regional Screening Level.
U	Indicates the analyte was analyzed for but not detected.
USEPA	U.S. Environmental Protection Agency.
VISL	Vapor Intrusion Screening Level.
VOC	Volatile organic compound.

Table 4
Summary of Shallow Groundwater VOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	Methyl tert-butyl ether	Methyl-cyclohexane	Methylene Chloride	Styrene	Tetra-chloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride	Total Xylenes
USEPA Residential Groundwater VISLs (µg/L)†			**550**	**NL**	**930**	**12,000**	**20**	**25,000**	**NL**	**NL**	**1.5**	**220**	**0.17**	**660**
Well/Sample Details														
VAP-1-GW	12-13	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
VAP-2 GW	15-16	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	**2.1**	< 1 U	< 1 U	< 2 U
VAP-3-GW	15-16	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
VAP-4-GW	15-16	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.83 J	< 1 U	< 1 U	< 2 U
VAP-5-GW	15-16	10/7/2015	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	**81**	< 8 U	< 8 U	< 16 U
VAP-6-GW	12-13	10/8/2015	< 10 U	< 10 U	6.7 J B	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	**160**	< 10 U	< 10 U	< 20 U
VAP-7-GW	13-14	10/9/2015	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	**21**	< 2 U	< 2 U	< 4 U
VAP-8-GW	18-19	10/8/2015	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	**39**	< 3.3 U	< 3.3 U	< 6.7 U
VAP-9-GW	15-16	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
VAP-10-GW	16-17	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.28 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U

Notes:

*	Laboratory control sample or laboratory control sample duplicate is outside acceptable limits
‡	Groundwater samples collected by vertical aquifer profile method. Analyzed by Method 8260B; presented in µg/L.
†	USEPA VISL Calculator Version 3.4, June 2015 RSLs used to calculate target residential screening levels for groundwater concentration based an average groundwater temperature of 20 degrees Celsius and on the lower of either a target cancer risk of 1E-06 or a target hazard index of 1. Screening levels assumes 26-year exposure duration, 350 days per year, 24 hours per day.
BOLD and SHADED	Bold values in the shallowest groundwater interval exceed the calculated target residential VISLs for groundwater to vapor based on the lower of either a target cancer risk of 1E-06 or a target hazard index of 1.0.

Acronyms:

B	Compound was found in the blank and sample.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.
µg/L	Micrograms per liter.
NL	No screening criteria calculated.
RSL	Regional Screening Level.
U	Indicates the analyte was analyzed for but not detected.
USEPA	U.S. Environmental Protection Agency.
VISL	Vapor Intrusion Screening Level.
VOC	Volatile organic compound.

Table 5
Summary of Groundwater VOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trichlorobenzene	1,2-Dibromo-3-Chloropropane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3-Dichlorobenzene
Well/Sample Details														
VAP-1-GW	12-13	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	15-16	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	20-21	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	25-26	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	30-31	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	35-36	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	40-41	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	45-46	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	49-50	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-2 GW	15-16	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	20-21	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	25-26	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	30-31	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	35-36	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	40-41	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	40-41 (DUP-1)	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	45-46	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	49-50	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-3-GW	15-16	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	20-21	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	25-26	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	30-31	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	35-36	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	40-41	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	45-46	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	49-50	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-4-GW	15-16	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	20-21	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	25-26	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	30-31	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	35-36	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	40-41	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	45-46	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	48-49	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-5-GW	15-16	10/7/2015	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 16 U	< 8 U	< 8 U	< 8 U	< 8 U
	20-21	10/7/2015	< 10 U F2	< 10 U	< 10 U	< 10 U	< 10 U F2	< 10 U F2	< 10 U	< 20 U	< 10 U	< 10 U	< 10 U	< 10 U
	25-26	10/7/2015	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U
	30-31	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	35-36	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	40-41	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	45-46	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	49-50	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-6-GW	12-13	10/8/2015	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 10 U	< 10 U	< 10 U	< 10 U
	15-16	10/8/2015	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 20 U	< 10 U	< 10 U	< 10 U	< 10 U
	20-21	10/8/2015	< 33 U	< 33 U	< 33 U	< 33 U	< 33 U	< 33 U	< 33 U	< 67 U	< 33 U	< 33 U	< 33 U	< 33 U
	25-26	10/8/2015	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 80 U	< 40 U	< 40 U	< 40 U	< 40 U
	30-31	10/8/2015	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 100 U	< 50 U	< 50 U	< 50 U	< 50 U
	30-31 (DUP-2)	10/8/2015	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 100 U	< 50 U	< 50 U	< 50 U	< 50 U
	30-35	10/8/2015	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 80 U	< 40 U	< 40 U	< 40 U	< 40 U
	40-41	10/8/2015	< 25 U F2	< 25 U F2	< 25 U F2	< 25 U	< 25 U	< 25 U	< 25 U	< 50 U	< 25 U F2	< 25 U	< 25 U	< 25 U F2
	45-46	10/8/2015	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 8 U	< 4 U	< 4 U	< 4 U	< 4 U
	49-50	10/8/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U

Table 5
Summary of Groundwater VOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trichlorobenzene	1,2-Dibromo-3-Chloropropane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3-Dichlorobenzene
Well/Sample Details														
VAP-7-GW	13-14	10/9/2015	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 4 U	< 2 U	< 2 U	< 2 U	< 2 U
	15-16	10/9/2015	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U
	20-21	10/9/2015	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 10 U	< 5 U	< 5 U	< 5 U	< 5 U
	25-26	10/9/2015	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.7 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U
	30-31	10/9/2015	< 2 U F2	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 4 U	< 2 U	< 2 U	< 2 U	< 2 U
	30-31 (DUP-3)	10/9/2015	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 4 U	< 2 U	< 2 U	< 2 U	< 2 U
	35-36	10/9/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	43-44	10/9/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	48-49	10/9/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-8-GW	18-19	10/8/2015	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 6.7 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U
	20-21	10/8/2015	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
	25-26	10/8/2015	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 4 U	< 2 U	< 2 U	< 2 U	< 2 U
	30-31	10/8/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	35-36	10/8/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	40-41	10/8/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	45-46	10/8/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	49-50	10/8/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-9-GW	15-16	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	20-21	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	25-26	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	30-31	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	35-36	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	40-41	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	45-46	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	49-50	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-10-GW	16-17	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	20-21	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	25-26	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	30-31	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	35-36	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	40-41	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	45-46	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U
	49-50	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	< 1 U	< 1 U	< 1 U

Notes:

‡	Groundwater samples collected by vertical aquifer profile method. Analyzed by Method 8260B; presented in µg/L.
B	Compound was found in the blank and sample.
F1	Matrix Spike and/or Matrix Spike Duplicate recovery is outside acceptable limits.
F2	Matrix Spike/Matrix Spike Duplicate Relative Percent Difference exceeds control limits.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.

Acronyms:

µg/L	Micrograms per liter.
U	Indicates the analyte was analyzed for but not detected.
VOC	Volatile organic compound.

Table 5
Summary of Groundwater VOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	1,4-Dichlorobenzene	2-Butanone (MEK)	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorodi-bromomethane
Well/Sample Details														
VAP-1-GW	12-13	10/2/2015	< 1 U	0.72 J	< 10 U	< 10 U	2.9 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	15-16	10/2/2015	< 1 U	0.56 J	< 10 U	< 10 U	6.6 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	20-21	10/2/2015	< 1 U	0.79 J	< 10 U	< 10 U	4.9 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	25-26	10/2/2015	< 1 U	< 10 U	< 10 U	< 10 U	2.1 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	30-31	10/2/2015	< 1 U	< 10 U	< 10 U	< 10 U	4 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	35-36	10/2/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	40-41	10/2/2015	< 1 U	0.91 J	< 10 U	< 10 U	14	< 1 U	< 1 U	< 1 U	0.47 J	< 1 U	< 1 U	< 1 U
	45-46	10/2/2015	< 1 U	0.8 J	< 10 U	< 10 U	1.6 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	49-50	10/2/2015	< 1 U	0.59 J	< 10 U	< 10 U	3.2 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-2 GW	15-16	10/5/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	20-21	10/5/2015	< 1 U	< 10 U	< 10 U	< 10 U	4.8 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	25-26	10/5/2015	< 1 U	< 10 U	< 10 U	< 10 U	6.2 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	30-31	10/5/2015	< 1 U	< 10 U	< 10 U	< 10 U	2.3 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	35-36	10/5/2015	< 1 U	< 10 U	< 10 U	< 10 U	6.5 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	40-41	10/5/2015	< 1 U	< 10 U	< 10 U	< 10 U	9.5 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	40-41 (DUP-1)	10/5/2015	< 1 U	< 10 U	< 10 U	< 10 U	5.6 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	45-46	10/5/2015	< 1 U	< 10 U	< 10 U	< 10 U	4.7 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	49-50	10/5/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-3-GW	15-16	10/6/2015	< 1 U	< 10 U	< 10 U	< 10 U	1.6 J	< 1 U	< 1 U	< 1 U	0.56 J	< 1 U	< 1 U	< 1 U
	20-21	10/6/2015	< 1 U	0.73 J	< 10 U	< 10 U	3.7 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	25-26	10/6/2015	< 1 U	< 10 U	< 10 U	< 10 U	4.5 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	30-31	10/6/2015	< 1 U	1.3 J	< 10 U	< 10 U	5.2 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	35-36	10/6/2015	< 1 U	0.67 J	< 10 U	< 10 U	4.6 J	< 1 U	< 1 U	< 1 U	0.38 J	< 1 U	< 1 U	< 1 U
	40-41	10/6/2015	< 1 U	1.4 J	< 10 U	< 10 U	6.1 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	45-46	10/6/2015	< 1 U	0.81 J	< 10 U	< 10 U	2.8 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	49-50	10/6/2015	< 1 U	0.83 J	< 10 U	< 10 U	4.5 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-4-GW	15-16	10/6/2015	< 1 U	< 10 U	< 10 U	< 10 U	1.3 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	20-21	10/6/2015	< 1 U	1.3 J	< 10 U	< 10 U	3 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	25-26	10/6/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	30-31	10/6/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	35-36	10/7/2015	< 1 U	0.86 J	< 10 U	< 10 U	1.4 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	40-41	10/7/2015	< 1 U	0.53 J	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	45-46	10/7/2015	< 1 U	0.54 J	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	48-49	10/7/2015	< 1 U	1.5 J	< 10 U	< 10 U	1.7 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-5-GW	15-16	10/7/2015	< 8 U	< 80 U	< 80 U	< 80 U	< 80 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U
	20-21	10/7/2015	< 10 U	< 100 U	< 100 U	< 100 U	< 100 U	< 10 U F2	< 10 U	< 10 U	< 10 U F2	< 10 U F2	< 10 U	< 10 U
	25-26	10/7/2015	< 5 U	< 50 U	< 50 U	< 50 U	< 50 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
	30-31	10/7/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	35-36	10/7/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	40-41	10/7/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	45-46	10/7/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	49-50	10/7/2015	< 1 U	2.3 J	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-6-GW	12-13	10/8/2015	< 10 U	< 100 U	< 100 U	< 100 U	< 100 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
	15-16	10/8/2015	< 10 U	< 100 U	< 100 U	< 100 U	< 100 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
	20-21	10/8/2015	< 33 U	< 330 U	< 330 U	< 330 U	< 330 U	< 33 U	< 33 U	< 33 U	< 33 U	< 33 U	< 33 U	< 33 U
	25-26	10/8/2015	< 40 U	< 400 U	< 400 U	< 400 U	< 400 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U
	30-31	10/8/2015	< 50 U	< 500 U	< 500 U	< 500 U	< 500 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U
	30-31 (DUP-2)	10/8/2015	< 50 U	< 500 U	< 500 U	< 500 U	< 500 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U
	30-35	10/8/2015	< 40 U	< 400 U	< 400 U	< 400 U	< 400 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U
	40-41	10/8/2015	< 25 U F2	< 250 U F2	< 250 U	< 250 U	< 250 U	< 25 U F2	< 25 U	< 25 U	< 25 U	< 25 U F2	< 25 U F2	< 25 U
	45-46	10/8/2015	< 4 U	< 40 U	< 40 U	< 40 U	< 40 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U
	49-50	10/8/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	0.9 J	< 1 U	< 1 U	< 1 U

Table 5
Summary of Groundwater VOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	1,4-Dichlorobenzene	2-Butanone (MEK)	2-Hexanone	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chlorodi-bromomethane
Well/Sample Details														
VAP-7-GW	13-14	10/9/2015	< 2 U	< 20 U	< 20 U	< 20 U	< 20 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
	15-16	10/9/2015	< 5 U	< 50 U	< 50 U	< 50 U	< 50 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
	20-21	10/9/2015	< 5 U	< 50 U	< 50 U	< 50 U	< 50 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U
	25-26	10/9/2015	< 3.3 U	< 33 U	< 33 U	< 33 U	< 33 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U
	30-31	10/9/2015	< 2 U	< 20 U	< 20 U	< 20 U	< 20 U	< 2 U	< 2 U	< 2 U F2	< 2 U	< 2 U	< 2 U	< 2 U
	30-31 (DUP-3)	10/9/2015	< 2 U	< 20 U	< 20 U	< 20 U	< 20 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
	35-36	10/9/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	43-44	10/9/2015	< 1 U	1.7 J	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	0.45 J	< 1 U	< 1 U	< 1 U
	48-49	10/9/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	0.4 J	< 1 U	< 1 U	< 1 U
VAP-8-GW	18-19	10/8/2015	< 3.3 U	< 33 U	< 33 U	< 33 U	< 33 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U
	20-21	10/8/2015	< 2.5 U	< 25 U	< 25 U	< 25 U	< 25 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U
	25-26	10/8/2015	< 2 U	< 20 U	< 20 U	< 20 U	< 20 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
	30-31	10/8/2015	< 1 U	< 10 U	< 10 U	< 10 U	1.2 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	35-36	10/8/2015	< 1 U	< 10 U	< 10 U	< 10 U	3.9 J	< 1 U	< 1 U	< 1 U	0.75 J	< 1 U	< 1 U	< 1 U
	40-41	10/8/2015	< 1 U	0.72 J	< 10 U	12	56	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.53 J	< 1 U
	45-46	10/8/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	49-50	10/8/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-9-GW	15-16	10/1/2015	< 1 U	1.3 J	< 10 U	< 10 U	8.3 J B	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	20-21	10/1/2015	< 1 U	1.2 J	< 10 U	< 10 U	2.3 J	< 1 U	< 1 U	< 1 U	0.64 J	< 1 U	< 1 U	< 1 U
	25-26	10/1/2015	< 1 U	0.66 J	< 10 U	< 10 U	2.8 J B	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	30-31	10/1/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	0.56 J	< 1 U	< 1 U	< 1 U
	35-36	10/1/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	40-41	10/1/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	0.52 J	< 1 U	< 1 U	< 1 U
	45-46	10/1/2015	< 1 U	0.68 J	< 10 U	< 10 U	1 J	< 1 U	< 1 U	< 1 U	0.47 J	< 1 U	< 1 U	< 1 U
	49-50	10/1/2015	< 1 U	0.65 J	< 10 U	< 10 U	5.1 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
VAP-10-GW	16-17	10/20/2015	< 1 U	0.64 J	< 10 U	< 10 U	2.2 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	20-21	10/20/2015	< 1 U	< 10 U	< 10 U	< 10 U	1.1 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	25-26	10/20/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	30-31	10/20/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	35-36	10/20/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	40-41	10/20/2015	< 1 U	1.9 J	< 10 U	< 10 U	4.5 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
	45-46	10/20/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	0.59 J	< 1 U	< 1 U	< 1 U
	49-50	10/20/2015	< 1 U	< 10 U	< 10 U	< 10 U	< 10 U	< 1 U	< 1 U	< 1 U	0.43 J	< 1 U	< 1 U	< 1 U

Notes:

‡	Groundwater samples collected by vertical aquifer profile method. Analyzed by Method 8260B; presented in µg/L.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery is outside acceptable limits.
F2	MS/MSD RPD exceeds control limits.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.

Acronyms:

µg/L	Micrograms per liter.
U	Indicates the analyte was analyzed for but not detected.
VOC	Volatile organic compound.

Table 5
Summary of Groundwater VOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Cyclohexane	Dichloro-bromomethane	Dichloro-difluoromethane	Ethylbenzene	Ethylene Dibromide	Isopropyl-benzene	Methyl Acetate
Well/Sample Details														
VAP-1-GW	12-13	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	15-16	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	20-21	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	25-26	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	30-31	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	35-36	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	40-41	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	45-46	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	49-50	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
VAP-2 GW	15-16	10/5/2015	< 1 U	< 1 U	< 1 U	0.74 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	20-21	10/5/2015	< 1 U	< 1 U	< 1 U	0.51 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	25-26	10/5/2015	< 1 U	< 1 U	< 1 U	0.54 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	30-31	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	35-36	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	40-41	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	40-41 (DUP-1)	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	45-46	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	49-50	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
VAP-3-GW	15-16	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	20-21	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	25-26	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	30-31	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	35-36	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	40-41	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	45-46	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	49-50	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
VAP-4-GW	15-16	10/6/2015	< 1 U	< 1 U	< 1 U	0.47 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	20-21	10/6/2015	< 1 U	< 1 U	< 1 U	10	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	25-26	10/6/2015	< 1 U	< 1 U	< 1 U	18	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	30-31	10/6/2015	< 1 U	< 1 U	< 1 U	5.2	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	35-36	10/7/2015	< 1 U	< 1 U	< 1 U	1.2	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	40-41	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	45-46	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	48-49	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
VAP-5-GW	15-16	10/7/2015	< 8 U	< 8 U	< 8 U	220	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 80 U
	20-21	10/7/2015	< 10 U	< 10 U F2	< 10 U	390 F1	< 10 U	< 10 U F2	< 10 U	< 10 U	< 10 U F2	< 10 U	< 10 U F2	< 100 U
	25-26	10/7/2015	< 5 U	< 5 U	< 5 U	130	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 50 U
	30-31	10/7/2015	< 1 U	< 1 U	< 1 U	2.8	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	35-36	10/7/2015	< 1 U	< 1 U	< 1 U	0.46 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	40-41	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	45-46	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	49-50	10/7/2015	< 1 U	< 1 U	< 1 U	0.27 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
VAP-6-GW	12-13	10/8/2015	< 10 U	< 10 U	< 10 U	170	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 100 U
	15-16	10/8/2015	< 10 U	< 10 U	< 10 U	270	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 100 U
	20-21	10/8/2015	< 33 U	< 33 U	< 33 U	580	< 33 U	< 33 U	< 33 U	< 33 U	< 33 U	< 33 U	< 33 U	< 330 U
	25-26	10/8/2015	< 40 U	< 40 U	< 40 U	1100	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 400 U
	30-31	10/8/2015	< 50 U	< 50 U	< 50 U	1300	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 500 U
	30-31 (DUP-2)	10/8/2015	< 50 U	< 50 U	< 50 U	1300	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 500 U
	30-35	10/8/2015	< 40 U	< 40 U	< 40 U	1000	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	< 400 U
	40-41	10/8/2015	< 25 U	< 25 U	< 25 U	630 F1	< 25 U	< 25 U	< 25 U	< 25 U F2	< 25 U F2	< 25 U	< 25 U	< 250 U F2
	45-46	10/8/2015	< 4 U	< 4 U	< 4 U	76	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 40 U
	49-50	10/8/2015	< 1 U	< 1 U	< 1 U	3.5	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U

Table 5
Summary of Groundwater VOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Cyclohexane	Dichloro-bromomethane	Dichloro-difluoromethane	Ethylbenzene	Ethylene Dibromide	Isopropyl-benzene	Methyl Acetate
Well/Sample Details														
VAP-7-GW	13-14	10/9/2015	< 2 U	< 2 U	< 2 U	44	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 20 U
	15-16	10/9/2015	< 5 U	< 5 U	< 5 U	130	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 50 U
	20-21	10/9/2015	< 5 U	< 5 U	< 5 U	140	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 50 U
	25-26	10/9/2015	< 3.3 U	< 3.3 U	< 3.3 U	100	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 33 U
	30-31	10/9/2015	< 2 U F2	< 2 U	< 2 U F2 F1	54	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 20 U
	30-31 (DUP-3)	10/9/2015	< 2 U	< 2 U	< 2 U	55	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 20 U
	35-36	10/9/2015	< 1 U	< 1 U	< 1 U	14	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	43-44	10/9/2015	< 1 U	< 1 U	< 1 U	10	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	48-49	10/9/2015	< 1 U	< 1 U	< 1 U	3.9	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
VAP-8-GW	18-19	10/8/2015	< 3.3 U	< 3.3 U	< 3.3 U	85	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 33 U
	20-21	10/8/2015	< 2.5 U	< 2.5 U	< 2.5 U	63	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 25 U
	25-26	10/8/2015	< 2 U	< 2 U	< 2 U	54	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 20 U
	30-31	10/8/2015	< 1 U	< 1 U	< 1 U	24	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	35-36	10/8/2015	< 1 U	< 1 U	< 1 U	7.5	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	40-41	10/8/2015	< 1 U	0.37 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	45-46	10/8/2015	< 1 U	< 1 U	< 1 U	0.83 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	49-50	10/8/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
VAP-9-GW	15-16	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	20-21	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	25-26	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	30-31	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	35-36	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	40-41	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	45-46	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	49-50	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
VAP-10-GW	16-17	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	20-21	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	25-26	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	30-31	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	35-36	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	40-41	10/20/2015	< 1 U	0.37 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	45-46	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U
	49-50	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 10 U

Notes:

‡	Groundwater samples collected by vertical aquifer profile method. Analyzed by Method 8260B; presented in µg/L.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery is outside acceptable limits.
F2	MS/MSD RPD exceeds control limits.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.

Acronyms:

µg/L	Micrograms per liter.
U	Indicates the analyte was analyzed for but not detected.
VOC	Volatile organic compound.

Table 5
Summary of Groundwater VOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	Methyl tert-butyl ether	Methyl-cyclohexane	Methylene Chloride	Styrene	Tetra-chloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride	Total Xylenes
Well/Sample Details														
VAP-1-GW	12-13	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	15-16	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	20-21	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	25-26	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	30-31	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	35-36	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	40-41	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	45-46	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	49-50	10/2/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
VAP-2 GW	15-16	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	2.1	< 1 U	< 1 U	< 2 U
	20-21	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.4 J	< 1 U	< 1 U	< 2 U
	25-26	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	30-31	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	35-36	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	40-41	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	40-41 (DUP-1)	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	45-46	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	49-50	10/5/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
VAP-3-GW	15-16	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	20-21	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	25-26	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	30-31	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	35-36	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	40-41	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	45-46	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	49-50	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
VAP-4-GW	15-16	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.83 J	< 1 U	< 1 U	< 2 U
	20-21	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	12	< 1 U	< 1 U	< 2 U
	25-26	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	19	< 1 U	< 1 U	< 2 U
	30-31	10/6/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	6.6	< 1 U	< 1 U	< 2 U
	35-36	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.95 J	< 1 U	< 1 U	< 2 U
	40-41	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	45-46	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	48-49	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.26 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
VAP-5-GW	15-16	10/7/2015	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	81	< 8 U	< 8 U	< 16 U
	20-21	10/7/2015	< 10 U F2	< 10 U F2	< 10 U F2	< 10 U	< 10 U F2	< 10 U F2	< 10 U F2	< 10 U	130	< 10 U	< 10 U	< 20 U F2
	25-26	10/7/2015	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	57	< 5 U	< 5 U	< 10 U
	30-31	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	1.3	< 1 U	< 1 U	< 2 U
	35-36	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.27 J	< 1 U	< 1 U	< 2 U
	40-41	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	45-46	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	49-50	10/7/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
VAP-6-GW	12-13	10/8/2015	< 10 U	< 10 U	6.7 J B	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	160	< 10 U	< 10 U	< 20 U
	15-16	10/8/2015	< 10 U	< 10 U	6.3 J B	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	260	< 10 U	< 10 U	< 20 U
	20-21	10/8/2015	< 33 U	< 33 U	23 J B	< 33 U	< 33 U	< 33 U	< 33 U	< 33 U	900	< 33 U	< 33 U	< 67 U
	25-26	10/8/2015	< 40 U	< 40 U	33 J B	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	1300	< 40 U	< 40 U	< 80 U
	30-31	10/8/2015	< 50 U	< 50 U	31 J B	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	1600	< 50 U	< 50 U	< 100 U
	30-31 (DUP-2)	10/8/2015	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	< 50 U	21 J	< 50 U	1600	< 50 U	< 50 U	< 100 U
	30-35	10/8/2015	< 40 U	< 40 U	29 J B	< 40 U	< 40 U	< 40 U	< 40 U	< 40 U	1300	< 40 U	< 40 U	< 80 U
	40-41	10/8/2015	< 25 U F2	< 25 U	17 J B	< 25 U	< 25 U F2	< 25 U F2	< 25 U	< 25 U	690 F1	< 25 U F2	< 25 U	< 50 U F2
	45-46	10/8/2015	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	< 4 U	110	< 4 U	< 4 U	< 8 U
	49-50	10/8/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	6.5	< 1 U	< 1 U	< 2 U

Table 5
Summary of Groundwater VOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	Methyl tert-butyl ether	Methyl-cyclohexane	Methylene Chloride	Styrene	Tetra-chloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride	Total Xylenes
Well/Sample Details														
VAP-7-GW	13-14	10/9/2015	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	21	< 2 U	< 2 U	< 4 U
	15-16	10/9/2015	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	62	< 5 U	< 5 U	< 10 U
	20-21	10/9/2015	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	< 5 U	79	< 5 U	< 5 U	< 10 U
	25-26	10/9/2015	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	76	< 3.3 U	< 3.3 U	< 6.7 U
	30-31	10/9/2015	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	33 F1	< 2 U	< 2 U	< 4 U
	30-31 (DUP-3)	10/9/2015	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	37	< 2 U	< 2 U	< 4 U
	35-36	10/9/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	10	< 1 U	< 1 U	< 2 U
	43-44	10/9/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	11	< 1 U	< 1 U	< 2 U
	48-49	10/9/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	6.6	< 1 U	< 1 U	< 2 U
VAP-8-GW	18-19	10/8/2015	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	< 3.3 U	39	< 3.3 U	< 3.3 U	< 6.7 U
	20-21	10/8/2015	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	< 2.5 U	31	< 2.5 U	< 2.5 U	< 5 U
	25-26	10/8/2015	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	24	< 2 U	< 2 U	< 4 U
	30-31	10/8/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	12	< 1 U	< 1 U	< 2 U
	35-36	10/8/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	5	< 1 U	< 1 U	< 2 U
	40-41	10/8/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.56 J
	45-46	10/8/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	1.4	< 1 U	< 1 U	< 2 U
	49-50	10/8/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.31 J	< 1 U	< 1 U	< 2 U
VAP-9-GW	15-16	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	20-21	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	25-26	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	30-31	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	35-36	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	40-41	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	45-46	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	49-50	10/1/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
VAP-10-GW	16-17	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.28 J	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	20-21	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	25-26	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	30-31	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	35-36	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	40-41	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	45-46	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U
	49-50	10/20/2015	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 2 U

Notes:

‡	Groundwater samples collected by vertical aquifer profile method. Analyzed by Method 8260B; presented in µg/L.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery is outside acceptable limits.
F2	MS/MSD RPD exceeds control limits.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.

Acronyms:

µg/L	Micrograms per liter.
U	Indicates the analyte was analyzed for but not detected.
VOC	Volatile organic compound.

Table 6
Summary of Groundwater SVOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	1,1'-Biphenyl	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Chloronaphthalene	2-Chlorophenol	2-Methylnaphthalene
Well/Sample Details													
VAP-1-GW	12-13	10/2/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
	15-16	10/2/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	20-21	10/2/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	25-26	10/2/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	30-31	10/2/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
	35-36	10/2/2015	< 0.94 U	< 4.7 U	< 4.7 U	< 1.9 U	< 1.9 U	< 38 U	< 4.7 U	< 4.7 U	< 0.94 U	< 0.94 U	< 0.19 U
	40-41	10/2/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	45-46	10/2/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
	49-50	10/2/2015	< 1 U	< 5 U	< 5 U	< 2 U	< 2 U	< 40 U	< 5 U	< 5 U	< 1 U	< 1 U	< 0.2 U
VAP-2 GW	15-16	10/5/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	20-21	10/5/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
	25-26	10/5/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	30-31	10/5/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
	35-36 RE	10/5/2015	< 0.96 U H	< 4.8 U H	< 4.8 U H	< 1.9 U H	< 1.9 U H	< 38 U H	< 4.8 U H	< 4.8 U H	< 0.96 U H	< 0.96 U H	< 0.19 U H
	40-41 RE	10/5/2015	< 0.96 U H	< 4.8 U H	< 4.8 U H	< 1.9 U H	< 1.9 U H	< 38 U H	< 4.8 U H	< 4.8 U H	< 0.96 U H	< 0.96 U H	< 0.19 U H
	40-41 (DUP-1) RE	10/5/2015	< 0.96 U H	< 4.8 U H	< 4.8 U H	< 1.9 U H	< 1.9 U H	< 38 U H	< 4.8 U H	< 4.8 U H	< 0.96 U H	< 0.96 U H	< 0.19 U H
	45-46 RE	10/5/2015	< 0.96 U H	< 4.8 U H	< 4.8 U H	< 1.9 U H	< 1.9 U H	< 38 U H	< 4.8 U H	< 4.8 U H	< 0.96 U H	< 0.96 U H	< 0.19 U H
	49-50	10/5/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
VAP-3-GW	15-16	10/6/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	20-21	10/6/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	25-26	10/6/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	30-31	10/6/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	35-36	10/6/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
	40-41	10/6/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
	45-46	10/6/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
	49-50	10/6/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
VAP-4-GW	15-16	10/6/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	20-21	10/6/2015	< 1 U	< 5 U	< 5 U	< 2 U	< 2 U	< 40 U	< 5 U	< 5 U	< 1 U	< 1 U	< 0.2 U
	25-26	10/6/2015	< 1 U	< 5 U	< 5 U	< 2 U	< 2 U	< 40 U	< 5 U	< 5 U	< 1 U	< 1 U	< 0.2 U
	30-31	10/6/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	35-36	10/7/2015	< 1 U	< 5 U	< 5 U	< 2 U	< 2 U	< 40 U	< 5 U	< 5 U	< 1 U	< 1 U	< 0.2 U
	40-41	10/7/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	45-46	10/7/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
	48-49	10/7/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
VAP-5-GW	15-16	10/7/2015	< 1 U	< 5 U	< 5 U	< 2 U	< 2 U	< 40 U	< 5 U	< 5 U	< 1 U	< 1 U	< 0.2 U
	20-21	10/7/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
	25-26	10/7/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	30-31	10/7/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	35-36	10/7/2015	< 1 U	< 5 U	< 5 U	< 2 U	< 2 U	< 40 U	< 5 U	< 5 U	< 1 U	< 1 U	< 0.2 U
	40-41	10/7/2015	< 1 U	< 5 U	< 5 U	< 2 U	< 2 U	< 40 U	< 5 U	< 5 U	< 1 U	< 1 U	< 0.2 U
	45-46	10/7/2015	< 1 U	< 5 U	< 5 U	< 2 U	< 2 U	< 40 U	< 5 U	< 5 U	< 1 U	< 1 U	< 0.2 U
	49-50	10/7/2015	–	–	–	–	–	–	–	–	–	–	–
VAP-6-GW	12-13	10/8/2015	–	–	–	–	–	–	–	–	–	–	–
	15-16 RE	10/8/2015	< 1 U H	< 5 U H	< 5 U H	< 2 U H	< 2 U H	< 40 U H	< 5 U H	< 5 U H	< 1 U H	< 1 U H	< 0.2 U H
	20-21	10/8/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
	20-21 RE	10/8/2015	< 0.96 U H	< 4.8 U H	< 4.8 U H	< 1.9 U H	< 1.9 U H	< 38 U H	< 4.8 U H	< 4.8 U H	< 0.96 U H	< 0.96 U H	< 0.19 U H
	25-26	10/8/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	25-26 RE	10/8/2015	< 0.93 U H	< 4.6 U H	< 4.6 U H	< 1.9 U H	< 1.9 U H	< 37 U H	< 4.6 U H	< 4.6 U H	< 0.93 U H	< 0.93 U H	< 0.19 U H
	30-31	10/8/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	30-31 RE	10/8/2015	< 0.93 U H	< 4.6 U H	< 4.6 U H	< 1.9 U H	< 1.9 U H	< 37 U H	< 4.6 U H	< 4.6 U H	< 0.93 U H	< 0.93 U H	< 0.19 U H
	30-31 (DUP-2)	10/8/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
	30-35	10/8/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	40-41	10/8/2015	< 1 U	< 5 U	< 5 U	< 2 U	< 2 U	< 40 U	< 5 U	< 5 U	< 1 U	< 1 U	< 0.2 U
	45-46	10/8/2015	< 1 U	< 5 U	< 5 U	< 2 U	< 2 U	< 40 U	< 5 U	< 5 U	< 1 U	< 1 U	< 0.2 U
	49-50	10/8/2015	< 1 U	< 5 U	< 5 U	< 2 U	< 2 U	< 40 U	< 5 U	< 5 U	< 1 U	< 1 U	< 0.2 U

Table 6
Summary of Groundwater SVOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	1,1'-Biphenyl	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Chloronaphthalene	2-Chlorophenol	2-Methylnaphthalene
Well/Sample Details													
VAP-7-GW	13-14	10/9/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	15-16	10/9/2015	< 1 U	< 5 U	< 5 U	< 2 U	< 2 U	< 40 U	< 5 U	< 5 U	< 1 U	< 1 U	< 0.2 U
	20-21	10/9/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
	25-26	10/9/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	30-31	10/9/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	30-31 (DUP-3) RE	10/9/2015	< 1 U H	< 5 U H	< 5 U H	< 2 U H	< 2 U H	< 40 U H	< 5 U H	< 5 U H	< 1 U H	< 1 U H	< 0.2 U H
	35-36 RE	10/9/2015	< 1.1 U H	< 5.4 U H	< 5.4 U H	< 2.2 U H	< 2.2 U H	< 43 U H	< 5.4 U H	< 5.4 U H	< 1.1 U H	< 1.1 U H	< 0.22 U H
	43-44 RE	10/9/2015	< 1 U H	< 5 U H	< 5 U H	< 2 U H	< 2 U H	< 40 U H	< 5 U H	< 5 U H	< 1 U H	< 1 U H	< 0.2 U H
	48-49 RE	10/9/2015	< 1.2 U H	< 6 U H	< 6 U H	< 2.4 U H	< 2.4 U H	< 48 U H	< 6 U H	< 6 U H	< 1.2 U H	< 1.2 U H	< 0.24 U H
VAP-8-GW	18-19 RE	10/8/2015	< 1.3 U H	< 6.3 U H	< 6.3 U H	< 2.5 U H	< 2.5 U H	< 50 U H	< 6.3 U H	< 6.3 U H	< 1.3 U H	< 1.3 U H	< 0.25 U H
	20-21 RE	10/8/2015	< 1.3 U H	6.6 U H	6.6 U H	< 2.6 U H	< 2.6 U H	< 53 U H	6.6 U H	6.6 U H	< 1.3 U H	< 1.3 U H	< 0.26 U H
	25-26	10/8/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	30-31	10/8/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	35-36	10/8/2015	< 1 U	< 5 U	< 5 U	< 2 U	< 2 U	< 40 U	< 5 U	< 5 U	< 1 U	< 1 U	< 0.2 U
	40-41	10/8/2015	< 1 U	< 5 U	< 5 U	< 2 U	< 2 U	< 40 U	< 5 U	< 5 U	< 1 U	< 1 U	< 0.2 U
	45-46	10/8/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
	49-50	10/8/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
VAP-9-GW	15-16	10/1/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	20-21	10/1/2015	< 1 U	< 5 U	< 5 U	< 2 U	< 2 U	< 40 U	< 5 U	< 5 U	< 1 U	< 1 U	< 0.2 U
	25-26	10/1/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	30-31	10/1/2015	< 1 U	< 5.1 U	< 5.1 U	< 2 U	< 2 U	< 41 U	< 5.1 U	< 5.1 U	< 1 U	< 1 U	< 0.2 U
	35-36	10/1/2015	< 1 U	< 5 U	< 5 U	< 2 U	< 2 U	< 40 U	< 5 U	< 5 U	< 1 U	< 1 U	< 0.2 U
	40-41	10/1/2015	< 0.89 U	< 4.5 U	< 4.5 U	< 1.8 U	< 1.8 U	< 36 U	< 4.5 U	< 4.5 U	< 0.89 U	< 0.89 U	< 0.18 U
	45-46	10/1/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
	49-50	10/1/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
VAP-10-GW	16-17	10/20/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
	20-21	10/20/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
	25-26	10/20/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
	30-31	10/20/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
	35-36	10/20/2015	< 0.89 U	< 4.5 U	< 4.5 U	< 1.8 U	< 1.8 U	< 36 U	< 4.5 U	< 4.5 U	< 0.89 U	< 0.89 U	< 0.18 U
	40-41	10/20/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U
	45-46	10/20/2015	< 0.96 U	< 4.8 U	< 4.8 U	< 1.9 U	< 1.9 U	< 38 U	< 4.8 U	< 4.8 U	< 0.96 U	< 0.96 U	< 0.19 U
	49-50	10/20/2015	< 0.93 U	< 4.6 U	< 4.6 U	< 1.9 U	< 1.9 U	< 37 U	< 4.6 U	< 4.6 U	< 0.93 U	< 0.93 U	< 0.19 U

Notes:

*	Laboratory control sample or laboratory control sample duplicate is outside acceptable limits.
‡	Groundwater samples collected by vertical aquifer profile method. Analyzed by Method 8270C; presented in µg/L.
--	Insufficient sample volume to analyze.
B	Compound was found in the blank and sample.
F2	Matrix Spike/Matrix Spike Duplicate Relative Percent Difference exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.

Acronyms:

µg/L	Micrograms per liter.
RE	Sample was re-analyzed.
SVOC	Semi-volatile organic compound.
U	Indicates the analyte was analyzed for but not detected.

Table 6
Summary of Groundwater SVOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	2-Methylphenol	2-Nitroaniline	2-Nitrophenol	3 & 4 Methylphenol	3,3'-Dichlorobenzidine	3-Nitroaniline	4,6-Dinitro-2-Methylphenol	4-Bromophenyl Phenyl Ether	4-Chloro-3-Methylphenol	4-Chloroaniline	4-Chlorophenyl Phenyl Ether	4-Nitroaniline
Well/Sample Details														
VAP-1-GW	12-13	10/2/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	15-16	10/2/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	20-21	10/2/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	25-26	10/2/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	30-31	10/2/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	35-36	10/2/2015	< 0.94 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.7 U	< 1.9 U	< 4.7 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	40-41	10/2/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	45-46	10/2/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	49-50	10/2/2015	< 1 U	< 2 U	< 2 U	< 2 U	< 5 U	< 2 U	< 5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
VAP-2 GW	15-16	10/5/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	20-21	10/5/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	25-26	10/5/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	30-31	10/5/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	35-36 RE	10/5/2015	< 0.96 U H	< 1.9 U H	< 1.9 U H	< 1.9 U H	< 4.8 U H F2	< 1.9 U H	< 4.8 U H	< 1.9 U H	< 1.9 U H	< 1.9 U H	< 1.9 U H	< 1.9 U H
	40-41 RE	10/5/2015	< 0.96 U H	< 1.9 U H	< 1.9 U H	< 1.9 U H	< 4.8 U H	< 1.9 U H	< 4.8 U H	< 1.9 U H	< 1.9 U H	< 1.9 U H	< 1.9 U H	< 1.9 U H
	40-41 (DUP-1) RE	10/5/2015	< 0.96 U H	< 1.9 U H	< 1.9 U H	< 1.9 U H	< 4.8 U H	< 1.9 U H	< 4.8 U H	< 1.9 U H	< 1.9 U H	< 1.9 U H	< 1.9 U H	< 1.9 U H
	45-46 RE	10/5/2015	< 0.96 U H	< 1.9 U H	< 1.9 U H	< 1.9 U H	< 4.8 U H	< 1.9 U H	< 4.8 U H	< 1.9 U H	< 1.9 U H	< 1.9 U H	< 1.9 U H	< 1.9 U H
	49-50	10/5/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
VAP-3-GW	15-16	10/6/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	20-21	10/6/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	25-26	10/6/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	30-31	10/6/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	35-36	10/6/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	40-41	10/6/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	45-46	10/6/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	49-50	10/6/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
VAP-4-GW	15-16	10/6/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	20-21	10/6/2015	< 1 U	< 2 U	< 2 U	< 2 U	< 5 U	< 2 U	< 5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
	25-26	10/6/2015	< 1 U	< 2 U	< 2 U	< 2 U	< 5 U	< 2 U	< 5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
	30-31	10/6/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	35-36	10/7/2015	< 1 U	< 2 U	< 2 U	< 2 U	< 5 U	< 2 U	< 5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
	40-41	10/7/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	45-46	10/7/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	48-49	10/7/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
VAP-5-GW	15-16	10/7/2015	< 1 U	< 2 U	< 2 U	< 2 U	< 5 U	< 2 U	< 5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
	20-21	10/7/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	25-26	10/7/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	30-31	10/7/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	35-36	10/7/2015	< 1 U	< 2 U	< 2 U	< 2 U	< 5 U	< 2 U	< 5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
	40-41	10/7/2015	< 1 U	< 2 U	< 2 U	< 2 U	< 5 U	< 2 U	< 5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
	45-46	10/7/2015	< 1 U	< 2 U	< 2 U	< 2 U	< 5 U	< 2 U	< 5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
	49-50	10/7/2015	–	–	–	–	–	–	–	–	–	–	–	–
VAP-6-GW	12-13	10/8/2015	–	–	–	–	–	–	–	–	–	–	–	–
	15-16 RE	10/8/2015	< 1 U H	< 2 U H	< 2 U H	< 2 U H	< 5 U H*	< 2 U H	< 5 U H	< 2 U H	< 2 U H	< 2 U H*	< 2 U H	< 2 U H
	20-21	10/8/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	20-21 RE	10/8/2015	< 0.96 U H	< 1.9 U H	< 1.9 U H	< 1.9 U H	< 4.8 U H*	< 1.9 U H	< 4.8 U H	< 1.9 U H	< 1.9 U H	< 1.9 U H*	< 1.9 U H	< 1.9 U H
	25-26	10/8/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	25-26 RE	10/8/2015	< 0.93 U H	< 1.9 U H	< 1.9 U H	< 1.9 U H	< 4.6 U H*	< 1.9 U H	< 4.6 U H	< 1.9 U H	< 1.9 U H	< 1.9 U H*	< 1.9 U H	< 1.9 U H
	30-31	10/8/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	30-31 RE	10/8/2015	< 0.93 U H	< 1.9 U H	< 1.9 U H	< 1.9 U H	< 4.6 U H*	< 1.9 U H	< 4.6 U H	< 1.9 U H	< 1.9 U H	< 1.9 U H*	< 1.9 U H	< 1.9 U H
	30-31 (DUP-2)	10/8/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	30-35	10/8/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	40-41	10/8/2015	< 1 U	< 2 U	< 2 U	< 2 U	< 5 U	< 2 U	< 5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
	45-46	10/8/2015	< 1 U	< 2 U	< 2 U	< 2 U	< 5 U	< 2 U	< 5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
	49-50	10/8/2015	< 1 U	< 2 U	< 2 U	< 2 U	< 5 U	< 2 U	< 5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U

Table 6
Summary of Groundwater SVOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	2-Methylphenol	2-Nitroaniline	2-Nitrophenol	3 & 4 Methylphenol	3,3'-Dichlorobenzidine	3-Nitroaniline	4,6-Dinitro-2-Methylphenol	4-Bromophenyl Phenyl Ether	4-Chloro-3-Methylphenol	4-Chloroaniline	4-Chlorophenyl Phenyl Ether	4-Nitroaniline
Well/Sample Details														
VAP-7-GW	13-14	10/9/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	15-16	10/9/2015	< 1 U	< 2 U	< 2 U	< 2 U	< 5 U	< 2 U	< 5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
	20-21	10/9/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	25-26	10/9/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	30-31	10/9/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	30-31 (DUP-3) RE	10/9/2015	< 1 U H	< 2 U H	< 2 U H	< 2 U H	< 5 U H*	< 2 U H	< 5 U H	< 2 U H	< 2 U H	< 2 U H*	< 2 U H	< 2 U H
	35-36 RE	10/9/2015	< 1.1 U H	< 2.2 U H	< 2.2 U H	< 2.2 U H	< 5.4 U H*	< 2.2 U H	< 5.4 U H	< 2.2 U H	< 2.2 U H	< 2.2 U H*	< 2.2 U H	< 2.2 U H
	43-44 RE	10/9/2015	< 1 U H	< 2 U H	< 2 U H	< 2 U H	< 5 U H*	< 2 U H	< 5 U H	< 2 U H	< 2 U H	< 2 U H*	< 2 U H	< 2 U H
	48-49 RE	10/9/2015	< 1.2 U H	< 2.4 U H	< 2.4 U H	< 2.4 U H	< 6 U H*	< 2.4 U H	< 6 U H	< 2.4 U H	< 2.4 U H	< 2.4 U H*	< 2.4 U H	< 2.4 U H
VAP-8-GW	18-19 RE	10/8/2015	< 1.3 U H	< 2.5 U H	< 2.5 U H	< 2.5 U H	< 6.3 U H*	< 2.5 U H	< 6.3 U H	< 2.5 U H	< 2.5 U H	< 2.5 U H*	< 2.5 U H	< 2.5 U H
	20-21 RE	10/8/2015	< 1.3 U H	< 2.6 U H	< 2.6 U H	< 2.6 U H	6.6 U H*	< 2.6 U H	6.6 U H	< 2.6 U H	< 2.6 U H	< 2.6 U H*	< 2.6 U H	< 2.6 U H
	25-26	10/8/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	30-31	10/8/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	35-36	10/8/2015	< 1 U	< 2 U	< 2 U	< 2 U	< 5 U	< 2 U	< 5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
	40-41	10/8/2015	< 1 U	< 2 U	< 2 U	< 2 U	< 5 U	< 2 U	< 5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
	45-46	10/8/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	49-50	10/8/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
VAP-9-GW	15-16	10/1/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	20-21	10/1/2015	< 1 U	< 2 U	< 2 U	< 2 U	< 5 U	< 2 U	< 5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
	25-26	10/1/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	30-31	10/1/2015	< 1 U	< 2 U	< 2 U	< 2 U	< 5.1 U	< 2 U	< 5.1 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
	35-36	10/1/2015	< 1 U	< 2 U	< 2 U	< 2 U	< 5 U	< 2 U	< 5 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
	40-41	10/1/2015	< 0.89 U	< 1.8 U	< 1.8 U	< 1.8 U	< 4.5 U	< 1.8 U	< 4.5 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U	< 1.8 U
	45-46	10/1/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
	49-50	10/1/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U	< 1.9 U
VAP-10-GW	16-17	10/20/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U*	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U*	< 1.9 U	< 1.9 U
	20-21	10/20/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U*	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U*	< 1.9 U	< 1.9 U
	25-26	10/20/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U*	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U*	< 1.9 U	< 1.9 U
	30-31	10/20/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U*	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U*	< 1.9 U	< 1.9 U
	35-36	10/20/2015	< 0.89 U	< 1.8 U	< 1.8 U	< 1.8 U	< 4.5 U*	< 1.8 U	< 4.5 U	< 1.8 U	< 1.8 U	< 1.8 U*	< 1.8 U	< 1.8 U
	40-41	10/20/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U*	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U*	< 1.9 U	< 1.9 U
	45-46	10/20/2015	< 0.96 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.8 U*	< 1.9 U	< 4.8 U	< 1.9 U	< 1.9 U	< 1.9 U*	< 1.9 U	< 1.9 U
	49-50	10/20/2015	< 0.93 U	< 1.9 U	< 1.9 U	< 1.9 U	< 4.6 U*	< 1.9 U	< 4.6 U	< 1.9 U	< 1.9 U	< 1.9 U*	< 1.9 U	< 1.9 U

Notes:

*	Laboratory control sample or laboratory control sample duplicate is outside acceptable limits.
‡	Groundwater samples collected by vertical aquifer profile method. Analyzed by Method 8270C; presented in µg/L.
–	Insufficient sample volume to analyze.
B	Compound was found in the blank and sample.
F2	Matrix Spike/Matrix Spike Duplicate Relative Percent Difference exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.

Acronyms:

µg/L	Micrograms per liter.
RE	Sample was re-analyzed.
SVOC	Semi-volatile organic compound.
U	Indicates the analyte was analyzed for but not detected.

Table 6
Summary of Groundwater SVOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	4-Nitrophenol	Acenaphthene	Acenaphthylene	Acetophenone	Anthracene	Atrazine	Benzaldehyde	Benzo[a] anthracene	Benzo[a] pyrene	Benzo[b] fluoranthene	Benzo[g,h,i] perylene
Well/Sample Details													
VAP-1-GW	12-13	10/2/2015	< 4.6 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.19 U	< 0.93 U	< 0.93 U *	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	15-16	10/2/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U *	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	20-21	10/2/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U *	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	25-26	10/2/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	30-31	10/2/2015	< 4.6 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.19 U	< 0.93 U	< 0.93 U *	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	35-36	10/2/2015	< 4.7 U	< 0.19 U	< 0.19 U	< 0.94 U	< 0.19 U	< 0.94 U	< 0.94 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	40-41	10/2/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	45-46	10/2/2015	< 4.6 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.19 U	< 0.93 U	< 0.93 U *	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	49-50	10/2/2015	< 5 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 1 U	< 1 U *	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
VAP-2 GW	15-16	10/5/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U *	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	20-21	10/5/2015	< 4.6 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.19 U	< 0.93 U	< 0.93 U *	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	25-26	10/5/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U *	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	30-31	10/5/2015	< 4.6 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.19 U	< 0.93 U	< 0.93 U *	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	35-36 RE	10/5/2015	< 4.8 U H	< 0.19 U H	< 0.19 U H	< 0.96 U H	< 0.19 U H	< 0.96 U H	< 0.96 U H *	< 0.19 U H	< 0.19 U H	< 0.19 U H	< 0.19 U H
	40-41 RE	10/5/2015	< 4.8 U H	< 0.19 U H	< 0.19 U H	< 0.96 U H	< 0.19 U H	< 0.96 U H	< 0.96 U H *	< 0.19 U H	< 0.19 U H	< 0.19 U H	< 0.19 U H
	40-41 (DUP-1) RE	10/5/2015	< 4.8 U H	< 0.19 U H	< 0.19 U H	< 0.96 U H	< 0.19 U H	< 0.96 U H	< 0.96 U H *	< 0.19 U H	< 0.19 U H	< 0.19 U H	< 0.19 U H
	45-46 RE	10/5/2015	< 4.8 U H	< 0.19 U H	< 0.19 U H	0.22 J H	< 0.19 U H	< 0.96 U H	< 0.96 U H *	< 0.19 U H	< 0.19 U H	< 0.19 U H	< 0.19 U H
	49-50	10/5/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U *	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
VAP-3-GW	15-16	10/6/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U *	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	20-21	10/6/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U *	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	25-26	10/6/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U *	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	30-31	10/6/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U *	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	35-36	10/6/2015	< 4.6 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.19 U	< 0.93 U	< 0.93 U *	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	40-41	10/6/2015	< 4.6 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.19 U	< 0.93 U	< 0.93 U *	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	45-46	10/6/2015	< 4.6 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.19 U	< 0.93 U	< 0.93 U *	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	49-50	10/6/2015	< 4.6 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.19 U	< 0.93 U	< 0.93 U *	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
VAP-4-GW	15-16	10/6/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U *	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	20-21	10/6/2015	< 5 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 1 U	< 1 U *	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
	25-26	10/6/2015	< 5 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 1 U	< 1 U *	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
	30-31	10/6/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	35-36	10/7/2015	< 5 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
	40-41	10/7/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	45-46	10/7/2015	< 4.6 U	< 0.19 U	< 0.19 U	0.28 J	< 0.19 U	< 0.93 U	< 0.93 U *	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	48-49	10/7/2015	< 4.6 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.19 U	< 0.93 U	< 0.93 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
VAP-5-GW	15-16	10/7/2015	< 5 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
	20-21	10/7/2015	< 4.6 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.19 U	< 0.93 U	< 0.93 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	25-26	10/7/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	30-31	10/7/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	35-36	10/7/2015	< 5 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
	40-41	10/7/2015	< 5 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
	45-46	10/7/2015	< 5 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
	49-50	10/7/2015	–	–	–	–	–	–	–	–	–	–	–
VAP-6-GW	12-13	10/8/2015	–	–	–	–	–	–	–	–	–	–	–
	15-16 RE	10/8/2015	< 5 U H	< 0.2 U H	< 0.2 U H	< 1 U H	< 0.2 U H	< 1 U H	< 1 U H *	< 0.2 U H	< 0.2 U H	< 0.2 U H	< 0.2 U H
	20-21	10/8/2015	< 4.6 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.19 U	< 0.93 U	< 0.93 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	20-21 RE	10/8/2015	< 4.8 U H	< 0.19 U H	< 0.19 U H	< 0.96 U H	< 0.19 U H	< 0.96 U H	< 0.96 U H *	< 0.19 U H	< 0.19 U H	< 0.19 U H	< 0.19 U H
	25-26	10/8/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	25-26 RE	10/8/2015	< 4.6 U H	< 0.19 U H	< 0.19 U H	< 0.93 U H	< 0.19 U H	< 0.93 U H	< 0.93 U H *	< 0.19 U H	< 0.19 U H	< 0.19 U H	< 0.19 U H
	30-31	10/8/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	30-31 RE	10/8/2015	< 4.6 U H	< 0.19 U H	< 0.19 U H	< 0.93 U H	< 0.19 U H	< 0.93 U H	< 0.93 U H *	< 0.19 U H	< 0.19 U H	< 0.19 U H	< 0.19 U H
	30-31 (DUP-2)	10/8/2015	< 4.6 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.19 U	< 0.93 U	< 0.93 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	30-35	10/8/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	40-41	10/8/2015	< 5 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
	45-46	10/8/2015	< 5 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
	49-50	10/8/2015	< 5 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U

Table 6
Summary of Groundwater SVOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

Location ID	Sample Depth (feet)	Sample Date	4-Nitrophenol	Acenaphthene	Acenaphthylene	Acetophenone	Anthracene	Atrazine	Benzaldehyde	Benzo[a] anthracene	Benzo[a] pyrene	Benzo[b] fluoranthene	Benzo[g,h,i] perylene
Well/Sample Details													
VAP-7-GW	13-14	10/9/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	15-16	10/9/2015	< 5 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
	20-21	10/9/2015	< 4.6 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.19 U	< 0.93 U	< 0.93 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	25-26	10/9/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	30-31	10/9/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	30-31 (DUP-3) RE	10/9/2015	< 5 U H	< 0.2 U H	< 0.2 U H	< 1 U H	< 0.2 U H	< 1 U H	< 1 U H*	< 0.2 U H	< 0.2 U H	< 0.2 U H	< 0.2 U H
	35-36 RE	10/9/2015	< 5.4 U H	< 0.22 U H	< 0.22 U H	< 1.1 U H	< 0.22 U H	< 1.1 U H	< 1.1 U H*	< 0.22 U H	< 0.22 U H	< 0.22 U H	< 0.22 U H
	43-44 RE	10/9/2015	< 5 U H	< 0.2 U H	< 0.2 U H	< 1 U H	< 0.2 U H	< 1 U H	< 1 U H*	< 0.2 U H	< 0.2 U H	< 0.2 U H	< 0.2 U H
	48-49 RE	10/9/2015	< 6 U H	< 0.24 U H	< 0.24 U H	< 1.2 U H	< 0.24 U H	< 1.2 U H	< 1.2 U H*	< 0.24 U H	< 0.24 U H	< 0.24 U H	< 0.24 U H
VAP-8-GW	18-19 RE	10/8/2015	< 6.3 U H	< 0.25 U H	< 0.25 U H	< 1.3 U H	< 0.25 U H	< 1.3 U H	< 1.3 U H*	< 0.25 U H	< 0.25 U H	< 0.25 U H	< 0.25 U H
	20-21 RE	10/8/2015	6.6 U H	< 0.26 U H	< 0.26 U H	< 1.3 U H	< 0.26 U H	< 1.3 U H	< 1.3 U H*	< 0.26 U H	< 0.26 U H	< 0.26 U H	< 0.26 U H
	25-26	10/8/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	30-31	10/8/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	35-36	10/8/2015	< 5 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
	40-41	10/8/2015	< 5 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 1 U	< 1 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
	45-46	10/8/2015	< 4.6 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.19 U	< 0.93 U	< 0.93 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	49-50	10/8/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
VAP-9-GW	15-16	10/1/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U*	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	20-21	10/1/2015	< 5 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 1 U	< 1 U*	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
	25-26	10/1/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	30-31	10/1/2015	< 5.1 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 1 U	< 1 U*	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
	35-36	10/1/2015	< 5 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	< 1 U	< 1 U*	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U
	40-41	10/1/2015	< 4.5 U	< 0.18 U	< 0.18 U	< 0.89 U	< 0.18 U	< 0.89 U	< 0.89 U*	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U
	45-46	10/1/2015	< 4.6 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.19 U	< 0.93 U	< 0.93 U*	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	49-50	10/1/2015	< 4.6 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.19 U	< 0.93 U	< 0.93 U*	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
VAP-10-GW	16-17	10/20/2015	< 4.6 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.19 U	< 0.93 U	< 0.93 U*	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	20-21	10/20/2015	< 4.6 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.19 U	< 0.93 U	< 0.93 U*	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	25-26	10/20/2015	< 4.6 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.19 U	< 0.93 U	< 0.93 U*	< 0.19 U	< 0.19 U	0.33	0.22
	30-31	10/20/2015	< 4.6 U	< 0.19 U	< 0.19 U	0.2 J	< 0.19 U	< 0.93 U	< 0.93 U*	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	35-36	10/20/2015	< 4.5 U	< 0.18 U	< 0.18 U	< 0.89 U	< 0.18 U	< 0.89 U	< 0.89 U*	< 0.18 U	< 0.18 U	< 0.18 U	< 0.18 U
	40-41	10/20/2015	< 4.6 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.19 U	< 0.93 U	< 0.93 U*	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	45-46	10/20/2015	< 4.8 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.19 U	< 0.96 U	< 0.96 U*	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U
	49-50	10/20/2015	< 4.6 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.19 U	< 0.93 U	< 0.93 U*	< 0.19 U	< 0.19 U	< 0.19 U	< 0.19 U

Notes:

*	Laboratory control sample or laboratory control sample duplicate is outside acceptable limits.
‡	Groundwater samples collected by vertical aquifer profile method. Analyzed by Method 8270C; presented in µg/L.
--	Insufficient sample volume to analyze.
B	Compound was found in the blank and sample.
F2	Matrix Spike/Matrix Spike Duplicate Relative Percent Difference exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.

Acronyms:

µg/L	Micrograms per liter.
RE	Sample was re-analyzed.
SVOC	Semi-volatile organic compound.
U	Indicates the analyte was analyzed for but not detected.

Table 6
Summary of Groundwater SVOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	Benzo[k] fluoranthene	Bis(2-chloro-isopropyl)ether	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl) ether	Bis(2-ethylhexyl) phthalate	Butyl Benzyl Phthalate	Caprolactam	Carbazole	Chrysene	Dibenz(a,h) anthracene	Dibenzofuran	Diethyl Phthalate
Well/Sample Details														
VAP-1-GW	12-13	10/2/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 1.9 U	< 0.93 U	28	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U
	15-16	10/2/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 1.9 U	< 0.96 U	35	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U
	20-21	10/2/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 1.9 U	< 0.96 U	100	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U
	25-26	10/2/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 1.9 U	< 0.96 U	14 B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U
	30-31	10/2/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 1.9 U	< 0.93 U	24	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U
	35-36	10/2/2015	< 0.19 U	< 0.94 U	< 0.94 U	< 0.94 U	< 1.9 U	< 0.94 U	25 B	< 0.94 U	< 0.19 U	< 0.19 U	< 0.94 U	< 0.94 U
	40-41	10/2/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 1.9 U	< 0.96 U	9.4 B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U
	45-46	10/2/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 1.9 U	< 0.93 U	9.5	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U
	49-50	10/2/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	28	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U
VAP-2 GW	15-16	10/5/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	1.8 J B	< 0.96 U	160 B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	1.9
	20-21	10/5/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	1.5 J B	< 0.93 U	3.2 J B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	0.42 J
	25-26	10/5/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	2.8 B	< 0.96 U	52 B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	0.32 J
	30-31	10/5/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 1.9 U	< 0.93 U	29 B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U
	35-36 RE	10/5/2015	< 0.19 U H	< 0.96 U H	< 0.96 U H	< 0.96 U H	< 1.9 U H	< 0.96 U H	4.7 J H F2 B	< 0.96 U H	< 0.19 U H	< 0.19 U H	< 0.96 U H	< 0.96 U H
	40-41 RE	10/5/2015	< 0.19 U H	< 0.96 U H	< 0.96 U H	< 0.96 U H	< 1.9 U H	< 0.96 U H	9.6 H B	< 0.96 U H	< 0.19 U H	< 0.19 U H	< 0.96 U H	0.23 J H
	40-41 (DUP-1) RE	10/5/2015	< 0.19 U H	< 0.96 U H	< 0.96 U H	< 0.96 U H	< 1.9 U H	< 0.96 U H	42 H B	< 0.96 U H	< 0.19 U H	< 0.19 U H	< 0.96 U H	0.23 J H
	45-46 RE	10/5/2015	< 0.19 U H	< 0.96 U H	< 0.96 U H	< 0.96 U H	< 1.9 U H	< 0.96 U H	7.6 H B	< 0.96 U H	< 0.19 U H	< 0.19 U H	< 0.96 U H	0.22 J H
	49-50	10/5/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	2 B	< 0.96 U	180 B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U
VAP-3-GW	15-16	10/6/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	2.1 B	< 0.96 U	2 J B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U
	20-21	10/6/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	1.5 J	< 0.96 U	95 B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	0.41 J
	25-26	10/6/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	1.8 J B	< 0.96 U	1000 B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	0.23 J
	30-31	10/6/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	1.5 J	< 0.96 U	190 B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	0.57 J
	35-36	10/6/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	2.1 B	< 0.93 U	1500 B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U
	40-41	10/6/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	2.1 B	< 0.93 U	800 B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U
	45-46	10/6/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 1.9 U	< 0.93 U	330 B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U
	49-50	10/6/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	1.6 J B	< 0.93 U	1600 B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U
VAP-4-GW	15-16	10/6/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	3 B	< 0.96 U	240 B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	0.31 J
	20-21	10/6/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	2.3 B	< 1 U	170 B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U
	25-26	10/6/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	2.2 B	< 1 U	45 B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U
	30-31	10/6/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	1.6 J B	< 0.96 U	190 B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U
	35-36	10/7/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	72 B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U
	40-41	10/7/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 1.9 U	< 0.96 U	6.8 B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U
	45-46	10/7/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	1.6 J	< 0.93 U	58 B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U
	48-49	10/7/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 1.9 U	< 0.93 U	110 B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U
VAP-5-GW	15-16	10/7/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	1.7 J B	< 1 U	120 B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U
	20-21	10/7/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	3.1 B	< 0.93 U	260 B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	0.22 J
	25-26	10/7/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 1.9 U	< 0.96 U	20 B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U
	30-31	10/7/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	1.7 J B	< 0.96 U	52 B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U
	35-36	10/7/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	30 B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U
	40-41	10/7/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	320 B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U
	45-46	10/7/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	150 B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U
	49-50	10/7/2015	–	–	–	–	–	–	–	–	–	–	–	–
VAP-6-GW	12-13	10/8/2015	–	–	–	–	–	–	–	–	–	–	–	–
	15-16 RE	10/8/2015	< 0.2 U H	< 1 U H	< 1 U H	< 1 U H	1.5 J H	< 1 U H	13 H B	< 1 U H	< 0.2 U H	< 0.2 U H	< 1 U H	< 1 U H
	20-21	10/8/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	4.2 B	< 0.93 U	160 B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U
	20-21 RE	10/8/2015	< 0.19 U H	< 0.96 U H	< 0.96 U H	< 0.96 U H	3.7 H	< 0.96 U H	71 H B	< 0.96 U H	< 0.19 U H	< 0.19 U H	< 0.96 U H	< 0.96 U H
	25-26	10/8/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	1.9 B	< 0.96 U	30 B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U
	25-26 RE	10/8/2015	< 0.19 U H	< 0.93 U H	< 0.93 U H	< 0.93 U H	< 1.9 U H	< 0.93 U H	52 H B	< 0.93 U H	< 0.19 U H	< 0.19 U H	< 0.93 U H	< 0.93 U H
	30-31	10/8/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	2.2 B	< 0.96 U	91 B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U
	30-31 RE	10/8/2015	< 0.19 U H	< 0.93 U H	< 0.93 U H	< 0.93 U H	< 1.9 U H	< 0.93 U H	22 H B	< 0.93 U H	< 0.19 U H	< 0.19 U H	< 0.93 U H	< 0.93 U H
	30-31 (DUP-2)	10/8/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	2.2 B	< 0.93 U	31 B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	0.3 J
	30-35	10/8/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	1.5 J B	< 0.96 U	150 B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U
	40-41	10/8/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	1.7 J B	< 1 U	18 B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U
	45-46	10/8/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	1.8 J B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U
	49-50	10/8/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	1.8 J B	< 1 U	1.3 J B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U

Table 6
Summary of Groundwater SVOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	Benzo[k] fluoranthene	Bis(2-chloro-isopropyl)ether	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl) ether	Bis(2-ethylhexyl) phthalate	Butyl Benzyl Phthalate	Caprolactam	Carbazole	Chrysene	Dibenz(a,h) anthracene	Dibenzofuran	Diethyl Phthalate
Well/Sample Details														
VAP-7-GW	13-14	10/9/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	1.7 J B	< 0.96 U	1.5 J B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U
	15-16	10/9/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	1.1 J B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U
	20-21	10/9/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	1.8 J B	< 0.93 U	1.8 J B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	0.21 J
	25-26	10/9/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	1.5 J B	< 0.96 U	< 4.8 U	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U
	30-31	10/9/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 1.9 U	< 0.96 U	0.68 J B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U
	30-31 (DUP-3) RE	10/9/2015	< 0.2 U H	< 1 U H	< 1 U H	< 1 U H	< 2 U H	< 1 U H	1.3 J H B	< 1 U H	< 0.2 U H	< 0.2 U H	< 1 U H	< 1 U H
	35-36 RE	10/9/2015	< 0.22 U H	< 1.1 U H	< 1.1 U H	< 1.1 U H	< 2.2 U H	< 1.1 U H	2 J H B	< 1.1 U H	< 0.22 U H	< 0.22 U H	< 1.1 U H	< 1.1 U H
	43-44 RE	10/9/2015	< 0.2 U H	< 1 U H	< 1 U H	< 1 U H	< 2 U H	< 1 U H	3.9 J H B	< 1 U H	< 0.2 U H	< 0.2 U H	< 1 U H	0.22 J H
	48-49 RE	10/9/2015	< 0.24 U H	< 1.2 U H	< 1.2 U H	< 1.2 U H	< 2.4 U H	< 1.2 U H	2.3 J H B	< 1.2 U H	< 0.24 U H	< 0.24 U H	< 1.2 U H	< 1.2 U H
VAP-8-GW	18-19 RE	10/8/2015	< 0.25 U H	< 1.3 U H	< 1.3 U H	< 1.3 U H	< 2.5 U H	< 1.3 U H	270 H B	< 1.3 U H	< 0.25 U H	< 0.25 U H	< 1.3 U H	0.65 J H
	20-21 RE	10/8/2015	< 0.26 U H	< 1.3 U H	< 1.3 U H	< 1.3 U H	< 2.6 U H	< 1.3 U H	16 H B	< 1.3 U H	< 0.26 U H	< 0.26 U H	< 1.3 U H	0.51 J H
	25-26	10/8/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 1.9 U	< 0.96 U	150 B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U
	30-31	10/8/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	2 B	< 0.96 U	70 B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	0.24 J
	35-36	10/8/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	1.6 J B	< 1 U	75 B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	0.29 J
	40-41	10/8/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	1.5 J B	< 1 U	3.3 J B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U
	45-46	10/8/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 1.9 U	< 0.93 U	2.3 J B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	0.22 J
	49-50	10/8/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 1.9 U	< 0.96 U	3.5 J B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U
VAP-9-GW	15-16	10/1/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 1.9 U	< 0.96 U	< 4.8 U	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U
	20-21	10/1/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	2.5 J	< 1 U	< 0.2 U	< 0.2 U	< 1 U	0.26 J
	25-26	10/1/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	1.7 J	< 0.96 U	1.6 J B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U
	30-31	10/1/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	2.1 J	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U
	35-36	10/1/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 2 U	< 1 U	2 J	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U
	40-41	10/1/2015	< 0.18 U	< 0.89 U	< 0.89 U	< 0.89 U	< 1.8 U	< 0.89 U	< 4.5 U	< 0.89 U	< 0.18 U	< 0.18 U	< 0.89 U	< 0.89 U
	45-46	10/1/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 1.9 U	< 0.93 U	1.1 J	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U
	49-50	10/1/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	4.3	< 0.93 U	17	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U
VAP-10-GW	16-17	10/20/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 1.9 U	< 0.93 U	8.5	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	0.31 J
	20-21	10/20/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	1.6 J	< 0.93 U	30	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	0.78 J
	25-26	10/20/2015	0.2	< 0.93 U	< 0.93 U	< 0.93 U	1.7 J	< 0.93 U	0.82 J	< 0.93 U	0.29	< 0.19 U	< 0.93 U	0.21 J
	30-31	10/20/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	1.8 J	< 0.93 U	0.85 J	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	0.29 J
	35-36	10/20/2015	< 0.18 U	< 0.89 U	< 0.89 U	< 0.89 U	1.4 J	< 0.89 U	0.72 J	< 0.89 U	< 0.18 U	< 0.18 U	< 0.89 U	< 0.89 U
	40-41	10/20/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	1.8 J	< 0.93 U	0.85 J	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	0.25 J
	45-46	10/20/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	1.8 J	< 0.96 U	0.91 J	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	0.33 J
	49-50	10/20/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	1.5 J	< 0.93 U	0.68 J	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	0.25 J

Notes:

*	Laboratory control sample or laboratory control sample duplicate is outside acceptable limits.
‡	Groundwater samples collected by vertical aquifer profile method. Analyzed by Method 8270C; presented in µg/L.
–	Insufficient sample volume to analyze.
B	Compound was found in the blank and sample.
F2	Matrix Spike/Matrix Spike Duplicate Relative Percent Difference exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.

Acronyms:

µg/L	Micrograms per liter.
RE	Sample was re-analyzed.
SVOC	Semi-volatile organic compound.
U	Indicates the analyte was analyzed for but not detected.

Table 6
Summary of Groundwater SVOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	Dimethyl Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Fluoranthene	Fluorene	Hexachloro-benzene	Hexachloro-butadiene	Hexachlorocyclo-pentadiene	Hexachloro-ethane	Indeno[1,2,3-cd]-pyrene	Isophorone
Well/Sample Details													
VAP-1-GW	12-13	10/2/2015	< 0.93 U	0.59 J B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	< 0.93 U
	15-16	10/2/2015	< 0.96 U	0.38 J B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	20-21	10/2/2015	< 0.96 U	0.87 J B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	25-26	10/2/2015	< 0.96 U	0.84 J B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	30-31	10/2/2015	< 0.93 U	0.8 J B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	< 0.93 U
	35-36	10/2/2015	< 0.94 U	0.79 J B	< 0.94 U	< 0.19 U	< 0.19 U	< 0.94 U	< 0.94 U	< 9.4 U	< 0.94 U	< 0.19 U	< 0.94 U
	40-41	10/2/2015	< 0.96 U	0.63 J B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	45-46	10/2/2015	< 0.93 U	0.7 J B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	< 0.93 U
	49-50	10/2/2015	< 1 U	0.84 J B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 10 U	< 1 U	< 0.2 U	< 1 U
VAP-2 GW	15-16	10/5/2015	< 0.96 U	0.96 B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	20-21	10/5/2015	< 0.93 U	0.52 J B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	< 0.93 U
	25-26	10/5/2015	< 0.96 U	0.87 J B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	30-31	10/5/2015	< 0.93 U	0.53 J B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	< 0.93 U
	35-36 RE	10/5/2015	< 0.96 U H	0.72 J H	< 0.96 U H	< 0.19 U H	< 0.19 U H	< 0.96 U H	< 0.96 U H	< 9.6 U H	< 0.96 U H	< 0.19 U H	< 0.96 U H
	40-41 RE	10/5/2015	< 0.96 U H	0.96 H	< 0.96 U H	< 0.19 U H	< 0.19 U H	< 0.96 U H	< 0.96 U H	< 9.6 U H	< 0.96 U H	< 0.19 U H	< 0.96 U H
	40-41 (DUP-1) RE	10/5/2015	< 0.96 U H	1.2 H	< 0.96 U H	< 0.19 U H	< 0.19 U H	< 0.96 U H	< 0.96 U H	< 9.6 U H	< 0.96 U H	< 0.19 U H	< 0.96 U H
	45-46 RE	10/5/2015	< 0.96 U H	0.58 J H	< 0.96 U H	< 0.19 U H	< 0.19 U H	< 0.96 U H	< 0.96 U H	< 9.6 U H	< 0.96 U H	< 0.19 U H	< 0.96 U H
	49-50	10/5/2015	< 0.96 U	0.58 J B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
VAP-3-GW	15-16	10/6/2015	< 0.96 U	0.47 J B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	20-21	10/6/2015	< 0.96 U	0.68 J	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	25-26	10/6/2015	< 0.96 U	0.71 J B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	0.069 J
	30-31	10/6/2015	< 0.96 U	1.3	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	35-36	10/6/2015	< 0.93 U	0.9 J B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	< 0.93 U
	40-41	10/6/2015	< 0.93 U	0.86 J B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	< 0.93 U
	45-46	10/6/2015	< 0.93 U	0.56 J B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	< 0.93 U
	49-50	10/6/2015	< 0.93 U	1.1 B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	< 0.93 U
VAP-4-GW	15-16	10/6/2015	< 0.96 U	1.2 B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	20-21	10/6/2015	< 1 U	1 B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 10 U	< 1 U	< 0.2 U	< 1 U
	25-26	10/6/2015	< 1 U	1.1 B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 10 U	< 1 U	< 0.2 U	< 1 U
	30-31	10/6/2015	< 0.96 U	1.2	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	35-36	10/7/2015	< 1 U	0.67 J	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 10 U	< 1 U	< 0.2 U	< 1 U
	40-41	10/7/2015	< 0.96 U	0.61 J	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	45-46	10/7/2015	< 0.93 U	1.5	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	< 0.93 U
	48-49	10/7/2015	< 0.93 U	0.94	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	< 0.93 U
VAP-5-GW	15-16	10/7/2015	< 1 U	0.72 J	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 10 U	< 1 U	< 0.2 U	< 1 U
	20-21	10/7/2015	< 0.93 U	1.1	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	< 0.93 U
	25-26	10/7/2015	< 0.96 U	0.6 J	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	30-31	10/7/2015	< 0.96 U	0.53 J	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	35-36	10/7/2015	< 1 U	0.57 J	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 10 U	< 1 U	< 0.2 U	< 1 U
	40-41	10/7/2015	< 1 U	0.71 J	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 10 U	< 1 U	< 0.2 U	< 1 U
	45-46	10/7/2015	< 1 U	0.83 J	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 10 U	< 1 U	< 0.2 U	< 1 U
	49-50	10/7/2015	–	–	–	–	–	–	–	–	–	–	–
VAP-6-GW	12-13	10/8/2015	–	–	–	–	–	–	–	–	–	–	–
	15-16 RE	10/8/2015	< 1 U H	0.71 J H	< 1 U H	< 0.2 U H	< 0.2 U H	< 1 U H	< 1 U H	< 10 U H	< 1 U H	< 0.2 U H	< 1 U H
	20-21	10/8/2015	< 0.93 U	0.67 J B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	< 0.93 U
	20-21 RE	10/8/2015	< 0.96 U H	0.38 J H	< 0.96 U H	< 0.19 U H	< 0.19 U H	< 0.96 U H	< 0.96 U H	< 9.6 U H	< 0.96 U H	< 0.19 U H	< 0.96 U H
	25-26	10/8/2015	< 0.96 U	0.81 J B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	25-26 RE	10/8/2015	< 0.93 U H	0.37 J H	< 0.93 U H	< 0.19 U H	< 0.19 U H	< 0.93 U H	< 0.93 U H	< 9.3 U H	< 0.93 U H	< 0.19 U H	< 0.93 U H
	30-31	10/8/2015	< 0.96 U	1.1 B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	30-31 RE	10/8/2015	< 0.93 U H	< 0.93 U H	< 0.93 U H	< 0.19 U H	< 0.19 U H	< 0.93 U H	< 0.93 U H	< 9.3 U H	< 0.93 U H	< 0.19 U H	< 0.93 U H
	30-31 (DUP-2)	10/8/2015	< 0.93 U	1.3 B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	< 0.93 U
	30-35	10/8/2015	< 0.96 U	0.87 J B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	40-41	10/8/2015	< 1 U	0.84 J B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 10 U	< 1 U	< 0.2 U	< 1 U
	45-46	10/8/2015	< 1 U	0.8 J B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 10 U	< 1 U	< 0.2 U	< 1 U
	49-50	10/8/2015	< 1 U	0.86 J B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 10 U	< 1 U	< 0.2 U	< 1 U

Table 6
Summary of Groundwater SVOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	Dimethyl Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Fluoranthene	Fluorene	Hexachloro-benzene	Hexachloro-butadiene	Hexachlorocyclo-pentadiene	Hexachloro-ethane	Indeno[1,2,3-cd]-pyrene	Isophorone
Well/Sample Details													
VAP-7-GW	13-14	10/9/2015	< 0.96 U	0.63 J B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	15-16	10/9/2015	< 1 U	0.56 J B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 10 U	< 1 U	< 0.2 U	< 1 U
	20-21	10/9/2015	< 0.93 U	0.74 J B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	< 0.93 U
	25-26	10/9/2015	< 0.96 U	0.71 J B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	30-31	10/9/2015	< 0.96 U	0.51 J B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	30-31 (DUP-3) RE	10/9/2015	< 1 U H	< 1 U H	< 1 U H	< 0.2 U H	< 0.2 U H	< 1 U H	< 1 U H	< 10 U H	< 1 U H	< 0.2 U H	< 1 U H
	35-36 RE	10/9/2015	< 1.1 U H	0.62 J H B	< 1.1 U H	< 0.22 U H	< 0.22 U H	< 1.1 U H	< 1.1 U H	< 11 U H	< 1.1 U H	< 0.22 U H	< 1.1 U H
	43-44 RE	10/9/2015	< 1 U H	0.55 J H B	< 1 U H	< 0.2 U H	< 0.2 U H	< 1 U H	< 1 U H	< 10 U H	< 1 U H	< 0.2 U H	< 1 U H
	48-49 RE	10/9/2015	< 1.2 U H	< 1.2 U H	< 1.2 U H	< 0.24 U H	< 0.24 U H	< 1.2 U H	< 1.2 U H	< 12 U H	< 1.2 U H	< 0.24 U H	< 1.2 U H
VAP-8-GW	18-19 RE	10/8/2015	< 1.3 U H	0.72 J H B	< 1.3 U H	< 0.25 U H	< 0.25 U H	< 1.3 U H	< 1.3 U H	< 13 U H	< 1.3 U H	< 0.25 U H	< 1.3 U H
	20-21 RE	10/8/2015	< 1.3 U H	0.84 J H B	< 1.3 U H	< 0.26 U H	< 0.26 U H	< 1.3 U H	< 1.3 U H	< 13 U H	< 1.3 U H	< 0.26 U H	< 1.3 U H
	25-26	10/8/2015	< 0.96 U	0.65 J B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	30-31	10/8/2015	< 0.96 U	1.2 B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	35-36	10/8/2015	< 1 U	1.2 B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 10 U	< 1 U	< 0.2 U	< 1 U
	40-41	10/8/2015	< 1 U	0.71 J B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 10 U	< 1 U	< 0.2 U	< 1 U
	45-46	10/8/2015	< 0.93 U	0.75 J B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	< 0.93 U
	49-50	10/8/2015	< 0.96 U	0.59 J B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
VAP-9-GW	15-16	10/1/2015	< 0.96 U	0.56 J B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	20-21	10/1/2015	< 1 U	0.7 J B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 10 U	< 1 U	< 0.2 U	< 1 U
	25-26	10/1/2015	< 0.96 U	0.6 J B	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	30-31	10/1/2015	< 1 U	0.75 J B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 10 U	< 1 U	< 0.2 U	< 1 U
	35-36	10/1/2015	< 1 U	0.53 J B	< 1 U	< 0.2 U	< 0.2 U	< 1 U	< 1 U	< 10 U	< 1 U	< 0.2 U	< 1 U
	40-41	10/1/2015	< 0.89 U	0.48 J B	< 0.89 U	< 0.18 U	< 0.18 U	< 0.89 U	< 0.89 U	< 8.9 U	< 0.89 U	< 0.18 U	< 0.89 U
	45-46	10/1/2015	< 0.93 U	< 0.93 U	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	< 0.93 U
	49-50	10/1/2015	< 0.93 U	0.58 J B	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	< 0.93 U
VAP-10-GW	16-17	10/20/2015	< 0.93 U	< 0.93 U	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	< 0.93 U
	20-21	10/20/2015	< 0.93 U	0.93	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	< 0.93 U
	25-26	10/20/2015	< 0.93 U	0.69 J	< 0.93 U	0.35	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	0.2	< 0.93 U
	30-31	10/20/2015	< 0.93 U	0.85 J	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	0.22 J
	35-36	10/20/2015	< 0.89 U	0.76 J	< 0.89 U	< 0.18 U	< 0.18 U	< 0.89 U	< 0.89 U	< 8.9 U	< 0.89 U	< 0.18 U	< 0.89 U
	40-41	10/20/2015	< 0.93 U	0.65 J	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	< 0.93 U
	45-46	10/20/2015	< 0.96 U	1.2	< 0.96 U	< 0.19 U	< 0.19 U	< 0.96 U	< 0.96 U	< 9.6 U	< 0.96 U	< 0.19 U	< 0.96 U
	49-50	10/20/2015	< 0.93 U	0.7 J	< 0.93 U	< 0.19 U	< 0.19 U	< 0.93 U	< 0.93 U	< 9.3 U	< 0.93 U	< 0.19 U	< 0.93 U

Notes:

*	Laboratory control sample or laboratory control sample duplicate is outside acceptable limits.
‡	Groundwater samples collected by vertical aquifer profile method. Analyzed by Method 8270C; presented in µg/L.
–	Insufficient sample volume to analyze.
B	Compound was found in the blank and sample.
F2	Matrix Spike/Matrix Spike Duplicate Relative Percent Difference exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.

Acronyms:

µg/L	Micrograms per liter.
RE	Sample was re-analyzed.
SVOC	Semi-volatile organic compound.
U	Indicates the analyte was analyzed for but not detected.

Table 6
Summary of Groundwater SVOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	Naphthalene	Nitrobenzene	N-Nitrosodi-n-propylamine	N-Nitrosodi-phenylamine	Penta-chlorophenol	Phenanthrene	Phenol	Pyrene
Well/Sample Details										
VAP-1-GW	12-13	10/2/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	< 0.19 U	< 0.93 U	< 0.19 U
	15-16	10/2/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U	< 0.19 U
	20-21	10/2/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U	< 0.19 U
	25-26	10/2/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U	< 0.19 U
	30-31	10/2/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	< 0.19 U	< 0.93 U	< 0.19 U
	35-36	10/2/2015	< 0.19 U	< 0.94 U	< 0.94 U	< 0.94 U	< 38 U	< 0.19 U	< 0.94 U	< 0.19 U
	40-41	10/2/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U	< 0.19 U
	45-46	10/2/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	< 0.19 U	< 0.93 U	< 0.19 U
	49-50	10/2/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 40 U	< 0.2 U	< 1 U	< 0.2 U
VAP-2 GW	15-16	10/5/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U	< 0.19 U
	20-21	10/5/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	< 0.19 U	< 0.93 U	< 0.19 U
	25-26	10/5/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U	< 0.19 U
	30-31	10/5/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	< 0.19 U	< 0.93 U	< 0.19 U
	35-36 RE	10/5/2015	< 0.19 U H	< 0.96 U H	< 0.96 U H	< 0.96 U H	< 38 U H	< 0.19 U H	< 0.96 U H	< 0.19 U H
	40-41 RE	10/5/2015	< 0.19 U H	< 0.96 U H	< 0.96 U H	< 0.96 U H	< 38 U H	< 0.19 U H	< 0.96 U H	< 0.19 U H
	40-41 (DUP-1) RE	10/5/2015	< 0.19 U H	< 0.96 U H	< 0.96 U H	< 0.96 U H	< 38 U H	< 0.19 U H	< 0.96 U H	< 0.19 U H
	45-46 RE	10/5/2015	0.22 H	< 0.96 U H	< 0.96 U H	< 0.96 U H	< 38 U H	< 0.19 U H	< 0.96 U H	< 0.19 U H
	49-50	10/5/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U	< 0.19 U
VAP-3-GW	15-16	10/6/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U	< 0.19 U
	20-21	10/6/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U	< 0.19 U
	25-26	10/6/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U	< 0.19 U
	30-31	10/6/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U	< 0.19 U
	35-36	10/6/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	< 0.19 U	< 0.93 U	< 0.19 U
	40-41	10/6/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	< 0.19 U	< 0.93 U	< 0.19 U
	45-46	10/6/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	< 0.19 U	< 0.93 U	< 0.19 U
	49-50	10/6/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	< 0.19 U	< 0.93 U	< 0.19 U
VAP-4-GW	15-16	10/6/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U	< 0.19 U
	20-21	10/6/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 40 U	< 0.2 U	< 1 U	< 0.2 U
	25-26	10/6/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 40 U	< 0.2 U	< 1 U	< 0.2 U
	30-31	10/6/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U	< 0.19 U
	35-36	10/7/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 40 U	< 0.2 U	12	< 0.2 U
	40-41	10/7/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U	< 0.19 U
	45-46	10/7/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	0.33	< 0.93 U	< 0.19 U
	48-49	10/7/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	< 0.19 U	< 0.93 U	< 0.19 U
VAP-5-GW	15-16	10/7/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 40 U	< 0.2 U	6.1	< 0.2 U
	20-21	10/7/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	< 0.19 U	< 0.93 U	< 0.19 U
	25-26	10/7/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U	< 0.19 U
	30-31	10/7/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U	< 0.19 U
	35-36	10/7/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 40 U	< 0.2 U	< 1 U	< 0.2 U
	40-41	10/7/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 40 U	< 0.2 U	< 1 U	< 0.2 U
	45-46	10/7/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 40 U	< 0.2 U	< 1 U	< 0.2 U
	49-50	10/7/2015	–	–	–	–	–	–	–	–
VAP-6-GW	12-13	10/8/2015	–	–	–	–	–	–	–	–
	15-16 RE	10/8/2015	< 0.2 U H	< 1 U H	< 1 U H	< 1 U H	< 40 U H	< 0.2 U H	< 1 U H	< 0.2 U H
	20-21	10/8/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	< 0.19 U	< 0.93 U	< 0.19 U
	20-21 RE	10/8/2015	< 0.19 U H	< 0.96 U H	< 0.96 U H	< 0.96 U H	< 38 U H	< 0.19 U H	< 0.96 U H	< 0.19 U H
	25-26	10/8/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U	< 0.19 U
	25-26 RE	10/8/2015	< 0.19 U H	< 0.93 U H	< 0.93 U H	< 0.93 U H	< 37 U H	< 0.19 U H	< 0.93 U H	< 0.19 U H
	30-31	10/8/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U	< 0.19 U
	30-31 RE	10/8/2015	< 0.19 U H	< 0.93 U H	< 0.93 U H	< 0.93 U H	< 37 U H	< 0.19 U H	< 0.93 U H	< 0.19 U H
	30-31 (DUP-2)	10/8/2015	0.21	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	< 0.19 U	< 0.93 U *	< 0.19 U
	30-35	10/8/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U	< 0.19 U
	40-41	10/8/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 40 U	< 0.2 U	< 1 U	< 0.2 U
	45-46	10/8/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 40 U	< 0.2 U	< 1 U	< 0.2 U
	49-50	10/8/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 40 U	< 0.2 U	< 1 U *	< 0.2 U

Table 6
Summary of Groundwater SVOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

Location ID	Sample Depth (feet)	Sample Date	Naphthalene	Nitrobenzene	N-Nitrosodi-n-propylamine	N-Nitrosodi-phenylamine	Penta-chlorophenol	Phenanthrene	Phenol	Pyrene
Well/Sample Details										
VAP-7-GW	13-14	10/9/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U *	< 0.19 U
	15-16	10/9/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 40 U	< 0.2 U	< 1 U *	< 0.2 U
	20-21	10/9/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	< 0.19 U	< 0.93 U *	< 0.19 U
	25-26	10/9/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U *	< 0.19 U
	30-31	10/9/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U *	< 0.19 U
	30-31 (DUP-3) RE	10/9/2015	< 0.2 U H	< 1 U H	< 1 U H	< 1 U H	< 40 U H	< 0.2 U H	< 1 U H	< 0.2 U H
	35-36 RE	10/9/2015	< 0.22 U H	< 1.1 U H	< 1.1 U H	< 1.1 U H	< 43 U H	< 0.22 U H	< 1.1 U H	< 0.22 U H
	43-44 RE	10/9/2015	< 0.2 U H	< 1 U H	< 1 U H	< 1 U H	< 40 U H	< 0.2 U H	< 1 U H	< 0.2 U H
	48-49 RE	10/9/2015	< 0.24 U H	< 1.2 U H	< 1.2 U H	< 1.2 U H	< 48 U H	< 0.24 U H	< 1.2 U H	< 0.24 U H
VAP-8-GW	18-19 RE	10/8/2015	< 0.25 U H	< 1.3 U H	< 1.3 U H	< 1.3 U H	< 50 U H	< 0.25 U H	< 1.3 U H	< 0.25 U H
	20-21 RE	10/8/2015	< 0.26 U H	< 1.3 U H	< 1.3 U H	< 1.3 U H	< 53 U H	< 0.26 U H	< 1.3 U H	< 0.26 U H
	25-26	10/8/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U *	< 0.19 U
	30-31	10/8/2015	0.21	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U *	< 0.19 U
	35-36	10/8/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 40 U	< 0.2 U	< 1 U *	< 0.2 U
	40-41	10/8/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 40 U	< 0.2 U	< 1 U *	< 0.2 U
	45-46	10/8/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	< 0.19 U	< 0.93 U *	< 0.19 U
	49-50	10/8/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U *	< 0.19 U
VAP-9-GW	15-16	10/1/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U	< 0.19 U
	20-21	10/1/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 40 U	< 0.2 U	< 1 U	< 0.2 U
	25-26	10/1/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U	< 0.19 U
	30-31	10/1/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 41 U	< 0.2 U	< 1 U	< 0.2 U
	35-36	10/1/2015	< 0.2 U	< 1 U	< 1 U	< 1 U	< 40 U	< 0.2 U	< 1 U	< 0.2 U
	40-41	10/1/2015	< 0.18 U	< 0.89 U	< 0.89 U	< 0.89 U	< 36 U	< 0.18 U	< 0.89 U	< 0.18 U
	45-46	10/1/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	< 0.19 U	< 0.93 U	< 0.19 U
	49-50	10/1/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	< 0.19 U	< 0.93 U	< 0.19 U
VAP-10-GW	16-17	10/20/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	< 0.19 U	< 0.93 U	< 0.19 U
	20-21	10/20/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	< 0.19 U	< 0.93 U	< 0.19 U
	25-26	10/20/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	0.27	< 0.93 U	0.37
	30-31	10/20/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	< 0.19 U	< 0.93 U	< 0.19 U
	35-36	10/20/2015	0.22	< 0.89 U	< 0.89 U	< 0.89 U	< 36 U	< 0.18 U	< 0.89 U	< 0.18 U
	40-41	10/20/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	< 0.19 U	< 0.93 U	< 0.19 U
	45-46	10/20/2015	< 0.19 U	< 0.96 U	< 0.96 U	< 0.96 U	< 38 U	< 0.19 U	< 0.96 U	< 0.19 U
	49-50	10/20/2015	< 0.19 U	< 0.93 U	< 0.93 U	< 0.93 U	< 37 U	< 0.19 U	< 0.93 U	< 0.19 U

Notes:

*	Laboratory control sample or laboratory control sample duplicate is outside acceptable limits.
‡	Groundwater samples collected by vertical aquifer profile method. Analyzed by Method 8270C; presented in µg/L.
–	Insufficient sample volume to analyze.
B	Compound was found in the blank and sample.
F2	Matrix Spike/Matrix Spike Duplicate Relative Percent Difference exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.

Acronyms:

µg/L	Micrograms per liter.
RE	Sample was re-analyzed.
SVOC	Semi-volatile organic compound.
U	Indicates the analyte was analyzed for but not detected.

Table 7
Summary of Groundwater Metals Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	Arsenic	Barium	Cadmium	Chromium	Chromium VI	Lead	Selenium	Silver	Mercury
Well/Sample Details											
VAP-1-GW	12-13	10/2/2015	60	370 B	1 J	120	< 10 U	42	< 5 U	< 5 U	0.11 J
	15-16	10/2/2015	< 10 U	34 J B	< 2 U	14	< 10 U	3.5	< 5 U	< 5 U	< 0.2 U
	20-21	10/2/2015	< 10 U	50 J B	0.14 J	18	< 10 U	4.3	< 5 U	< 5 U	< 0.2 U
	25-26	10/2/2015	30	520 B	1.4 J	200	< 10 U	82	7.7	< 5 U	< 0.2 U
	30-31	10/2/2015	12	830 B	0.71 J	280	< 10 U	45	< 5 U	< 5 U	< 0.2 U
	35-36	10/2/2015	24	360 B	0.67 J	320	< 10 U	81	< 5 U	< 5 U	< 0.2 U
	40-41	10/2/2015	38	630 B	1.2 J	430	< 10 U	62	4.9 J	< 5 U	< 0.2 U
	45-46	10/2/2015	7.2 J	660 B	1 J	210	< 10 U	75	4.9 J	< 5 U	< 0.2 U
	49-50	10/2/2015	12	490 B	0.89 J	200	< 10 U	31	< 5 U	< 5 U	< 0.2 U
VAP-2 GW	15-16	10/5/2015	7.9 J	180 J	0.2 J	38 B	16	10	4.5 J	< 5 U	< 0.2 U
	20-21	10/5/2015	5.5 J	83 J	< 2 U	12 B	< 10 U	5.1	< 5 U	< 5 U	< 0.2 U
	25-26	10/5/2015	61	1300	1.2 J	460 B	< 10 U	150	8.7	< 5 U	1.8
	30-31	10/5/2015	5.4 J	180 J	0.14 J	21 B	< 10 U	9	< 5 U	< 5 U	< 0.2 U
	35-36	10/5/2015	5.7 J	180 J	0.3 J	51 B	< 10 U	15	< 5 U	< 5 U	< 0.2 U F1
	40-41	10/5/2015	120	1800	5.5	660 B	< 10 U	230	67	< 5 U	1.2
	40-41 (DUP-1)	10/5/2015	41	1100	2.4	200 B	< 10 U	85	22	< 5 U	0.32
	45-46	10/5/2015	22	450	0.8 J	120 B	< 10 U	44	< 5 U	< 5 U	0.11 J
	49-50	10/5/2015	< 10 U	36 J	< 2 U	1.2 J B	< 10 U	< 3 U	< 5 U	< 5 U	< 0.2 U
VAP-3-GW	15-16	10/6/2015	10	230	0.62 J	35 B	< 10 U	11	< 5 U	< 5 U	< 0.2 U
	20-21	10/6/2015	13	210	0.23 J	73 B	< 10 U	9.8	< 5 U	< 5 U	< 0.2 U
	25-26	10/6/2015	16	120 J	0.41 J	29 B	< 10 U	13	< 5 U	< 5 U	< 0.2 U
	30-31	10/6/2015	27	2300	1.3 J	870 B	< 10 U	260	19	< 5 U L	1
	35-36	10/6/2015	8.6 J	380	0.31 J	140 B	< 10 U	35	< 5 U	< 5 U	< 0.2 U
	40-41	10/6/2015	17	1100	1.2 J	470 B	< 10 U	150	9.5	< 5 U	0.17 J
	45-46	10/6/2015	8.1 J	410	2.7	140 B	< 10 U	39	21	< 5 U	0.095 J
	49-50	10/6/2015	23	380	0.54 J	140 B	< 10 U	34	< 5 U	< 5 U	0.16 J
VAP-4-GW	15-16	10/6/2015	130	980	1.9 J	260 B	< 10 U	57	4.1 J	< 5 U	0.22
	20-21	10/6/2015	19	410	0.24 J	130 B	< 10 U	32	< 5 U	< 5 U	< 0.2 U
	25-26	10/6/2015	19	260	0.21 J	100 B	< 10 U	34	< 5 U	< 5 U	0.38
	30-31	10/6/2015	96	1300 B	1.6 J	550	< 10 U	280	< 5 U	< 5 U L	2.3
	35-36	10/7/2015	66	2400 B	3.9	670	< 10 U	230	11	< 5 U L	1
	40-41	10/7/2015	15	1400 B	1.4 J	380	< 10 U	130	7	< 5 U	< 0.2 U
	45-46	10/7/2015	15	1500 B	2.1	690	< 10 U	190	11	< 5 U	0.15 J
	48-49	10/7/2015	56	2400 B	4.1	2000	< 10 U	220	12	< 5 U L	0.54
VAP-5-GW	15-16	10/7/2015	14	440 B	1 J	100	< 10 U	37	< 5 U	< 5 U	1
	20-21	10/7/2015	35	140 J B	0.26 J	40	< 10 U	11	< 5 U	< 5 U	0.2
	25-26	10/7/2015	9.2 J	240 B	0.18 J	55	< 10 U	23	< 5 U	< 5 U	0.11 J
	30-31	10/7/2015	7.8 J	380 B	3.6	210	< 10 U	96	29	< 5 U	0.28
	35-36	10/7/2015	12	280 B	0.48 J	48	< 10 U	30	< 5 U	< 5 U	0.15 J
	40-41	10/7/2015	14	190 J B	0.66 J	33	< 10 U	18	< 5 U	< 5 U	< 0.2 U
	45-46	10/7/2015	16	220 B	0.68 J	54	< 10 U	28	< 5 U	< 5 U	< 0.2 U
	49-50	10/7/2015	--	--	--	--	--	--	--	--	--
VAP-6-GW	12-13	10/8/2015	--	--	--	--	--	--	--	--	--
	15-16	10/8/2015	51	960 B	0.93 J	250	< 10 U	79	< 5 U	< 5 U	0.24
	20-21	10/8/2015	< 10 U	21 J B	< 2 U	2.4 J	< 10 U	< 3 U	< 5 U	< 5 U	< 0.2 U
	25-26	10/8/2015	34	590 B	0.55 J	260	< 10 U	90	< 5 U	< 5 U	2.1
	30-31	10/8/2015	12	210 B	0.19 J	78	< 10 U	29	< 5 U	< 5 U	< 0.2 U
	30-31 (DUP-2)	10/8/2015	12	250 B	0.43 J	92	< 10 U	31	< 5 U	< 5 U	< 0.2 U
	30-35	10/8/2015	< 10 U	69 J B	< 2 U	5.1	< 10 U	< 3 U	< 5 U	< 5 U	< 0.2 U
	40-41	10/8/2015	5.3 J	180 J B	0.19 J	53	< 10 U	13	< 5 U	< 5 U	0.1 J
	45-46	10/8/2015	77	1400 B	1.2 J	740	< 10 U	180	54	< 5 U	3
	49-50	10/8/2015	9.3 J	340 B	1 J	160	< 10 U	92	42	< 5 U	0.21
VAP-7-GW	13-14	10/9/2015	18	350 B	0.32 J	130	< 10 U	33	8.3	< 5 U	0.11 J
	15-16	10/9/2015	18	320 B	0.5 J	120	< 10 U	33	< 5 U	< 5 U	0.14 J
	20-21	10/9/2015	6.4 J	190 J B	< 2 U	43	< 10 U	11	< 5 U	< 5 U	< 0.2 U
	25-26	10/9/2015	12	390 B	0.44 J	140	< 10 U	47	< 5 U	< 5 U	0.093 J
	30-31	10/9/2015	9.4 J	280 B	0.4 J	93	< 10 U	38	4.9 J	< 5 U	0.099 J
	30-31 (DUP-3)	10/9/2015	11	310 B	0.4 J	110	< 10 U	46	4 J	< 5 U	0.19 J
	35-36	10/9/2015	35	790 B	1.5 J	380	< 10 U	390	51	< 5 U	1.2
	43-44	10/9/2015	46	330 B	0.73 J	180	< 10 U	39	< 5 U	< 5 U	0.17 J
	48-49	10/9/2015	28	250 B	0.31 J	66	18	27	< 5 U	< 5 U	0.18 J
VAP-8-GW	18-19	10/8/2015	26	680 B	0.7 J	200	< 10 U	70	< 5 U	< 5 U	0.31
	20-21	10/8/2015	120	570 B	0.84 J	180	< 10 U	77	< 5 U	< 5 U	< 0.2 U
	25-26	10/8/2015	14	920 B	0.42 J	260	< 10 U	100	4.5 J	< 5 U	0.21
	30-31	10/8/2015	10	520 B	0.2 J	190	< 10 U	47	< 5 U	< 5 U	0.17 J
	35-36	10/8/2015	17	820 B	0.41 J	480	< 10 U	280	13	< 5 U L	0.35
	40-41	10/8/2015	69	1100 B	12	500	< 10 U	470	190	< 5 U	0.91
	45-46	10/8/2015	84	440 B	2.5	180	< 10 U	80	14	< 5 U	0.22
	49-50	10/8/2015	4 J	250 B	0.17 J	39	< 10 U	13	< 5 U	< 5 U	< 0.2 U
VAP-9-GW	15-16	10/1/2015	43	280 B	0.77 J	130	< 10 U	31	< 5 U	< 5 U	0.28
	20-21	10/1/2015	48	1600 B	4.7	680	< 10 U	280	26	< 5 U	1.6
	25-26	10/1/2015	19	900 B	1.4 J	330	< 10 U	82	< 5 U	< 5 U	0.12 J
	30-31	10/1/2015	9.8 J	420 B	0.59 J	120	< 10 U	56	12	< 5 U	0.26
	35-36	10/1/2015	< 10 U	120 J B	0.21 J	1.3 J	13	< 3 U	< 5 U	< 5 U	< 0.2 U
	40-41	10/1/2015	8.8 J	540 B	0.69 J	180	< 10 U	75	< 5 U	< 5 U	< 0.2 U
	45-46	10/1/2015	13	510 B	1.7 J	150	< 10 U	42	< 5 U	< 5 U	0.14 J
	49-50	10/1/2015	25	590 B	2	270	< 10 U	71	6.9	< 5 U	< 0.2 U
VAP-10-GW	16-17	10/20/2015	24	460 B	0.77 J	130	< 10 U	34	< 5 U	< 5 U	0.17 J
	20-21	10/20/2015	4.2 J	43 J B	0.18 J	5	< 10 U	< 3 U	< 5 U	< 5 U	< 0.2 U
	20-25	10/20/2015	49	490 B	1.2 J	410	< 10 U	76	< 5 U	< 5 U	0.43
	30-31	10/20/2015	16	720 B	1 J	400	< 10 U	64	4.4 J	< 5 U L	0.82
	35-36	10/20/2015	3.7 J	330 B	0.57 J	96	< 10 U	43	4.4 J	< 5 U	< 0.2 U
	40-41	10/20/2015	--	--	--	--	--	--	--	--	--
	45-46	10/20/2015	36	750 B	1.6 J	570	< 10 U	73	4.8 J	< 5 U	0.15 J
	49-50	10/20/2015	--	--	--	--	--	--	--	--	--

Notes:

‡ Groundwater samples collected by vertical aquifer profile method. Analyzed by Method 6010B, Method SM 3500-Cr B for Cr VI, and Method 7470A for Mercury; presented in µg/L.

-- Insufficient sample volume to analyze.

B Compound was found in the blank and sample.

J Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.

U Indicates the analyte was analyzed for but not detected.

Acronym:

µg/L Micrograms per liter.

Table 8
Summary of Quality Control/Quality Assurance VOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID Sample Date	TB-01 (100115) 10/1/2015	TB-01 (101915) 10/19/2015	TB-02 (100515) 10/5/2015	TB-03 (100715) 10/7/2015	TB-04 (100715) 10/7/2015	TB-05(100815) 10/8/2015	TB-06(100815) 10/8/2015	TB-07(100915) 10/9/2015
1,1,1-Trichloroethane	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2,2-Tetrachloroethane	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2-Trichloro-1,2,2-trifluoroethane	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1,2-Trichloroethane	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethane	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,1-Dichloroethene	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2,4-Trichlorobenzene	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dibromo-3-Chloropropane	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U
1,2-Dichlorobenzene	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloroethane	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,2-Dichloropropane	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,3-Dichlorobenzene	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
1,4-Dichlorobenzene	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
2-Butanone (MEK)	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
2-Hexanone	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
4-Methyl-2-pentanone (MIBK)	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Acetone	3.2 J	3 J	1 J	2.2 J	3.9 J	2.1 J B	< 10 U	3.3 J
Benzene	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromoform	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Bromomethane	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Carbon disulfide	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	0.63 J	< 1 U
Carbon tetrachloride	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chlorobenzene	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chlorodibromomethane	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroethane	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloroform	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Chloromethane	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,2-Dichloroethene	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
cis-1,3-Dichloropropene	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Cyclohexane	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Dichlorobromomethane	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Dichlorodifluoromethane	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Ethylbenzene	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Ethylene Dibromide	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Isopropylbenzene	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Methyl acetate	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U	< 10 U
Methyl tert-butyl ether	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Methylcyclohexane	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Methylene Chloride	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Styrene	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Tetrachloroethene	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Toluene	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,2-Dichloroethene	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
trans-1,3-Dichloropropene	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Trichloroethene	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Trichlorofluoromethane	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Vinyl chloride	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U	< 1 U
Xylenes, Total	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U	< 2 U

Notes:

‡	Analyzed by Method 8260B; presented in µg/L.
B	Compound was found in the blank and sample.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Acronym:

µg/L	Micrograms per liter.

Table 9
Summary of Soil VOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,4-Trichlorobenzene	1,2-Dibromo-3-chloropropane
Well/Sample Details										
VAP-1-GW	1-2	10/2/2015	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 8.9 U
VAP-2 GW	2-4	10/5/2015	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 9.8 U
VAP-3-GW	1-2	10/5/2015	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 8.4 U
VAP-4-GW	6-8	10/6/2015	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 8.7 U
VAP-5-GW	4-6	10/7/2015	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 8.9 U
VAP-6-GW	2-4	10/8/2015	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 9 U
VAP-7-GW	2-4	10/9/2015	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 9 U
VAP-8-GW	1-2	10/8/2015	< 4.6 U	< 4.6 U	< 4.8 U	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U	< 9.2 U
VAP-9-GW	2-4	10/1/2015	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 8.5 U
	2-4 (DUP-01)	10/1/2015	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 8.8 U
VAP-10-GW	0-2	10/19/2015	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 12 U

Notes:

*	Laboratory control sample or laboratory control sample duplicate is outside acceptable limits
‡	Soil samples analyzed by Method 8260B; presented in µg/kg.
B	Compound was found in the blank and sample.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Acronyms:

µg/kg	Micrograms per kilogram.
VOC	Volatile organic compounds.

Table 9
Summary of Soil VOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2-Butanone (MEK)	2-Hexanone
Well/Sample Details									
VAP-1-GW	1-2	10/2/2015	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	2.6 J B	< 18 U
VAP-2 GW	2-4	10/5/2015	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	2 J B	< 20 U
VAP-3-GW	1-2	10/5/2015	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	1.4 J B	< 17 U
VAP-4-GW	6-8	10/6/2015	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	1.3 J B	< 17 U
VAP-5-GW	4-6	10/7/2015	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	1.1 J B	< 18 U
VAP-6-GW	2-4	10/8/2015	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	1.8 J B	< 18 U
VAP-7-GW	2-4	10/9/2015	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	0.78 J B	< 18 U
VAP-8-GW	1-2	10/8/2015	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U	3.6 J B	< 18 U
VAP-9-GW	2-4	10/1/2015	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	4.9 J B	< 17 U
	2-4 (DUP-01)	10/1/2015	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	3.3 J B	< 18 U
VAP-10-GW	0-2	10/19/2015	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	16 J B	< 24 U

Notes:

*	Laboratory control sample or laboratory control sample duplicate is outside acceptable limits
‡	Soil samples analyzed by Method 8260B; presented in µg/kg.
B	Compound was found in the blank and sample.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Acronyms:

µg/kg	Micrograms per kilogram.
VOC	Volatile organic compounds.

Table 9
Summary of Soil VOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene	Bromoform	Bromomethane	Carbon disulfide	Carbon tetrachloride
Well/Sample Details									
VAP-1-GW	1-2	10/2/2015	< 18 U	40	< 4.4 U	< 4.4 U	< 4.4 U	0.57 J	< 4.4 U
VAP-2 GW	2-4	10/5/2015	< 20 U	10 J B *	0.57 J	< 4.9 U	< 4.9 U	0.6 J	< 4.9 U
VAP-3-GW	1-2	10/5/2015	< 17 U	7.9 J B *	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U
VAP-4-GW	6-8	10/6/2015	< 17 U	9.3 J B *	< 4.3 U	< 4.3 U	< 4.3 U	0.52 J	< 4.3 U
VAP-5-GW	4-6	10/7/2015	< 18 U	< 18 U *	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
VAP-6-GW	2-4	10/8/2015	< 18 U	5.7 J B *	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U
VAP-7-GW	2-4	10/9/2015	< 18 U	< 18 U *	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U
VAP-8-GW	1-2	10/8/2015	< 18 U	22 B *	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U
VAP-9-GW	2-4	10/1/2015	< 17 U	45	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U
	2-4 (DUP-01)	10/1/2015	< 18 U	31	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
VAP-10-GW	0-2	10/19/2015	< 24 U	210 B	0.37 J	< 6 U	< 6 U	< 6 U	< 6 U

Notes:

*	Laboratory control sample or laboratory control sample duplicate is outside acceptable limits
‡	Soil samples analyzed by Method 8260B; presented in µg/kg.
B	Compound was found in the blank and sample.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Acronyms:

µg/kg	Micrograms per kilogram.
VOC	Volatile organic compounds.

Table 9
Summary of Soil VOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	Chlorobenzene	Chlorodi-bromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene
Well/Sample Details									
VAP-1-GW	1-2	10/2/2015	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
VAP-2 GW	2-4	10/5/2015	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U
VAP-3-GW	1-2	10/5/2015	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U
VAP-4-GW	6-8	10/6/2015	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U
VAP-5-GW	4-6	10/7/2015	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
VAP-6-GW	2-4	10/8/2015	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U
VAP-7-GW	2-4	10/9/2015	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U
VAP-8-GW	1-2	10/8/2015	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U
VAP-9-GW	2-4	10/1/2015	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U
	2-4 (DUP-01)	10/1/2015	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U
VAP-10-GW	0-2	10/19/2015	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U

Notes:

*	Laboratory control sample or laboratory control sample duplicate is outside acceptable limits
‡	Soil samples analyzed by Method 8260B; presented in µg/kg.
B	Compound was found in the blank and sample.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Acronyms:

µg/kg	Micrograms per kilogram.
VOC	Volatile organic compounds.

Table 9
Summary of Soil VOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	Cyclohexane	Dichloro-bromomethane	Dichloro-difluoromethane	Ethylbenzene	Ethylene Dibromide	Isopropyl-benzene	Methyl Acetate	Methyl tert-butyl ether
Well/Sample Details										
VAP-1-GW	1-2	10/2/2015	< 8.9 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 8.9 U	< 4.4 U
VAP-2 GW	2-4	10/5/2015	< 9.8 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 9.8 U *	< 4.9 U
VAP-3-GW	1-2	10/5/2015	< 8.4 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 8.4 U *	< 4.2 U
VAP-4-GW	6-8	10/6/2015	< 8.7 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 8.7 U *	< 4.3 U
VAP-5-GW	4-6	10/7/2015	< 8.9 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 8.9 U *	< 4.4 U
VAP-6-GW	2-4	10/8/2015	< 9 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 9 U *	< 4.5 U
VAP-7-GW	2-4	10/9/2015	< 9 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 9 U *	< 4.5 U
VAP-8-GW	1-2	10/8/2015	< 9.2 U	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U	< 9.2 U *	< 4.6 U
VAP-9-GW	2-4	10/1/2015	< 8.5 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 8.5 U	< 4.2 U
	2-4 (DUP-01)	10/1/2015	< 8.8 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 8.8 U	< 4.4 U
VAP-10-GW	0-2	10/19/2015	< 12 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	15	< 6 U

Notes:

*	Laboratory control sample or laboratory control sample duplicate is outside acceptable limits
‡	Soil samples analyzed by Method 8260B; presented in µg/kg.
B	Compound was found in the blank and sample.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Acronyms:

µg/kg	Micrograms per kilogram.
VOC	Volatile organic compounds.

Table 9
Summary of Soil VOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	Methyl-cyclohexane	Methylene Chloride	Styrene	Tetra-chloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride	Total Xylenes
Well/Sample Details													
VAP-1-GW	1-2	10/2/2015	< 8.9 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 8.9 U
VAP-2 GW	2-4	10/5/2015	< 9.8 U	< 4.9 U	< 4.9 U	< 4.9 U	0.49 J	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 4.9 U	< 9.8 U
VAP-3-GW	1-2	10/5/2015	< 8.4 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 8.4 U
VAP-4-GW	6-8	10/6/2015	< 8.7 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 4.3 U	< 8.7 U
VAP-5-GW	4-6	10/7/2015	< 8.9 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 8.9 U
VAP-6-GW	2-4	10/8/2015	< 9 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 9 U
VAP-7-GW	2-4	10/9/2015	< 9 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 4.5 U	< 9 U
VAP-8-GW	1-2	10/8/2015	< 9.2 U	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U	< 4.6 U	< 9.2 U
VAP-9-GW	2-4	10/1/2015	< 8.5 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 4.2 U	< 8.5 U
	2-4 (DUP-01)	10/1/2015	< 8.8 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 4.4 U	< 8.8 U
VAP-10-GW	0-2	10/19/2015	< 12 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 6 U	< 12 U

Notes:

*	Laboratory control sample or laboratory control sample duplicate is outside acceptable limits
‡	Soil samples analyzed by Method 8260B; presented in µg/kg.
B	Compound was found in the blank and sample.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Acronyms:

µg/kg	Micrograms per kilogram.
VOC	Volatile organic compounds.

Table 10
Summary of Soil SVOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	1,1'-Biphenyl	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichloro-phenol	2,4-Dimethyl-phenol	2,4-Dinitro-phenol	2,4-Dinitro-toluene	2,6-Dinitro-toluene	2-Chloro-naphthalene	2-Chloro-phenol
Well/Sample Details												
VAP-1-GW	1-2	10/2/2015	< 60 U	< 180 U	< 180 U	< 180 U	< 180 U	< 400 U	< 240 U	< 240 U	< 60 U	< 60 U
VAP-2 GW	2-4	10/5/2015	< 64 U	< 190 U	< 190 U	< 190 U	< 190 U	< 420 U	< 260 U	< 260 U	< 64 U	< 64 U
VAP-3-GW	1-2	10/5/2015	< 61 U	< 180 U	< 180 U	< 180 U	< 180 U	< 400 U	< 240 U F2	< 240 U	< 61 U	< 61 U
VAP-4-GW	6-8	10/6/2015	< 61 U	< 180 U	< 180 U	< 180 U	< 180 U	< 400 U	< 240 U	< 240 U	< 61 U	< 61 U
VAP-5-GW	4-6	10/7/2015	< 63 U	< 190 U	< 190 U	< 190 U	< 190 U	< 410 U	< 250 U	< 250 U	< 63 U	< 63 U
VAP-6-GW	2-4	10/8/2015	< 62 U	< 190 U	< 190 U	< 190 U	< 190 U	< 410 U	< 250 U	< 250 U	< 62 U	< 62 U
VAP-7-GW	2-4	10/9/2015	< 61 U	< 180 U	< 180 U	< 180 U	< 180 U	< 400 U	< 240 U	< 240 U	< 61 U	< 61 U
VAP-8-GW	1-2	10/8/2015	< 61 U	< 180 U	< 180 U	< 180 U	< 180 U	< 400 U	< 240 U	< 240 U	< 61 U	< 61 U
VAP-9-GW	2-4	10/1/2015	< 80 U	< 180 U	< 180 U	< 180 U	< 180 U	< 400 U	< 240 U	< 240 U	< 60 U	< 60 U
	2-4 (DUP-01)	10/1/2015	< 60 U	< 180 U	< 180 U	< 180 U	< 180 U	< 400 U	< 240 U	< 240 U	< 60 U	< 60 U
VAP-10-GW	0-2	10/19/2015	< 55 U	< 170 U	< 170 U	< 170 U	< 170 U	< 360 U	< 220 U	< 220 U	< 55 U	< 55 U

Notes:

*	Laboratory control sample or laboratory control sample duplicate is outside acceptable limits
**	Anaylzed by Method 8260B_TCLP; presented in µg/L.
‡	Soil samples analyzed by Method 8270C; presented in µg/kg.
B	Compound was found in the blank and sample.
F1	Matrix Spike and/or Matrix Spike Duplicate recovery is outside acceptable limits.
F2	Matrix Spike/Matrix Spike Duplicate Relative Percent Difference exceeds control limits.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Acronyms:

µg/kg	Micrograms per kilogram.
SVOC	Semi-volatile organic compounds.

Table 10
Summary of Soil SVOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	2-Methyl-naphthalene	2-Methyl-phenol	2-Nitroaniline	2-Nitrophenol	3 & 4 Methyl-phenol	3,3'-Dichloro-benzidine	3-Nitroaniline	4,6-Dinitro-2-methylphenol	4-Bromophenyl Phenyl Ether	4-Chloro-3-methylphenol
Well/Sample Details												
VAP-1-GW	1-2	10/2/2015	< 8 U	< 240 U	< 240 U	< 60 U	< 480 U	< 120 U	< 240 U	< 180 U	< 60 U	< 180 U
VAP-2 GW	2-4	10/5/2015	< 8.6 U	< 260 U	< 260 U	< 64 U	< 520 U	< 130 U	< 260 U	< 190 U	< 64 U	< 190 U
VAP-3-GW	1-2	10/5/2015	< 8.1 U	< 240 U	< 240 U	< 61 U F2	< 490 U	< 120 U	< 240 U	< 180 U F1 F2	< 61 U	< 180 U
VAP-4-GW	6-8	10/6/2015	< 8.1 U	< 240 U	< 240 U	< 61 U	< 490 U	< 120 U	< 240 U	< 180 U	< 61 U	< 180 U
VAP-5-GW	4-6	10/7/2015	< 8.3 U	< 250 U	< 250 U	< 63 U	< 500 U	< 130 U	< 250 U	< 190 U	< 63 U	< 190 U
VAP-6-GW	2-4	10/8/2015	< 8.3 U	< 250 U	< 250 U	< 62 U	< 500 U	< 120 U	< 250 U	< 190 U	< 62 U	< 190 U
VAP-7-GW	2-4	10/9/2015	< 8.1 U	< 240 U	< 240 U	< 61 U	< 490 U	< 120 U	< 240 U	< 180 U	< 61 U	< 180 U
VAP-8-GW	1-2	10/8/2015	< 8.2 U	< 240 U	< 240 U	< 61 U	< 490 U	< 120 U	< 240 U	< 180 U	< 61 U	< 180 U
VAP-9-GW	2-4	10/1/2015	< 8 U	< 240 U	< 240 U	< 60 U	< 480 U	< 120 U	< 240 U	< 180 U	< 60 U	< 180 U
	2-4 (DUP-01)	10/1/2015	< 8 U	< 240 U	< 240 U	< 60 U	< 480 U	< 120 U	< 240 U	< 180 U	< 60 U	< 180 U
VAP-10-GW	0-2	10/19/2015	4.8 J	< 220 U	< 220 U	< 55 U	< 440 U	< 110 U	< 220 U	< 170 U	< 55 U	< 170 U

Notes:

*	Laboratory control sample or laboratory control sample duplicate is outside acceptable limits
**	Anaylzed by Method 8260B_TCLP; presented in µg/L.
‡	Soil samples analyzed by Method 8270C; presented in µg/kg.
B	Compound was found in the blank and sample.
F1	Matrix Spike and/or Matrix Spike Duplicate recovery is outside acceptable limits.
F2	Matrix Spike/Matrix Spike Duplicate Relative Percent Difference exceeds control limits.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Acronyms:

µg/kg	Micrograms per kilogram.
SVOC	Semi-volatile organic compounds.

Table 10
Summary of Soil SVOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	4-Chloro-aniline	4-Chlorophenyl Phenyl Ether	4-Nitroaniline	4-Nitrophenol	Acenaphthene	Acenaphthylene	Acetophenone	Anthracene	Atrazine	Benzaldehyde
Well/Sample Details												
VAP-1-GW	1-2	10/2/2015	< 180 U	< 60 U	< 240 U	< 400 U	< 8 U	< 8 U	< 120 U	< 8 U	< 240 U	< 120 U
VAP-2 GW	2-4	10/5/2015	< 190 U	< 64 U	< 260 U	< 420 U	< 8.6 U	< 8.6 U	< 130 U	< 8.6 U	< 260 U	< 130 U
VAP-3-GW	1-2	10/5/2015	< 180 U	< 61 U	< 240 U	< 400 U	< 8.1 U	< 8.1 U	< 120 U	< 8.1 U	< 240 U	< 120 U
VAP-4-GW	6-8	10/6/2015	< 180 U	< 61 U	< 240 U	< 400 U	< 8.1 U	< 8.1 U	< 120 U	< 8.1 U	< 240 U	< 120 U
VAP-5-GW	4-6	10/7/2015	< 190 U	< 63 U	< 250 U	< 410 U	< 8.3 U	< 8.3 U	< 130 U	< 8.3 U	< 250 U	< 130 U
VAP-6-GW	2-4	10/8/2015	< 190 U	< 62 U	< 250 U	< 410 U	< 8.3 U	< 8.3 U	< 120 U	< 8.3 U	< 250 U	< 120 U
VAP-7-GW	2-4	10/9/2015	< 180 U	< 61 U	< 240 U	< 400 U	< 8.1 U	< 8.1 U	< 120 U	< 8.1 U	< 240 U	< 120 U
VAP-8-GW	1-2	10/8/2015	< 180 U	< 61 U	< 240 U	< 400 U	< 8.2 U	< 8.2 U	< 120 U	< 8.2 U	< 240 U	< 120 U
VAP-9-GW	2-4	10/1/2015	< 180 U	< 60 U	< 240 U	< 400 U	< 8 U	< 8 U	< 120 U	< 8 U	< 240 U	< 120 U
	2-4 (DUP-01)	10/1/2015	< 180 U	< 60 U	< 240 U	< 400 U	< 8 U	< 8 U	< 120 U	< 8 U	< 240 U	< 120 U
VAP-10-GW	0-2	10/19/2015	< 170 U	< 55 U	< 220 U	< 360 U	< 7.3 U	< 7.3 U	< 110 U	< 7.3 U	< 220 U	< 110 U

Notes:

*	Laboratory control sample or laboratory control sample duplicate is outside acceptable limits
**	Anaylzed by Method 8260B_TCLP; presented in µg/L.
‡	Soil samples analyzed by Method 8270C; presented in µg/kg.
B	Compound was found in the blank and sample.
F1	Matrix Spike and/or Matrix Spike Duplicate recovery is outside acceptable limits.
F2	Matrix Spike/Matrix Spike Duplicate Relative Percent Difference exceeds control limits.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Acronyms:

µg/kg	Micrograms per kilogram.
SVOC	Semi-volatile organic compounds.

Table 10
Summary of Soil SVOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	Benzo[a] anthracene	Benzo[a] pyrene	Benzo[b] fluoranthene	Benzo[g,h,i] perylene	Benzo[k] fluoranthene	bis (2-chloro-isopropyl) ether	Bis(2-chloroethoxy) methane	Bis(2-chloroethyl) ether	Bis(2-ethylhexyl) phthalate	Butyl Benzyl Phthalate
Well/Sample Details												
VAP-1-GW	1-2	10/2/2015	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 120 U	< 120 U	< 120 U	36 J	< 84 U
VAP-2 GW	2-4	10/5/2015	< 8.6 U	< 8.6 U	< 8.6 U	< 8.6 U	< 8.6 U	< 130 U	< 130 U	< 130 U	25 J	< 90 U
VAP-3-GW	1-2	10/5/2015	< 8.1 U	< 8.1 U	< 8.1 U	< 8.1 U	< 8.1 U	< 120 U	< 120 U	< 120 U	25 J	< 85 U
VAP-4-GW	6-8	10/6/2015	< 8.1 U	< 8.1 U	< 8.1 U	< 8.1 U	< 8.1 U	< 120 U	< 120 U	< 120 U	27 J	< 85 U
VAP-5-GW	4-6	10/7/2015	< 8.3 U	< 8.3 U	< 8.3 U	< 8.3 U	< 8.3 U	< 130 U	< 130 U	< 130 U	< 88 U	< 88 U
VAP-6-GW	2-4	10/8/2015	< 8.3 U	< 8.3 U	< 8.3 U	< 8.3 U	< 8.3 U	< 120 U	< 120 U	< 120 U	26 J	< 87 U
VAP-7-GW	2-4	10/9/2015	< 8.1 U	< 8.1 U	< 8.1 U	< 8.1 U	< 8.1 U	< 120 U	< 120 U	< 120 U	< 85 U	< 85 U
VAP-8-GW	1-2	10/8/2015	< 8.2 U	< 8.2 U	< 8.2 U	< 8.2 U	< 8.2 U	< 120 U	< 120 U	< 120 U	< 86 U	< 86 U
VAP-9-GW	2-4	10/1/2015	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 120 U	< 120 U	< 120 U	< 84 U	< 84 U
	2-4 (DUP-01)	10/1/2015	< 8 U	< 8 U	< 8 U	< 8 U	< 8 U	< 120 U	< 120 U	< 120 U	26 J	< 84 U
VAP-10-GW	0-2	10/19/2015	< 7.3 U	< 7.3 U	< 7.3 U	< 7.3 U	< 7.3 U	< 110 U	< 110 U	< 110 U	35 J	< 77 U

Notes:

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**	Anaylzed by Method 8260B_TCLP; presented in µg/L.
‡	Soil samples analyzed by Method 8270C; presented in µg/kg.
B	Compound was found in the blank and sample.
F1	Matrix Spike and/or Matrix Spike Duplicate recovery is outside acceptable limits.
F2	Matrix Spike/Matrix Spike Duplicate Relative Percent Difference exceeds control limits.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Acronyms:

µg/kg	Micrograms per kilogram.
SVOC	Semi-volatile organic compounds.

Table 10
Summary of Soil SVOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	Caprolactam	Carbazole	Chrysene	Dibenz(a,h) anthracene	Dibenzofuran	Diethyl Phthalate	Dimethyl Phthalate	Di-n-butyl Phthalate	Di-n-octyl Phthalate	Fluoranthene
Well/Sample Details												
VAP-1-GW	1-2	10/2/2015	52 J	< 60 U	< 8 U	< 8 U	< 60 U	< 84 U	< 84 U	< 84 U	< 84 U	< 8 U
VAP-2 GW	2-4	10/5/2015	< 420 U	< 64 U	< 8.6 U	< 8.6 U	< 64 U	< 90 U	< 90 U	26 J B	< 90 U	< 8.6 U
VAP-3-GW	1-2	10/5/2015	< 400 U	< 61 U	< 8.1 U	< 8.1 U	< 61 U	< 85 U	< 85 U	< 85 U	< 85 U F1 F2	< 8.1 U
VAP-4-GW	6-8	10/6/2015	< 400 U	< 61 U	< 8.1 U	< 8.1 U	< 61 U	< 85 U	< 85 U	27 J B	< 85 U	< 8.1 U
VAP-5-GW	4-6	10/7/2015	< 410 U	< 63 U	< 8.3 U	< 8.3 U	< 63 U	< 88 U	< 88 U	< 88 U	< 88 U	< 8.3 U
VAP-6-GW	2-4	10/8/2015	< 410 U	< 62 U	< 8.3 U	< 8.3 U	< 62 U	< 87 U	< 87 U	41 J	< 87 U	< 8.3 U
VAP-7-GW	2-4	10/9/2015	< 400 U	< 61 U	< 8.1 U	< 8.1 U	< 61 U	< 85 U	< 85 U	< 85 U	< 85 U	< 8.1 U
VAP-8-GW	1-2	10/8/2015	290 J	< 61 U	< 8.2 U	< 8.2 U	< 61 U	< 86 U	< 86 U	< 86 U	< 86 U	< 8.2 U
VAP-9-GW	2-4	10/1/2015	< 400 U	< 60 U	< 8 U	< 8 U	< 60 U	< 84 U	< 84 U	< 84 U	< 84 U	< 8 U
	2-4 (DUP-01)	10/1/2015	< 400 U	< 60 U	< 8 U	< 8 U	< 60 U	< 84 U	< 84 U	< 84 U	< 84 U	< 8 U
VAP-10-GW	0-2	10/19/2015	< 360 U	< 55 U	< 7.3 U	< 7.3 U	< 55 U	< 77 U	< 77 U	< 77 U	< 77 U	< 7.3 U

Notes:

*	Laboratory control sample or laboratory control sample duplicate is outside acceptable limits
**	Anaylzed by Method 8260B_TCLP; presented in µg/L.
‡	Soil samples analyzed by Method 8270C; presented in µg/kg.
B	Compound was found in the blank and sample.
F1	Matrix Spike and/or Matrix Spike Duplicate recovery is outside acceptable limits.
F2	Matrix Spike/Matrix Spike Duplicate Relative Percent Difference exceeds control limits.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Acronyms:

µg/kg	Micrograms per kilogram.
SVOC	Semi-volatile organic compounds.

Table 10
Summary of Soil SVOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	Fluorene	Hexachloro-benzene	Hexachloro-butadiene	Hexachlorocyclo-pentadiene	Hexachloro-ethane	Indeno[1,2,3-cd]-pyrene	Isophorone	Naphthalene	Nitrobenzene	N-Nitrosodi-n-propylamine	N-Nitrosodi-phenylamine
Well/Sample Details													
VAP-1-GW	1-2	10/2/2015	< 8 U	< 8 U	< 60 U	< 400 U F1	< 60 U	< 8 U	< 60 U	< 8 U	< 120 U	< 60 U	< 60 U
VAP-2 GW	2-4	10/5/2015	< 8.6 U	< 8.6 U	< 64 U	< 420 U	< 64 U	< 8.6 U	< 64 U	< 8.6 U	< 130 U	< 64 U	< 64 U
VAP-3-GW	1-2	10/5/2015	< 8.1 U	< 8.1 U	< 61 U	< 400 U F1	< 61 U	< 8.1 U	< 61 U	< 8.1 U	< 120 U	< 61 U	< 61 U
VAP-4-GW	6-8	10/6/2015	< 8.1 U	< 8.1 U	< 61 U	< 400 U	< 61 U	< 8.1 U	< 61 U	< 8.1 U	< 120 U	< 61 U	< 61 U
VAP-5-GW	4-6	10/7/2015	< 8.3 U	< 8.3 U	< 63 U	< 410 U	< 63 U	< 8.3 U	< 63 U	< 8.3 U	< 130 U	< 63 U	< 63 U
VAP-6-GW	2-4	10/8/2015	< 8.3 U	< 8.3 U	< 62 U	< 410 U	< 62 U	< 8.3 U	< 62 U	< 8.3 U	< 120 U	< 62 U	< 62 U
VAP-7-GW	2-4	10/9/2015	< 8.1 U	< 8.1 U	< 61 U	< 400 U	< 61 U	< 8.1 U	< 61 U	< 8.1 U	< 120 U	< 61 U	< 61 U
VAP-8-GW	1-2	10/8/2015	< 8.2 U	< 8.2 U	< 61 U	< 400 U	< 61 U	< 8.2 U	< 61 U	< 8.2 U	< 120 U	< 61 U	< 61 U
VAP-9-GW	2-4	10/1/2015	< 8 U	< 8 U	< 60 U	< 400 U	< 60 U	< 8 U	< 60 U	< 8 U	< 120 U	< 60 U	< 60 U
	2-4 (DUP-01)	10/1/2015	< 8 U	< 8 U	< 60 U	< 400 U	< 60 U	< 8 U	< 60 U	< 8 U	< 120 U	< 60 U	< 60 U
VAP-10-GW	0-2	10/19/2015	< 7.3 U	< 7.3 U	< 55 U	< 360 U	< 55 U	< 7.3 U	< 55 U	6 J	< 110 U	< 55 U	< 55 U

Notes:

*	Laboratory control sample or laboratory control sample duplicate is outside acceptable limits
**	Anaylzed by Method 8260B_TCLP; presented in µg/L.
‡	Soil samples analyzed by Method 8270C; presented in µg/kg.
B	Compound was found in the blank and sample.
F1	Matrix Spike and/or Matrix Spike Duplicate recovery is outside acceptable limits.
F2	Matrix Spike/Matrix Spike Duplicate Relative Percent Difference exceeds control limits.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Acronyms:

µg/kg	Micrograms per kilogram.
SVOC	Semi-volatile organic compounds.

Table 10
Summary of Soil SVOC Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

Location ID	Sample Depth (feet)	Sample Date	Penta-chlorophenol	Phenanthrene	Phenol	Pyrene
Well/Sample Details						
VAP-1-GW	1-2	10/2/2015	< 180 U F1 F2	< 8 U	< 60 U	< 8 U
VAP-2 GW	2-4	10/5/2015	< 190 U	< 8.6 U	< 64 U	< 8.6 U
VAP-3-GW	1-2	10/5/2015	< 180 U	< 8.1 U	< 61 U	< 8.1 U
VAP-4-GW	6-8	10/6/2015	< 180 U	< 8.1 U	< 61 U	< 8.1 U
VAP-5-GW	4-6	10/7/2015	< 190 U	< 8.3 U	< 63 U	< 8.3 U
VAP-6-GW	2-4	10/8/2015	< 190 U	< 8.3 U	< 62 U	< 8.3 U
VAP-7-GW	2-4	10/9/2015	< 180 U	< 8.1 U	< 61 U	< 8.1 U
VAP-8-GW	1-2	10/8/2015	< 180 U	< 8.2 U	< 61 U	< 8.2 U
VAP-9-GW	2-4	10/1/2015	< 180 U	< 8 U	< 60 U	< 8 U
	2-4 (DUP-01)	10/1/2015	< 180 U	< 8 U	< 60 U	< 8 U
VAP-10-GW	0-2	10/19/2015	< 170 U	< 7.3 U	< 55 U	< 7.3 U

Notes:

*	Laboratory control sample or laboratory control sample duplicate is outside acceptable limits
**	Anaylzed by Method 8260B_TCLP; presented in µg/L.
‡	Soil samples analyzed by Method 8270C; presented in µg/kg.
B	Compound was found in the blank and sample.
F1	Matrix Spike and/or Matrix Spike Duplicate recovery is outside acceptable limits.
F2	Matrix Spike/Matrix Spike Duplicate Relative Percent Difference exceeds control limits.
J	Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Acronyms:

µg/kg	Micrograms per kilogram.
SVOC	Semi-volatile organic compounds.

Table 11
Summary of Soil Metals Analytical Results‡
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location ID	Sample Depth (feet)	Sample Date	Arsenic	Barium	Cadmium	Chromium	Lead	Selenium	Silver	Cr (VI)	Mercury
Well/Sample Details											
VAP-1-GW	1-2	10/2/2015	9.1	79	0.058 J B	14	14	0.43 J	0.098 J B	< 0.96 U	0.046 J
VAP-2 GW	2-4	10/5/2015	3.7	93	0.038 J	7.7 B	8.1	0.46 J	< 0.56 U	0.44 J	0.018 J
VAP-3-GW	1-2	10/5/2015	10	66	0.068 J	14 B	11	< 0.43 U	< 0.43 U	< 2 U	0.043 J
VAP-4-GW	6-8	10/6/2015	2.3	440	0.048 J	8.2 B	6.9	< 0.43 U	< 0.43 U	0.35 J	< 0.12 U
VAP-5-GW	4-6	10/7/2015	7.1	110	0.11 J	9.2 B	8.7	0.44 J	< 0.45 U	< 1 U	< 0.11 U
VAP-6-GW	2-4	10/8/2015	8.7	120	0.09 J B	14 B	8.7 B	< 0.58 U	0.12 J	0.56 J	0.026 J
VAP-7-GW	2-4	10/9/2015	8.2	73	0.066 J B	12 B	9.6 B	< 0.57 U	< 0.57 U	< 0.99 U	0.022 J
VAP-8-GW	1-2	10/8/2015	8.9	45	0.054 J B	12 B	12 B	< 0.51 U	0.18 J	0.47 J	0.041 J
VAP-9-GW	2-4	10/1/2015	5.5	70	0.019 J B	11	8.9	0.52	< 0.42 U	< 0.97 U	< 0.12 U
	2-4 (DUP-01)	10/1/2015	6	110	< 0.38 U	11	8	< 0.94 U	< 0.94 U	< 0.94 U	< 0.12 U
VAP-10-GW	0-2	10/19/2015	5.9	78	0.072 J	9.6	11	0.32 J	< 0.47 U	< 1.7 U	0.02 J

Notes:

‡ Soil samples analyzed by Method 6010B and, for mercury, Method 7471A; presented in mg/kg.

B Compound was found in the blank and sample.

J Result is less than the Reporting Limit but greater than or equal to the Method Detection Limit, and the concentration is an approximate value.

U Indicates the analyte was analyzed for but not detected.

Acronym:

mg/kg Milligrams per kilogram.

Table 12
Summary of Geotechnical Analytical Results
Grenada Manufacturing, LLC
Grenada, Mississippi

ARCADIS

Location/ Sample ID	Date Collected	Depth (feet)	Natural Moisture (%)	Porosity			Permeability (cm/sec)	USDA Classification
				Water Filled (%)	Air Filled (%)	Total (%)		
VAP 6*	10/8/2015	6-8	20.9	36.0	0.0	36.0	NA	Brown Lean Clay†
VAP 8*	10/8/2015	6-8	22.6	37.4	0.3	37.7	NA	Brown Silty Clay†
VAP 9*	10/9/2015	6-8	25.4	39.7	1.9	41.6	NA	Brown Lean Clay†
ST-219A**	7/15-7/20/2015	6-8	23.3	NA	NA	38.00	3.46E-09	Silt Loam
ST-219B**	7/13-7/16/2015	6-8	22.2	NA	NA	35.96	1.32E-07	Silty Clay Loam
ST-219C**	7/13-7/20/2015	6-8	21.8	NA	NA	38.03	3.12E-09	Silt Loam

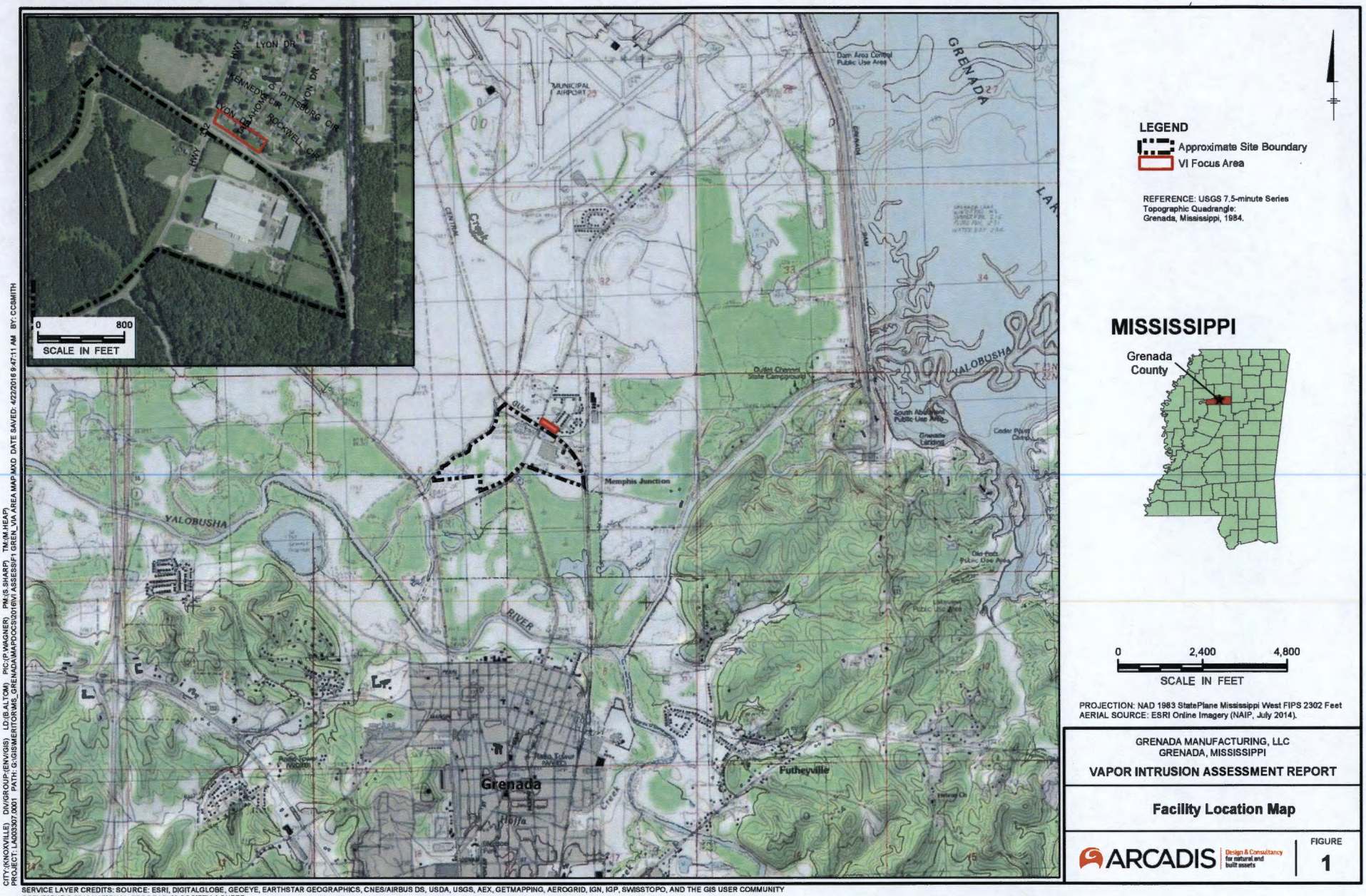
Notes:

*	Sample collected by Arcadis and analyzed by CGC.
**	Sample collected by T&M Associates and analyzed by S&ME.
†	Visual description.

Acronyms:

%	Percentage.
cm/sec	Centimeters per second.
NA	Not applicable.

FIGURES



LEGEND

Approximate Site Boundary

VI Focus Area

REFERENCE: USGS 7.5-minute Series
Topographic Quadrangle:
Grenada, Mississippi, 1984.

MISSISSIPPI

0 2,400 4,800

SCALE IN FEET

PROJECTION: NAD 1983 StatePlane Mississippi West FIPS 2302 Feet
AERIAL SOURCE: ESRI Online Imagery (NAIP, July 2014).

GRENADA MANUFACTURING, LLC
GRENADA, MISSISSIPPI

VAPOR INTRUSION ASSESSMENT REPORT

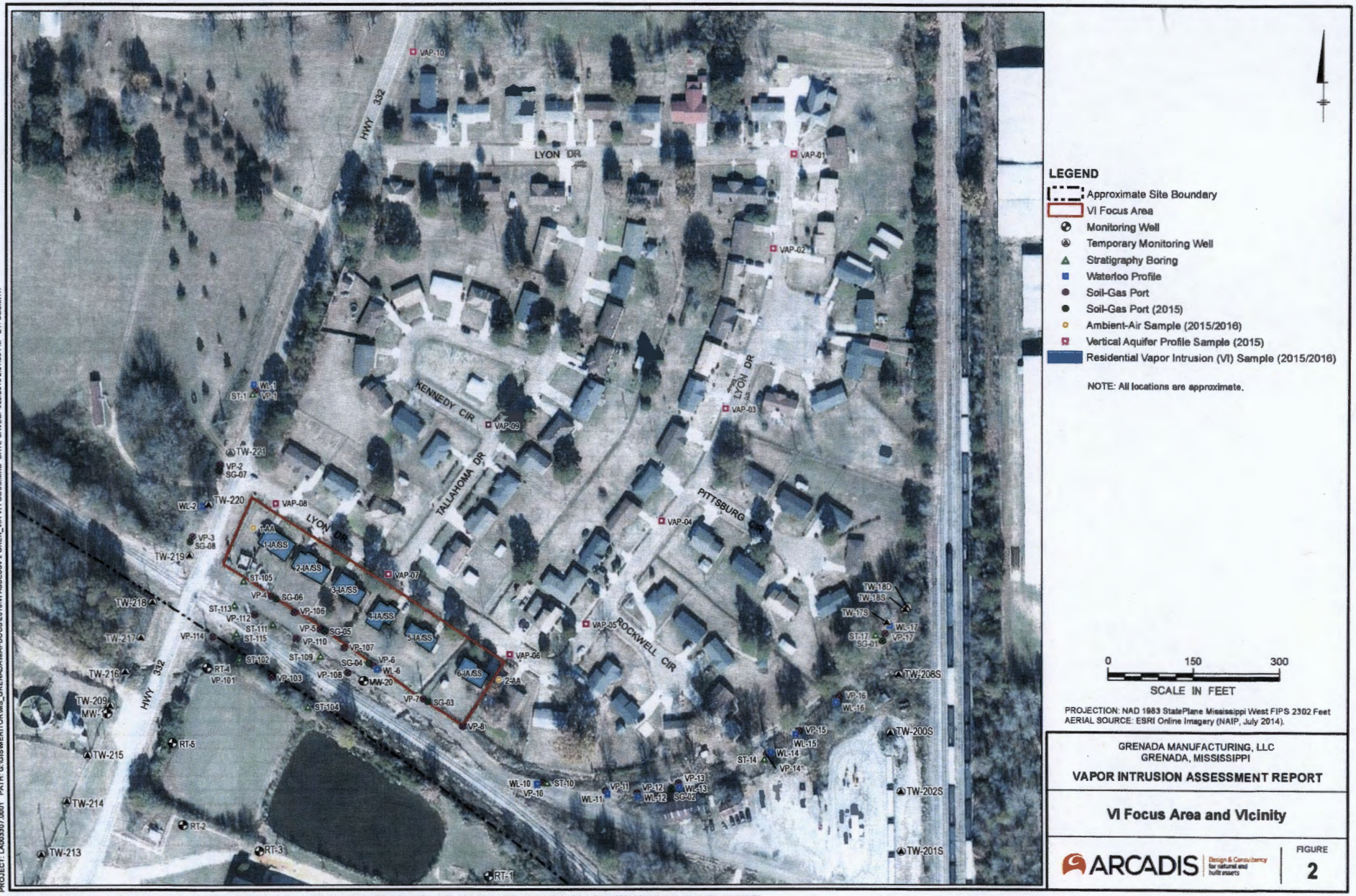
Facility Location Map

ARCADIS Design & Consultancy for natural and built assets

FIGURE 1

CITY:(KNOXVILLE) DIV/GROUP:(ENV/GIS) LD:(B.ALTOM) PIC:(P.WAGNER) PM:(S.SHARP) TM:(M.HEAP)
PROJECT: LA003307.0001 PATH: G:\GIS\MERITOR\MS_GRENADA\MAPDOCS\2016\VI ASSESS\F1 GREN_VIA AREA MAP.MXD DATE SAVED: 4/22/2016 9:47:11 AM BY: CCSMITH

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY
COPYRIGHT:© 2013 NATIONAL GEOGRAPHIC SOCIETY, I-CUBED



LEGEND

- Approximate Site Boundary
- VI Focus Area
- Monitoring Well
- Temporary Monitoring Well
- Stratigraphy Boring
- Waterloo Profile
- Soil-Gas Port
- Soil-Gas Port (2015)
- Ambient-Air Sample (2015/2016)
- Vertical Aquifer Profile Sample (2015)
- Residential Vapor Intrusion (VI) Sample (2015/2016)

NOTE: All locations are approximate.

PROJECTION: NAD 1983 StatePlane Mississippi West FIPS 2302 Feet
AERIAL SOURCE: ESRI Online Imagery (NAIP, July 2014).

GRENADA MANUFACTURING, LLC
GRENADA, MISSISSIPPI

VAPOR INTRUSION ASSESSMENT REPORT

VI Focus Area and Vicinity

ARCADIS Design & Consultancy for natural and built assets

FIGURE 2

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

CITY:(KNOXVILLE) DIV/GROUP:(ENV/GIS) LD:(B.ALTOM) PIC:(P.WAGNER) PM:(S.SHARP) TM:(M.HEAP)
PROJECT: LA003307.0001 PATH: G:\GIS\MERITOR\MS_GRENADA\MAPDOCS\2016\VI ASSESS\F2 GREN_VIA VI FOCUS.MXD DATE SAVED: 4/22/2016 2:51:35 PM BY: CCSMITH

Constituent	Indoor Air / Ambient Air (µg/m³)	Sub-Slab Vapor / Soil Gas (µg/m³)
Tetrachloroethene (PCE)	11	360
Trichloroethene (TCE)	0.48	16
Dichloroethene, cis-1,2- (cis-1,2-DCE)	NL	NL
Vinyl chloride	0.17	5.6
Benzene	0.36	12
Toluene	5200	170000
Ethylbenzene	1.1	37
m,p-Xylenes	100	3500
o-Xylenes	100	3500
Chloroform	0.12	4.1
Dichloroethane, 1,2- (1,2-DCA)	0.11	3.6
Methylene chloride	100	3400
Trimethylbenzene, 1,2,4- (1,2,4-TMB)	7.3	240

Location	1-AA	
Sample Date	9/23/2015	3/2/2016
Benzene	0.30 J	0.34
cis-1,2-DCE	0.85	<0.13
Toluene	0.66	0.56
TCE	**1.2**	<0.17
Vinyl chloride	0.10	<0.041
m,p-Xylenes	0.52	<0.28
o-Xylenes	0.29	<0.14

Location	1-IA		1-SS	
Sample Date	9/23/2015	3/2/2016	9/23/2015	3/3/2016
Benzene	**3.8**	**1.6**	< 3.9 [< 3.8]	<3.8
Chloroform	**0.75**	**0.9**	< 6.0 [< 5.7]	<5.8
1,2-DCA	**0.84**	**0.58**	< 4.9 [< 4.8]	<4.8
cis-1,2-DCE	0.61	<0.29	< 4.8 [< 4.6]	<4.7
Ethylbenzene	1.0	0.46	< 5.3 [< 5.1]	<5.1
PCE	< 0.62	<0.5	8.5 [< 8.0]	<8
Toluene	5.4	2.8	< 4.6 [< 4.4]	<4.5
TCE	**1.1**	<0.4	**< 6.6 [22]**	<6.4
m,p-Xylenes	2.6	1.2	< 5.3 [< 5.1]	<5.1
o-Xylenes	0.95	0.39		

Location	2-IA		2-SS	
Sample Date	9/23/2015	3/2/2016	9/23/2015	3/3/2016
Benzene	**0.81**	<0.87	< 3.7	<3.8
Chloroform	**0.91**	<0.53	< 5.7	<5.8
1,2-DCA	**7.0**	**8.8**	< 4.7	<4.8
cis-1,2-DCE	0.57	<0.43	< 4.6	<4.7
Ethylbenzene	0.85	0.52	< 5.1	<5.1
Toluene	7.9	7.4	6.9	<4.5
TCE	**1.1**	<0.58	< 6.3	<6.4
m,p-Xylenes	1.9	1.5	< 5.1	<5.1
o-Xylenes	1.1	0.64	< 5.1	<5.1

Location	3-IA		3-SS	
Sample Date	9/23/2015	3/2/2016	9/23/2015	3/3/2016
Benzene	< 2.8	**1.1**	< 3.6	<3.7
Chloroform	**4.2**	<0.33	< 5.6	<5.7
1,2-DCA	< 1.4	**0.36**	< 4.6	<4.7
trans-1,2-DCE	< 6.9	<1.3	12	<4.6
Toluene	5.6	11	< 4.3	<4.4
m,p-Xylenes	< 3.0	0.61	< 5.0	<5.0

Location	4-IA		4-SS	
Sample Date	9/23/2015	3/2/2016	9/23/2015	3/3/2016
Benzene	**1.8**	**0.68**	< 3.7	<3.8
Chloroform	**0.94**	**4.9**	< 5.7	<5.7
1,2-DCA	**1.2**	<0.14	< 4.7	<4.8
cis-1,2-DCE	0.58	<0.13	< 4.6	<4.6
Ethylbenzene	0.43	0.4	< 5.0	<5.1
PCE	< 0.24	<0.23	7.9	<8
Toluene	2.7	1.7	< 4.4	<4.4
TCE	**0.99**	<0.18	< 6.3	<6.3
Vinyl chloride	0.079	<0.043	< 3.0	<3
m,p-Xylenes	1.1	0.95	< 5.0	<5.1
o-Xylenes	0.56	0.34	< 5.0	<5.1

Location	5-IA		5-SS	
Sample Date	9/23/2015	3/2/2016	9/23/2015	3/3/2016
Benzene	**0.86**	0.31 [0.3]	< 3.8	<3.6 [<3.7]
Chloroform	**0.21**	<0.16 [<0.15]	< 5.8	<5.5 [<5.7]
1,2-DCA	**0.18**	<0.13 [<0.12]	< 4.8	<4.6 [<4.7]
cis-1,2-DCE	0.65	<0.13 [<0.12]	< 4.7	<4.5 [<4.6]
Ethylbenzene	0.55	<0.14 [<0.13]	< 5.2	<4.9 [<5.1]
Methylene chloride	2.0	<1.1 [<1]	< 41	<39 [<41]
Toluene	2.6	0.39 [0.36]	< 4.5	<4.2 [<4.4]
TCE	**0.86**	<0.17 [<0.16]	< 6.4	<6.0 [<6.3]
1,2,4-TMB	< 0.94 UJ	<0.8 [<0.74]	6.6	<5.5 [<5.8]
Vinyl chloride	0.062	<0.041 [<0.038]	< 3.0	<2.9 [<3]
m,p-Xylenes	1.6	<0.28 [<0.26]	< 5.2	<4.9 [<5.1]
o-Xylenes	0.56	<0.14 [<0.13]	< 5.2	<4.9 [<5.1]

Location	6-IA		6-SS	
Sample Date	9/23/2015	3/2/2016	9/23/2015	3/3/2016
Benzene	< 0.70	**0.57**	< 3.7	<3.8
Chloroform	**0.56**	<0.22	**140**	**38**
cis-1,2-DCE	0.38	<0.18	< 4.6	<4.8
Ethylbenzene	0.63	<0.20	< 5.1	<5.1
Toluene	3.9	4	4.7	<4.5
TCE	**0.65**	<0.25	< 6.3	<6.4
m,p-Xylenes	2.1	0.47	< 5.1	<5.1
o-Xylenes	1.0	<0.20	< 5.1	<5.1

Location	2-AA	
Sample Date	9/23/2015	3/2/2016
Benzene	0.32	0.3
cis-1,2-DCE	0.67	<0.12
Ethylbenzene	0.24	<0.13
Toluene	0.89	0.34
TCE	**1.0**	<0.16
Vinyl chloride	0.046 J	<0.038
m,p-Xylenes	0.83	<0.26
o-Xylenes	0.36	<0.13

Sample ID	SG-7	SG-7
Sample Date	10/7/2015	3/2/2016
Depth (ft. bgs)	2.75 - 3.25	2.75 - 3.25
Chloroform	**17**	<5.6
1,2,4-TMB	14	<5.6
m,p-Xylenes	13	6.5
o-Xylenes	8.1	<5.0

Sample ID	SG-8	SG-8
Sample Date	10/7/2015	3/2/2016
Depth (ft. bgs)	3.0 - 3.5	3.0 - 3.5
TCE	8.7	14

Sample ID	SG-6	SG-6
Sample Date	9/16/2015	3/2/2016
Depth (ft. bgs)	5.5 - 6.0	5.5 - 6.0
Benzene	**23 J**	<5 [<5.8]
Chloroform	**97 J**	<7.7 [<8.8]
Ethylbenzene	8.5 J	<6.8 [<7.8]
Toluene	21 J	5.9 [<6.8]
1,2,4-TMB	15 J	<7.7 [<8.9]
m,p-Xylenes	48 J	<6.8 [<7.8]
o-Xylenes	16 J	<6.8 [<7.8]

Sample ID	SG-5	SG-5
Sample Date	9/16/2015	3/2/2016
Depth (ft. bgs)	5.0 - 5.5	5.0 - 5.5
Benzene	8.3 J [6.8 J]	NS
Chloroform	**88 J [88 J]**	NS
Ethylbenzene	13 J [13 J]	NS
Toluene	30 J [30 J]	NS
1,2,4-TMB	21 J [20 J]	NS
m,p-Xylenes	65 J [68 J]	NS
o-Xylenes	24 J [25 J]	NS

Sample ID	SG-4	SG-4
Sample Date	10/7/2015	3/2/2016
Depth (ft. bgs)	5.5 - 6.0	5.5 - 6.0
	Not Detected	NS

Sample ID	SG-3	SG-3
Sample Date	9/16/2015	3/2/2016
Depth (ft. bgs)	5.5 - 6.0	5.5 - 6.0
Benzene	9.4	<3.8
Chloroform	**9.1**	<5.7

Sample ID	SG-2	SG-2
Sample Date	9/16/2015	3/2/2016
Depth (ft. bgs)	5.5 - 6.0	5.5 - 6.0
Benzene	5.6	NS

Sample ID	SG-1	SG-1
Sample Date	9/16/2015	3/2/2016
Depth (ft. bgs)	5.5 - 6.0	5.5 - 6.0
Ethylbenzene	7.6	NS
m,p-Xylenes	15	NS

Exemption 6 Personal Privacy

LYON DR

LEGEND

- Approximate Site Boundary
- VI Focus Area
- Monitoring Well
- Temporary Monitoring Well
- Stratigraphy Boring
- Waterloo Profile
- Soil-Gas Port
- Soil-Gas Port (2015)
- Ambient-Air Sample (2015/2016)
- Vertical Aquifer Profile Sample (2015)
- Residential Vapor Intrusion (VI) Sample (2015/2016)

NOTES:
1) All locations are approximate.
2) Soil-Gas sample (SG) locations depths are reported in feet below ground surface (ft bgs).
3) [ ] indicates a duplicate sample.
4) All concentrations reported in micrograms per cubic meter (µg/m³).
5) **BOLD** and shaded values exceed the applicable screening level based on the lower of either a target cancer risk of 1E-06 or a target hazard index of 1.0.
6) J - The compound was positively identified; however, the associated numerical value is an estimated concentration only.
7) UJ - The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
8) Only constituents detected in either soil-gas samples and paired indoor air and sub-slab sample locations are presented.

VI - Vapor Intrusion
NS - Not Sampled

0 150 300
SCALE IN FEET

PROJECTION: NAD 1983 StatePlane Mississippi West FIPS 2302 Feet
AERIAL SOURCE: ESRI Online Imagery (NAIP, July 2014).

GRENADA MANUFACTURING, LLC
GRENADA, MISSISSIPPI

VAPOR INTRUSION ASSESSMENT REPORT

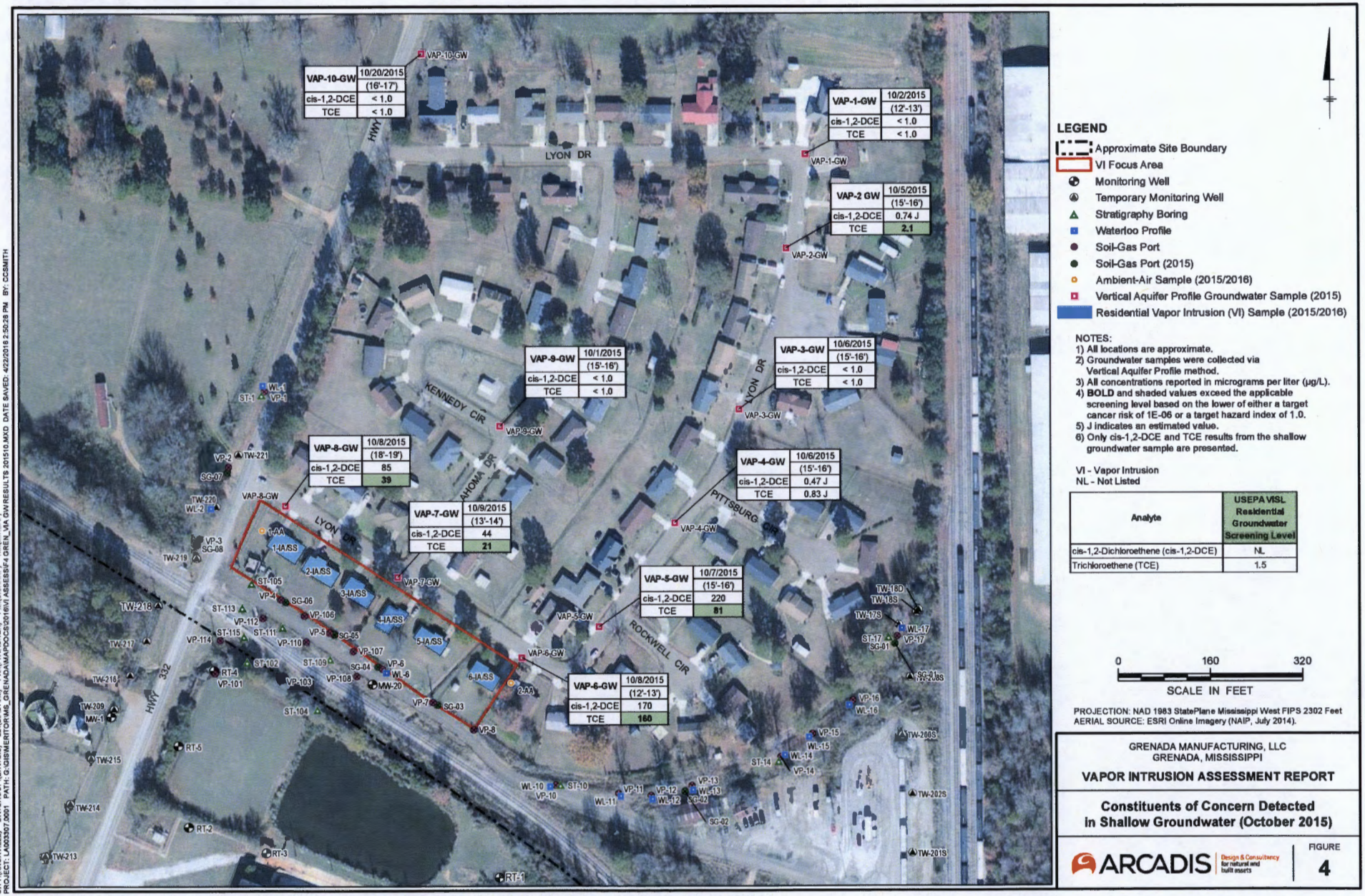
VI Sampling (Indoor and Ambient Air, Sub-Slab Vapor and Soil Gas) Results

ARCADIS Design & Consultancy for natural and built assets

FIGURE 3

CITY:(KNOXVILLE) DIV/GROUP:(ENV/GIS) LD:(B.ALTON) PIC:(P.WAGNER) PM:(B.SHARP) TM:(M.HEAP)
PROJECT: LA003307.0001 PATH: G:\GIS\MERITOR\MS_GRENADA\MAPDOCS\2016\VI ASSESS\F3 GREN_VIA VI RESULTS 2016.MXD DATE SAVED: 4/22/2016 2:39:13 PM BY: CSMITH

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY



LEGEND

- Approximate Site Boundary
- VI Focus Area
- Monitoring Well
- Temporary Monitoring Well
- Stratigraphy Boring
- Waterloo Profile
- Soil-Gas Port
- Soil-Gas Port (2015)
- Ambient-Air Sample (2015/2016)
- Vertical Aquifer Profile Groundwater Sample (2015)
- Residential Vapor Intrusion (VI) Sample (2015/2016)

NOTES:
1) All locations are approximate.
2) Groundwater samples were collected via Vertical Aquifer Profile method.
3) All concentrations reported in micrograms per liter (µg/L).
4) **BOLD** and shaded values exceed the applicable screening level based on the lower of either a target cancer risk of 1E-06 or a target hazard index of 1.0.
5) J indicates an estimated value.
6) Only cis-1,2-DCE and TCE results from the shallow groundwater sample are presented.

VI - Vapor Intrusion
NL - Not Listed

Analyte	USEPA VISL Residential Groundwater Screening Level
cis-1,2-Dichloroethene (cis-1,2-DCE)	NL
Trichloroethene (TCE)	1.5

0 160 320
SCALE IN FEET

PROJECTION: NAD 1983 StatePlane Mississippi West FIPS 2302 Feet
AERIAL SOURCE: ESRI Online Imagery (NAIP, July 2014).

GRENADA MANUFACTURING, LLC
GRENADA, MISSISSIPPI

VAPOR INTRUSION ASSESSMENT REPORT

Constituents of Concern Detected in Shallow Groundwater (October 2015)

ARCADIS Design & Consultancy for natural and built assets

FIGURE 4

SERVICE LAYER CREDITS: SOURCE: ESRI, DIGITALGLOBE, GEOEYE, EARTHSTAR GEOGRAPHICS, CNES/AIRBUS DS, USDA, USGS, AEX, GETMAPPING, AEROGRID, IGN, IGP, SWISSTOPO, AND THE GIS USER COMMUNITY

CITY:(KNOXVILLE) DIV/GROUP:(ENV/GIS) LD:(B.ALTOM) PIC:(P.WAGNER) PM:(S.SHARP) TM:(M.HEAP)
PROJECT: LA003307.0001 PATH: G:\GIS\MERITOR\MS_GRENADA\MAPDOCS\2016\VI ASSESS\F4 GREN_VIA GWRESULTS 201510.MXD DATE SAVED: 4/22/2016 2:50:28 PM BY: CCSMITH

APPENDIX A

USEPA Documents and Letters

ARCADIS
Infrastructure · Water · Environment · Buildings

ARCADIS U.S., Inc.
10352 Plaza Americana Drive
Baton Rouge
Louisiana
Tel 225-292-1004
Fax 225-218-9677
www.arcadis-us.com

Mr. Donald Williams
Grenada Manufacturing, LLC
635 Highway 332
Grenada, Mississippi 38901

Subject:
Revised Interim Measures Work Plan – Vapor Intrusion Assessment
Grenada Manufacturing, LLC, Grenada, Mississippi.
Permit No. MSD 007 037 278

ENVIRONMENT

Date:
August 28, 2015

Contact:
John Ellis

Extension:
208

Email:
john.ellis@arcadis-us.com

Our ref:
IN000899.0013.00001
Grenada/IN899.13/C/1/bbn

Dear Mr. Williams:

ARCADIS is pleased to provide this Revised Interim Measures Work Plan (IMWP) to Grenada Manufacturing, LLC (Grenada Manufacturing) for its facility located in Grenada, Mississippi detailing the proposed Vapor Intrusion (VI) Assessment. The revisions to the IMWP incorporate comments provided by the U.S. Environmental Protection Agency (USEPA). This IMWP has been prepared in response to the June 30, 2015, USEPA Region 4 letter to Grenada Manufacturing, in which USEPA requested performance by Grenada Manufacturing of the tasks identified therein pursuant to the company's Hazardous and Solid Waste (HSWA) permit. The IMWP outlines screening, field work, laboratory analysis, data evaluation, and reporting proposed for the scope of work, which will be conducted in accordance with *the USEPA OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air* (USEPA June 2015).

Background

The manufacturing facility was constructed by Lyon in 1961 and sold to Rockwell International Corporation (Rockwell) in 1966. Rockwell operated a wheel cover manufacturing facility from 1966 to 1985, when the plant and property were sold to Textron, Inc. (Textron), formerly Randall Textron. In 1999, Textron sold the operations and property to Grenada Manufacturing, who continued to operate the wheel cover plant until 2008 when portions of the property were leased to ICE Industries, Inc. (ICE). Following ICE's lease of the premises, the facility was converted to a stamping plant, providing stamp-formed parts for various industries.

During prior groundwater investigation activities performed at the facility, an elevated concentration of trichloroethylene (TCE) was detected in a groundwater sample collected from off-site Monitoring Well MW-20 in a May 2012 sampling event. Seventeen soil gas ports (VP-1 through VP-17) were installed and sampled in 2013 to further investigate this area. An additional six soil gas ports (VP-101, VP-103, VP108, VP-110, VP112, and VP-114) were installed and sampled during May 2014.

Groundwater samples were also obtained in the fall of 2012 and the spring of 2013 from sample locations WL-1, WL-2, WL-6, WL-10, WL-11, WL-12, WL-13, WL-15,

WL-16, WL-17, and TW-18S/D. The sample locations correspond to the soil gas ports (VPs) with the same number. Given the construction of the soil gas ports, groundwater is sometimes encountered in ports and water samples are collected. Water samples were collected from (VP-1, VP-2, VP-4, VP-5, VP-6, VP-7, VP-8, VP-10, VP-11, VP-12, VP-14, VP-15, VP-16, VP-17, VP-101, VP-103, VP-106, VP-107, VP-108, VP-110, VP-112, and VP-114). The data and preliminary evaluation from the sampling were submitted to USEPA Region 4 in a letter dated January 17, 2014. A figure presenting the groundwater data obtained from the soil gas ports is provided in Attachment A. These data were collected using the methods described in the January 17, 2014, letter.

Figure 1 depicts the sample locations in relation to the off-site Monitoring Well MW-20 assessment area. USEPA requested that Grenada Manufacturing prepare an IMWP to evaluate the potential VI pathway in the off-site area in a letter dated June 30, 2015. An IMWP was submitted on August 3, 2015. USEPA provided comments on the IMWP in a letter dated August 20, 2015.

Scope of Work

In an effort to evaluate the potential VI pathway in the off-site area, additional air data will be collected. Samples collected will include:

- Soil gas
- Ambient air
- Indoor air from select residential buildings
- Sub-slab vapor from select residential buildings

A reconnaissance of any building where indoor air and sub-slab vapor samples will be collected will be conducted prior to sampling.

USEPA has also requested that sampling of groundwater conditions in the upper aquifer be conducted. The groundwater data collected will be reviewed to determine the extent of constituents in groundwater as well as the source of any such constituents.

Details on the sampling procedures and data evaluations are provided below.

Any additional sampling beyond what is described in this IMWP will be based on the data evaluation. The evaluation will use the multiple lines of evidence (MLE) approach described in the *USEPA OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air* (USEPA June 2015). If the evaluation indicates that the VI pathway is incomplete, additional VI evaluation is not warranted.

Soil Gas Assessment

ARCADIS proposes to install and sample eight shallow soil gas ports as shown on Figure 1. These eight proposed off-site locations will be installed in proximity to the existing deeper soil gas ports (VP-2 through VP-6, VP-13, and VP-17), including the ones with the elevated TCE concentrations. A desktop review of the available soil borings and geological cross-sections shows that an approximate 8- to 12-foot-thick surficial clay layer underlain by a sand layer is present in this area. The existing soil gas ports with detected volatile organic compound (VOC) concentrations were screened at the clay/sand interface or within the water-bearing sand layer. ARCADIS will use the data to evaluate the migration of concentrations detected in the previously installed soil gas ports.

Soil Gas Port Installation

A truck mounted Geoprobe® will be used to create an open borehole, and a 2.25-inch-diameter Macro-Core® sampler will be used to remove soil from the boring. As part of the reconnaissance, a utility locate will be requested to identify buried utilities in the vicinity of the structures and any proposed soil gas ports prior to intrusive activities. Soil will be classified in the field and certain soil samples may be collected from select borings for soil moisture analysis. Each of the soil gas ports will be installed to a depth of 6 feet below ground surface and will be screened from the 5.5-foot to 6-foot interval below ground surface. Soil gas ports will be constructed of 0.25-inch nylon tubing with 6-inch stainless steel screens. The screen will be installed with filter pack sand placed around the screen to 6 inches above the screen. Granular bentonite will be used to fill the remainder of the borehole above the screen filter pack to the surface and hydrated during installation. A protective cover will be installed at the surface. At the surface, the end of the tubing will be equipped with a Swagelok® fitting and a gas tight valve. Upon completion of the installation and sealing of each soil gas port, the volume of air in the sand pack will be calculated and approximately 3 times this volume of air will be purged using a low-flow air sampling pump set at a rate of 100 milliliters per minute (mL/min).

Soil Gas Port Sampling

A minimum of 24 hours after installation, each soil gas port will be sampled using 1-liter polished stainless steel SUMMA® canisters with calibrated flow controllers that are cleaned and certified by the laboratory. The flow controllers will be calibrated for a sampling duration of 10 minutes (≈ 80 mL/min). Approximately one to three times the dead volume of air will be purged at a rate of 100 mL/min prior to sampling using a low-flow air sampling pump. The amount and rate of dead volumes purged will be measured and recorded in the field and will remain consistent between sample locations. The sampling procedure consists of connecting the purge pump to the soil gas port, then turning it on, then opening the soil gas port valve to purge the tubing. At completion of purging, the valve on the soil gas port will be closed, the purge pump removed, and then the sampling canister and flow controller will be connected to the soil gas port. The sampling canister will be opened and then the valve on the

soil gas port will be opened. At the completion of sampling, the canister will be closed first and then the soil gas port valve. A final canister vacuum between 2 and 5 inches of mercury will signify that sample collection is complete. At the completion of each sample collection, the Summa canisters will be closed and sealed with a brass Swagelok® cap.

Meteorological data (temperature, precipitation, humidity, barometric pressure, and wind speed/direction) will be collected before and during sampling activities.

Residential VI Assessment

In addition to the supplemental soil gas investigation, ARCADIS proposes to complete VI sampling at six residential properties located on Lyon Drive (as shown on Figure 1). Work will be conducted in accordance with *the USEPA OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air* (USEPA June 2015).

The six residential structures on Lyon Drive have been selected based on their relative proximity to known groundwater impacts (MW-20) and potential soil gas impacts (VP-2, VP-3, VP-5, VP-6). Only four of these structures are within 100 feet of the known groundwater or potential soil gas impacts (as shown on Figure 1). The other two properties, east and west of the potentially impacted area, are being assessed as a conservative measure. At this time, no preferential pathways have been identified in the area of potential impacts.

Community Outreach

Prior to engaging property owners regarding the residential VI sampling, the USEPA will conduct outreach with potentially affected community members. The purpose of this outreach will be to disseminate information regarding the Site history, constituents being assessed, vapor intrusion, sampling process, and obtaining access.

Residential VI sampling will be contingent on the USEPA obtaining approval and a signed access agreement from the property owners.

Reconnaissance of Structures

As recommended in USEPA guidance, prior to conducting sampling activities, a reconnaissance of the potentially affected structures will be performed. As appropriate, a visual inspection of the structure's interiors and exteriors will be performed to identify potential preferential pathways (such as utilities) to potential vapor migration into the structures and to identify any background sources or other factors that could affect the quality of indoor air. As part of the reconnaissance, information will be gathered from the homeowner on potential sources within each structure, ventilation systems, and building construction. A copy of the indoor air building survey and sampling form is provided in Attachment B. Identified potential background sources will be removed from the structure during the VI sampling event.

Samples collected from the residential structures will be given a unique identification to conceal the identity of the sample locations.

Review of the Grenada County Assessor records indicates that the houses along Lyon Drive are single-story buildings with slab-on-grade construction (no basements) and are less than 1,500 square feet in size. Thus, paired indoor air and sub-slab sampling is recommended at each structure.

USEPA will collect information on the residences in the community during their outreach campaign.

Indoor Air Sampling

Indoor air samples will be collected using 6-liter polished stainless steel SUMMA® canisters with calibrated flow controllers that are cleaned and certified by the laboratory. The canisters will utilize flow controllers calibrated for a 24-hour sample collection. During the collection process, the indoor air canister will be securely positioned at the breathing zone level for the most sensitive exposed population and located near the center of the structure. Because all six of the structures identified for the residential VI assessment are single-story, slab-on-grade construction and are less than 1,500 square feet in size, one indoor air sample location is appropriate. All indoor air samples will be collected under normal home conditions. A final canister vacuum on the flow controller between 2 and 5 inches of mercury will signify that sample collection is complete. At the completion of sampling, the canister will be closed and the flow controller removed. The canisters will be gauged with an independent gauge and the final vacuum recorded. The canister will then be closed and sealed with a brass Swagelok® cap.

Meteorological data (temperature, precipitation, humidity, barometric pressure, and wind speed/direction) will be collected before and during sampling activities.

Ambient Air Sampling

Ambient air samples will be collected outdoors concurrently with indoor air samples to evaluate potential background contaminant sources from outside the structures. Ambient air samples will be collected using 6-liter polished stainless steel SUMMA® canisters with calibrated flow controllers that are cleaned and certified by the laboratory. The canisters will utilize flow controllers calibrated for a 24-hour sample collection. During the collection process, the sample canister will be securely positioned at breathing height (approximately 5 feet above the ground). It is anticipated that all structures will not be sampled at the same time. It is proposed that, instead of collecting ambient air samples at each structure location, ambient air samples be collected at strategic locations that cover multiple structures at once. One ambient air sample will be collected upwind of multiple groups of buildings. At this time, two ambient air sample locations are proposed (Figure 1). If multiple events are required to collect indoor air samples, additional ambient air samples will be collected during these events. The location of the ambient air sample will be

determined based on wind direction at the time of sampling and the forecasted wind direction.

The ambient air sample canister will be placed so as to minimize potential contamination from extraneous sources. The canister will be positioned away from wind shields such as trees or bushes and at least 15 feet away from any buildings. Collection of the ambient air sample will follow the same methodology as described for indoor air samples.

Sub-Slab Port Installation

In accordance with USEPA guidance, a permanent sub-slab vapor port will be installed in the concrete floor near the center of the structure for collecting sub-slab vapor samples. The ports will be installed after the collection of the indoor air sample from that structure. The sub-slab vapor ports will be designed to lie flush on the upper surface of the concrete floor and to "float" in the slab to enable collection of vapors from sub-slab material in direct contact with the slab or from a pocket of air directly beneath the slab created by sub-slab material subsidence. Stainless steel Vapor Pins™ will be utilized. The Vapor Pins™ will be preassembled for each installation prior to drilling through the floor to minimize exposure time of the sub-slab soils to an open hole.

To install a sub-slab vapor port, a rotary hammer drill will be used to drill a 1.125-inch-outer-diameter hole approximately 2 inches into the floor. The inside of the 1.125-inch-outer-diameter hole will be cleaned with a damp towel and then a 0.625-inch-outer-diameter hole will be drilled through the remainder of the concrete. Once through the concrete, the drill will be allowed to penetrate an additional 2 to 3 inches into the sub-slab material. The outer-diameter hole will be cleaned once more with a damp towel. The Vapor Pins™ will be pressed into the concrete slab and sealed with the supplied non-volatile organic compound silicone sleeve. After the sub-slab vapor port is set, a small aliquot of air will be purged into a Tedlar® bag so as to not introduce potential vapors to the building interior. A protective cap will be placed on the end of the Vapor Pin™ and finished with a stainless steel thread-on flush-mount cover. Once the sub-slab vapor port is installed, it will be allowed to set for a minimum of 24-hours prior to sampling. These sub-slab vapor ports will remain in place after the initial sampling for use in future sampling events. After all sampling events have been completed, the sub-slab vapor ports will be removed and the holes will be patched.

Sub-Slab Port Sampling

The sub-slab vapor samples will be collected using 1-liter polished stainless steel SUMMA® canisters that are cleaned and certified by the laboratory with a calibrated flow controller. The flow controller will be calibrated for a sampling duration of 10 minutes (≈80 mL/min). The sub-slab samples will be collected by assembling a short (≈16 inches) length of 0.25-inch-diameter nylon tubing fitted with stainless steel Swagelok® tube connectors at each end that connect directly to the sub-slab vapor

port and the sampling canister. A stainless steel gas-tight valve will be installed near the canister end of the sample tubing. The sample assembly will be connected to the sub-slab vapor port and approximately three volumes of dead air will be purged from the sample assembly at a rate of approximately 100 mL/min prior to sampling using a 60-mL syringe into a Tedlar® bag so as to not introduce potential vapors to the building interior. The sampling canister will then be connected, opened, and then the valve on the sample assembly will be opened. A final canister vacuum on the flow controller between 2 and 5 inches of mercury will signify that sample collection is complete. At the completion of sampling, the canister will be closed first and then the sample assembly to the sub-slab vapor port valve. The canisters will be disconnected from the port and the flow controller removed. The canisters will be gauged with an independent gauge and the final vacuum recorded. The canister will then be closed and sealed with a brass Swagelok® cap.

Meteorological data (temperature, precipitation, humidity, barometric pressure, and wind speed/direction) will be collected before and during sampling activities.

Residential VI Seasonal Sampling

In accordance with USEPA guidance, multiple VI sampling events will be performed to demonstrate that the VI pathway is not complete. Thus, a second seasonal sampling event will be performed in the opposite season as the initial sampling event. The seasonal sampling event will follow the procedures detailed above for soil gas, sub-slab, indoor air, and ambient air sampling.

Air Sample Laboratory Analysis

Air samples will be analyzed for the following VOCs:

- 1,1-Dichloroethene (1,1-DCE)
- 1,2-Dichloroethane (1,2-DCA)
- cis-1,2-Dichloroethene (cis-1,2-DCE)
- trans-1,2-Chloroethene (trans-1,2-DCE)
- Tetrachloroethene (PCE)
- 1,1,2-Trichloroethane (1,1,2-TCA)
- Trichloroethene (TCE)
- Vinyl Chloride
- Benzene
- Toluene*
- Ethylbenzene
- Xylenes*
- 1,2,4-Trimethylbenzene
- Chloroform
- Methylene Chloride

*Benzene and xylenes are being analyzed at USEPA's request to evaluate background concentrations in the structures that are being sampled.

Analysis of the air samples will use USEPA Compendium Method TO-15. Sample media will be ordered from Eurofins Air Toxics, Inc. (Eurofins) in Folsom, California, using proper quality assurance/quality control procedures and chain-of-custody protocols. Analysis of air samples will also be conducted by Eurofins. Analytical results will be reported in concentration units of parts per million by volume (ppmv) and micrograms per cubic meter (µg/m3). Eurofins will be instructed to report data with constituent detection limits at or below screening levels. To minimize potential effects on the sample integrity, samples will be shipped within 24 hours following collection and the samples will not be chilled during storage. To improve the confidence in measured concentrations, a duplicate sample will be collected and analyzed for the same parameters as the parent samples. Duplicate samples will be collected by connecting two canisters together so that they have the same intake port. One duplicate sample will be collected per 20 samples of each media sampled, with the exception of the ambient air (e.g., one duplicate soil gas sample, one duplicate sub-slab sample, and one indoor air sample).

Leak Testing

In accordance with USEPA guidance, leak testing will be performed on the soil gas and sub-slab vapor ports. Leak testing will be accomplished by enriching the atmosphere in the immediate vicinity of the area where the port intersects the ground with a tracer gas and measure a vapor sample from the port for the presence of high concentrations (>10 percent) of the tracer gas. A shroud consisting of a 1-gallon container equipped with two gas valves will be placed over the sub-slab vapor ports and sealed to the ground with modeling clay. The tubing assembly will be passed through the shroud to the outside through a hole that will then be sealed with modeling clay. A cylinder of laboratory-grade compressed helium gas will be connected to one gas valve, and helium will be introduced to the shroud at a slow rate in order to not pressurize the shroud. A Dielectric MGD-2002 Helium Detector (or equivalent) will be used to measure the amount of helium in the shroud by inserting the detector probe into the second gas valve in the shroud. Once a minimum of 60 percent helium is detected in the shroud, the port will then be purged and the purged air will be collected in a Tedlar® bag. The helium detector will then be used to screen the sample aliquot in the Tedlar® bag. If less than 10 percent helium is detected in the Tedlar® bag, a SUMMA® canister will then be attached to the tubing assembly and the sample collected while the helium concentration within the shroud is maintained at a minimum of 60 percent. At the completion of the sample collection, an aliquot of air will be purged again from the port and screened for helium. If less than 10 percent helium is detected in the Tedlar® bag, the sample will be submitted to the laboratory for analysis. If greater than 10 percent helium is detected in the Tedlar® bag, the sample will not be analyzed. The sub-slab vapor port will be removed and reinstalled following the procedures detailed above. The sub-slab vapor port will then be leak tested and re-sampled.

Groundwater Assessment

USEPA also has requested that additional groundwater sampling be conducted in the residential neighborhood north of the facility to further assess VOC concentrations. ARCADIS proposes to install and sample six Vertical Aquifer Profiling (VAP) borings as shown on Figure 1. The purpose of these VAP borings is to further evaluate the stratification of VOC concentrations in the groundwater of the upper aquifer. Groundwater samples collected in the fall of 2012 and the spring of 2013 from sample locations WL-1, WL-2, WL-6, WL-10, WL-11, WL-12, WL-13, WL-15, WL-16, WL-17, and TW-18S/D indicated that VOC detections, if any, at or near the groundwater table are very low, with VOC concentrations increasing with depth. ARCADIS will evaluate the data from the new borings. The extent of VOCs in groundwater will be assessed and considered in the context of the MLE approach to determine whether supplemental VI assessments are needed.

Vertical Aquifer Profiling (VAP) Boring Installation and Sampling

A truck mounted Geoprobe® rig will be used to advance the six VAP borings to a depth of approximately 40 feet below ground surface (bgs). Beginning at the groundwater table (anticipated to be encountered approximately 10 to 12 feet bgs), ARCADIS will collect a grab groundwater sample at first encountered groundwater, then at 5-foot intervals to a total depth of approximately 40 feet bgs. After the samples have been collected, the Geoprobe boreholes will be properly abandoned.

As required by state law, ARCADIS will initiate the call-before-you-dig procedure at least 48 hours before the investigation is conducted to determine the location of utilities. Furthermore, a utility locate company (GPRS) will be utilized to assist in identifying the utilities in the vicinity. The VAP grab groundwater samples will be collected in a manner that will minimize interference and/or cross-impacts from the various vertical water-bearing zones within the upper aquifer. Duplicate, trip blank, and matrix spike/matrix spike duplicate samples will be collected during the sampling event for QA/QC purposes.

Groundwater Sample Laboratory Analysis

Groundwater samples will be shipped on ice under proper chain-of-custody to TestAmerica Laboratory for analysis of the following parameters:

VOCs (USEPA Method 8260):

- Trichloroethene (TCE)
- cis-1,2-Dichloroethene (Cis-1,2-DCE)
- Vinyl Chloride (VC)
- 1,2-Dichloroethane
- 1,1,-Dichloroethene

- 1,1,2-Trichloroethane
- Tetrachloroethene (PCE)
- Chloroethane
- Methylene chloride
- Acetone
- Carbon Disulfide
- 1,1-Dichloroethane
- Trans-1,2-Dichloroethene
- 1,1,1-Trichloroethane
- 1,2-Dichloropropane
- Benzene
- Toluene
- Ethylbenzene
- Xylenes (total)

Data Evaluation and Reporting

Upon receiving the air data, which should be available approximately 14 days after completion of sampling, the analytical package will be reviewed for completeness. Once reviewed, the data package will be shared with the USEPA. The data obtained from this VI assessment will be evaluated and compared to the calculated Vapor Intrusion Screening Levels. Any additional sampling beyond what is described in this IMWP will be based on the data evaluation. The evaluation will use the MLE approach described in the *USEPA OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air* (USEPA June 2015). Additionally, data will be evaluated against indoor air background concentrations as identified in the *Background Indoor Air Concentrations of Volatile Organic Compounds in North American Residences (1990-2005): A Compilation of Statistics for Assessing Vapor Intrusion* (USEPA 2011). Data from the background ambient air samples collected during the event will assist in the MLE evaluation. If the evaluation of the initial and seasonal sampling events indicate that the VI pathway is incomplete, additional VI evaluation is not warranted.

Groundwater data will also be evaluated upon receipt and reviewed for completeness. The data will be summarized and the data package will be shared with the USEPA.

ARCADIS will prepare a Summary Report of the results from this assessment for Grenada Manufacturing to submit to the USEPA. Communication of the sample results to the residential property owners will be handled by the USEPA.

Schedule

Upon receiving the executed access agreements, personnel will mobilize to the area to conduct the structure reconnaissance and the sampling. In the event that potential source materials are found, they will be removed or isolated and the structure will be allowed to ventilate for approximately 24 hours. Installation and sampling of the soil gas ports are expected to take approximately 3 days. Installation of the sub-slab sample ports will take approximately 1 hour per structure. Indoor air sampling will take approximately 24 hours per structure. Assuming all activities can be coordinated during a single mobilization, the sampling effort will take approximately 7 to 8 days to complete. The groundwater sampling is anticipated to take an additional 5 to 6 days to complete and likely will occur under a separate mobilization. Data will be available approximately 14 days after completion of each of the sampling events.

Closing

If you have any questions regarding this IMWP, please do not hesitate to contact us at 225-292-1004.

Sincerely,

ARCADIS U.S., Inc.

I have reviewed this document in sufficient depth to accept full responsibility for its contents.



George E. Cook, RPG
Staff Geologist
Mississippi Registration Number 0889

John Ellis
Certified Project Manager

Attachments

Copies:
Steven Sharp – ARCADIS

ARCADIS

Figure



PROJECTION: NAD 1983 StatePlane Mississippi West FIPS 2302 Feet
AERIAL SOURCE: ESRI Online Imagery (NAIP, July 2014).

LEGEND

- Site Boundary
- 100-foot radius
- Monitoring Well
- Temporary Sampling Point
- Stratigraphy Boring
- Soil-Gas Port
- Waterloo Profile
- Proposed Residential Vapor Intrusion (VI) Sample
- Proposed Soil-Gas Port
- Proposed Ambient-Air Sample
- Proposed Vertical Aquifer Profile Sample

NOTE: All locations are approximate.

0 120 240
SCALE IN FEET

GRENADA MANUFACTURING, LLC
GRENADA, MISSISSIPPI

REVISED INTERIM MEASURES WORK PLAN

Site Map

ARCADIS

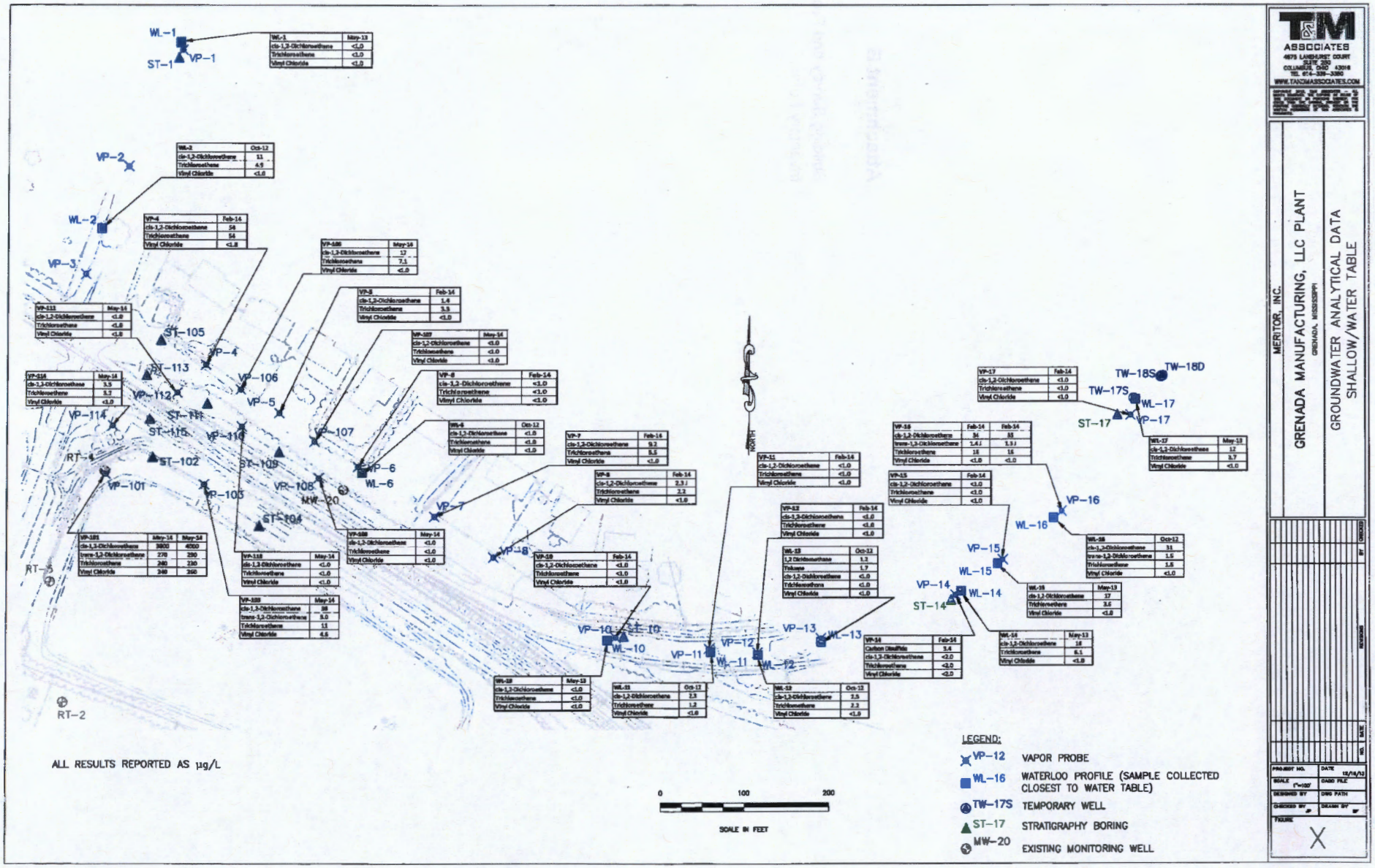
FIGURE 1

CITY:(KNOXVILLE) DIV/GROUP:(ENV/GIS) LD:(B.ALTOM) PIC:(P.WAGNER) PM:(S.SHARP) TM:(M.HEAP)
PROJECT: IN000899.DWD PATH: G:\GIS\MERITOR\MS_GRENADA_ICE\MAPDOCS\2015\REV INTERIM WP\F1 ICE_RIMWP SITE MAP.MXD DATE SAVED: 8/27/2015 8:06:00 AM BY: BALTOM

ARCADIS

Attachment A

Groundwater Analytical Data Figure



ALL RESULTS REPORTED AS µg/L

TM ASSOCIATES
4675 LANDHURST COURT
SUITE 200
COLUMBUS, OHIO 43016
TEL 614-339-3380
WWW.TMASSOCIATES.COM

MERITOR, INC.

GRENADA MANUFACTURING, LLC PLANT
GRENADA, MISSISSIPPI

GROUNDWATER ANALYTICAL DATA
SHALLOW/WATER TABLE

PROJECT NO.
DATE 12/16/13
SCALE 1"=100'
CADD FILE
DESIGNED BY
DWG PATH
CHECKED BY
DRAWN BY

FIGURE X

ARCADIS

Attachment B

Building Survey and Product Inventory Form

Building Survey and Product Inventory Form

Directions: This form must be completed for each residence or area involved in indoor air testing.

Preparer's Name: _____

Date/Time Prepared: _____

Preparer's Affiliation: _____

Phone No.: _____

Purpose of Investigation: _____

1. OCCUPANT:

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/Persons at this Location: _____

Age of Occupants: _____

2. OWNER OR LANDLORD: (Check if Same as Occupant ___)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS:

Type of Building: (circle appropriate response)

Residential	School	Commercial/Multi-use
Industrial	Church	Other: _____

If the Property is Residential, Type? (circle appropriate response)

Ranch		2-Family 3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If Multiple Units, How Many? _____

If the Property is Commercial, Type?

Business Type(s) _____

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other Characteristics:

Number of Floors_____ Building Age_____

Is the Building Insulated? Y / N How Air-Tight? Tight / Average / Not Tight

4. AIRFLOW:

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow Between Floors

_____

_____

_____

Airflow Near Source

Outdoor Air Infiltration

Infiltration Into Air Ducts

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS: (circle all that apply)

a.	**Above grade construction:**	wood frame	concrete	stone brick	
b.	**Basement type:**	full	crawlspace	slab	other _____
c.	**Basement floor:**	concrete	dirt	stone	other _____
d.	**Basement floor:**	uncovered	covered	covered with _____	
e.	**Concrete floor:**	unsealed	sealed	sealed with _____	
f.	**Foundation walls:**	poured	block stone	other _____	
g.	**Foundation walls:**	unsealed	sealed	sealed with _____	
h.	**The basement is:**	wet	damp	dry	moldy
i.	**The basement is:**	finished	unfinished	partially finished	
j.	**Sump present?**	Y / N			
k.	**Water in sump?**	Y / N / NA			

Basement/lowest level depth below grade: _____(feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

_____

_____

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? Y / N

6. HEATING, VENTILATING, AND AIR CONDITIONING: (circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard
Space heaters	Stream radiation	Radiant floor
Electric baseboard	Wood stove	Outdoor wood boiler
Other _____		

The primary type of fuel used is:

Natural base	Fuel oil	Kerosene
Electric	Propane	Solar
Wood coal		

Domestic hot water tank fueled by: _____

Boiler/furnace located in: Basement Outdoors Main Floor Other_____

Air conditioning: Central Air Window Units Open Windows None

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

_____

_____

_____

7. OCCUPANCY:

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

General Use of Each Floor (e.g., family room, bedroom, laundry, workshop, storage):

Basement _____

1st Floor _____

2nd Floor _____

3rd Floor _____

4th Floor _____

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY:

a. Is there an attached garage? Y / N

b. Does the garage have a separate heating unit? Y / N / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, ATV, car)?

Y / N / NA Please specify: _____

d. Has the building ever had a fire? Y / N When? _____

e. Is a kerosene or unvented gas space heater present? Y / N Where? _____

f. Is there a workshop or hobby/craft area? Y / N Where & Type? _____

g. Is there smoking in the building? Y / N How frequently? _____

h. Have cleaning products been used recently? Y / N When & Type? _____

i. Have cosmetic products been used recently? Y / N When & Type? _____

j. Has painting/staining been done in the last 6 months? Y / N Where & When? _____

k. **Is there new carpet, drapes or other textiles? Y / N Where & When?** _____

l. Have air fresheners been used recently? Y / N When & Type? _____

m. Is there a kitchen exhaust fan? Y / N If yes, where _____

n. Is there a bathroom exhaust fan? Y / N If yes, where vented? _____

o. Is there a clothes dryer? Y / N If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / N When & Type? _____

q. Are there odors in the building? Y / N

If yes, please describe: _____

Do any of the building occupants use solvents (e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist) at work? Y / N

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No

Yes, use dry-cleaning infrequently (monthly or less) Unknown

Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / N

Date of Installation: _____

Is the system active or passive? Active/Passive

Are there any Outside Contaminant Sources? (circle appropriate responses)

Contaminated site with 1000-foot radius? Y / N Specify _____

Other stationary sources nearby (e.g., gas stations, emission stacks, etc.): _____

_____

Heavy vehicle traffic nearby (or other mobile sources): _____

9. WATER AND SEWAGE:

Water Supply: Public Water Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: Public Sewer Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION: (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

_____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

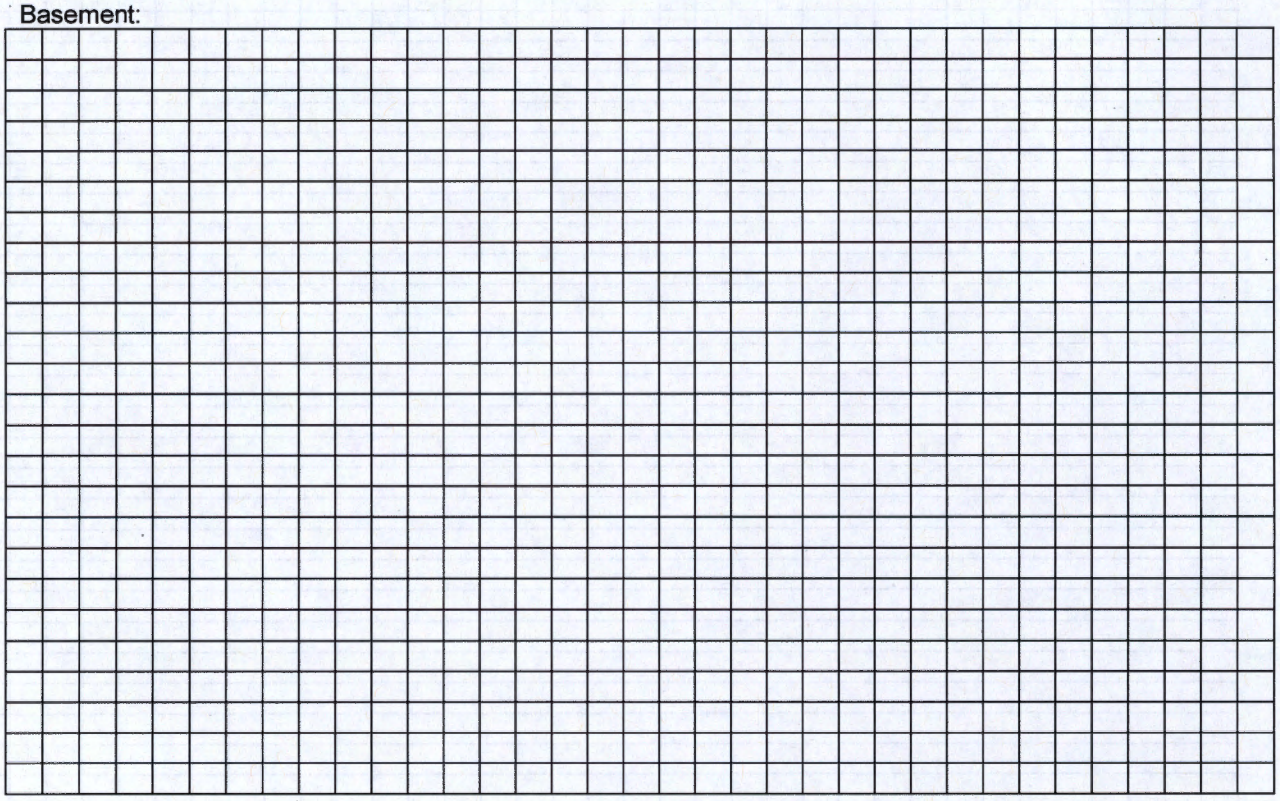
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

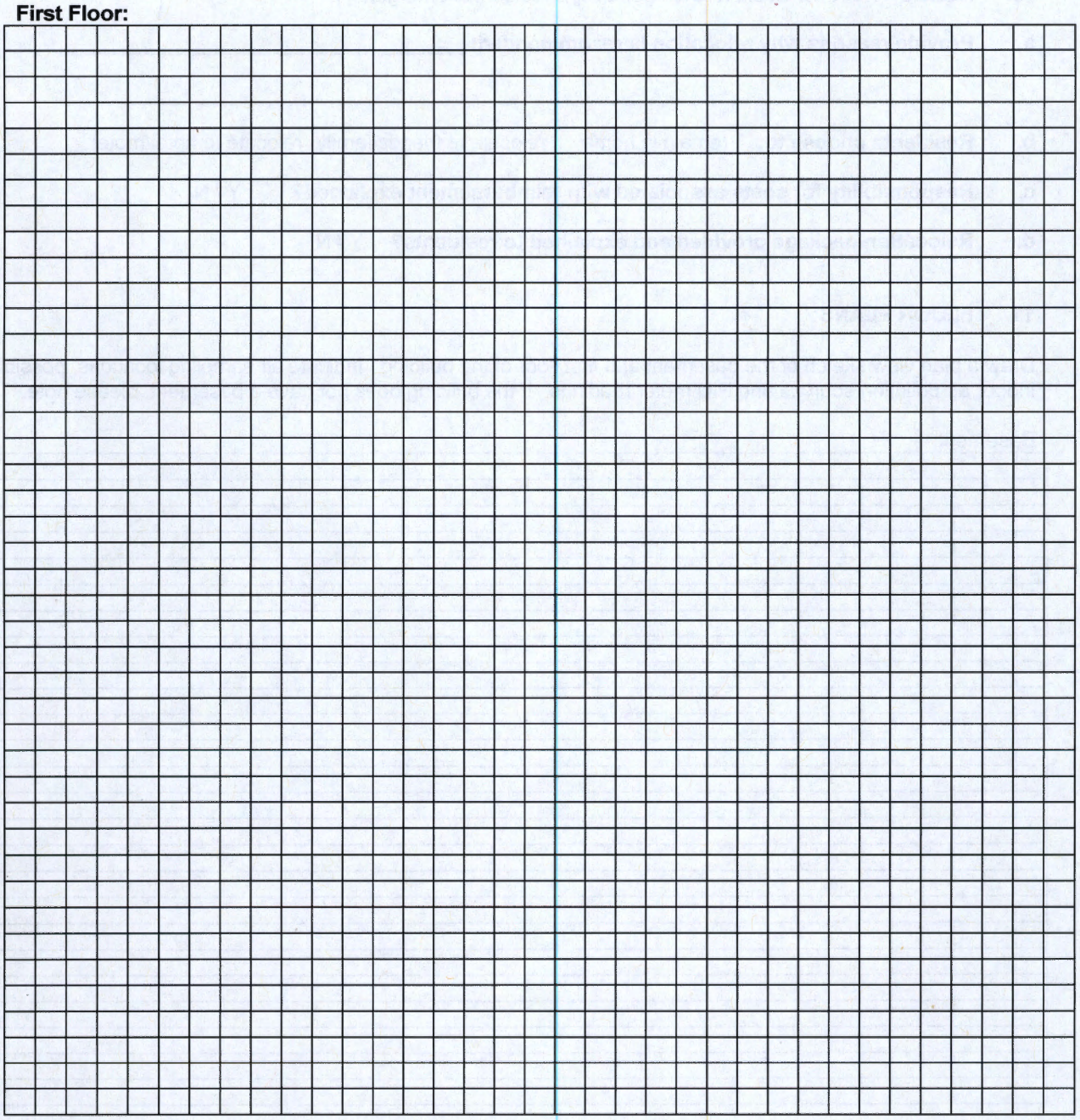
11. FLOOR PLANS:

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



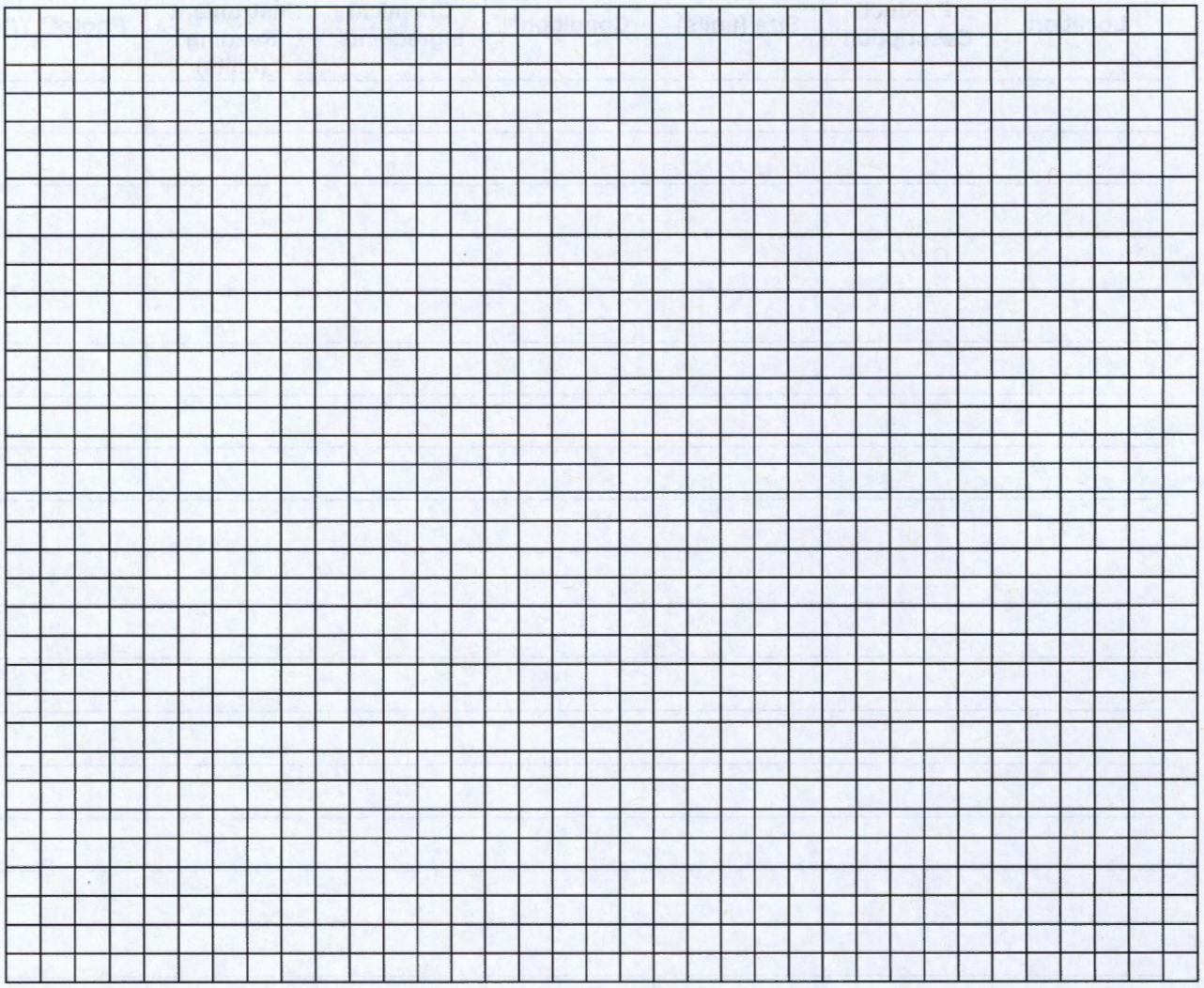
First Floor:



12. OUTDOOR PLOT:

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s), and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM:

Make and Model of field instrument used: _____

List specific products found in the residence or area that have the potential to affect indoor air quality (e.g., gasoline or kerosene storage cans, glues, paints, cleaning solvents/products, polishes/waxes, new furniture/ carpet, nail polish/hairspray/cologne).

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y/N

Grenada Manufacturing, LLC

635 Hwy 332
Grenada, Ms 38901

662-226-1161
662-226-1166 Fax

Via Electronic Mail and Overnight Delivery

September 11, 2015

Mr. Brian Bastek (bastek.brian@epa.gov)
RCRA Corrective Action and Permitting Section
RCRA Cleanup and Brownfields Branch
U.S. Environmental Protection Agency
Region 4, Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-8960

Re: Submission of Final Revised Interim Measures Work Plan
EPA HSWA Permit No. MSD 007 037 278, July 29, 2010
Grenada Manufacturing, LLC, Grenada, Mississippi

Dear Mr. Bastek:

On behalf of Grenada Manufacturing, LLC, I have enclosed the Final Revised Interim Measures Work Plan requested in your letter of September 4, 2015. The revisions address the comments provided in the letter as well as comments provided during discussions with the agency. Mr. John Ellis of ARCADIS U.S., Inc., will continue to serve as the Project Manager on this matter.

Please do not hesitate to contact Mr. Ellis at 225-292-1004 if you have any questions regarding the enclosed work plan.

Sincerely,

Grenada Manufacturing, LLC
c/o Mr. Donald Williams
635 Highway 332
Grenada, MS 38901

Enclosure

cc: Ms. Carla Brown, Mississippi Department of Environmental Quality
Mr. John Ellis, ARCADIS U.S., Inc.

ARCADIS
Infrastructure · Water · Environment · Buildings

ARCADIS U.S., Inc.
10352 Plaza Americana Drive
Baton Rouge
Louisiana
Tel 225-292-1004
Fax 225-218-9677
www.arcadis-us.com

ENVIRONMENT

Mr. Donald Williams
Grenada Manufacturing, LLC
635 Highway 332
Grenada, Mississippi 38901

Subject:
Final Revised Interim Measures Work Plan – Vapor Intrusion Assessment
Grenada Manufacturing, LLC, Grenada, Mississippi.
Permit No. MSD 007 037 278

Date:
September 11, 2015

Contact:
John Ellis

Extension:
208

Email:
john.ellis@arcadis-us.com

Our ref:
IN000899.0013.00001
Grenada/IN899.13/C/1/bbn

Dear Mr. Williams:

ARCADIS is pleased to provide this Final Revised Interim Measures Work Plan (IMWP) to Grenada Manufacturing, LLC (Grenada Manufacturing) for its facility located in Grenada, Mississippi, detailing the proposed Vapor Intrusion (VI) Assessment and supplemental soil and groundwater sampling. The revisions to the IMWP incorporate comments provided by the U.S. Environmental Protection Agency (USEPA). This IMWP has been prepared in response to the June 30, 2015, August 20, 2015, and September 4, 2015, USEPA Region 4 letters to Grenada Manufacturing, in which the USEPA requested performance by Grenada Manufacturing of the tasks identified therein pursuant to the company's Hazardous and Solid Waste (HSWA) permit. The IMWP outlines screening, field work, laboratory analysis, data evaluation, and reporting proposed for the scope of work, which will be conducted in accordance with *the USEPA OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air* (USEPA June 2015) and, as appropriate, USEPA Region 4 protocols.

Background

The manufacturing facility was constructed by Lyon in 1961 and sold to Rockwell International Corporation (Rockwell) in 1966. Rockwell operated a wheel cover manufacturing facility from 1966 to 1985, when the plant and property were sold to Textron, Inc. (Textron), formerly Randall Textron. In 1999, Textron sold the operations and property to Grenada Manufacturing, who continued to operate the wheel cover plant until 2008 when portions of the property were leased to ICE Industries, Inc. (ICE). Following ICE's lease of the premises, the facility was converted to a stamping plant, providing stamp-formed parts for various industries.

During prior groundwater investigation activities performed at the facility, an elevated concentration of trichloroethylene (TCE) was detected in a groundwater sample collected from off-site Monitoring Well MW-20 in a May 2012 sampling event.

Seventeen soil gas ports (VP-1 through VP-17) were installed and sampled in 2013 to further investigate this area. An additional six soil gas ports (VP-101, VP-103, VP108, VP-110, VP112, and VP-114) were installed and sampled during May 2014.

Groundwater samples were also obtained in the fall of 2012 and the spring of 2013 from sample locations WL-1, WL-2, WL-6, WL-10, WL-11, WL-12, WL-13, WL-15, WL-16, WL-17, and TW-18S/D. The sample locations correspond to the soil gas ports (VPs) with the same number. Given the construction of the soil gas ports, groundwater is sometimes encountered in ports and water samples are collected. Water samples were collected from (VP-1, VP-2, VP-4, VP-5, VP-6, VP-7, VP-8, VP-10, VP-11, VP-12, VP-14, VP-15, VP-16, VP-17, VP-101, VP-103, VP-106, VP-107, VP-108, VP-110, VP-112, and VP-114). The data and preliminary evaluation from the sampling were submitted to USEPA Region 4 in a letter dated January 17, 2014. A figure presenting the groundwater data obtained from the soil gas ports is provided in Attachment A. These data were collected using the methods described in the January 17, 2014, letter.

Figure 1 depicts the sample locations in relation to the off-site Monitoring Well MW-20 assessment area. The USEPA requested that Grenada Manufacturing prepare an IMWP to evaluate the potential VI pathway in the off-site area in a letter dated June 30, 2015. An IMWP was submitted on August 3, 2015. The USEPA provided comments on the IMWP in a letter dated August 20, 2015. A Revised IMWP was submitted to the USEPA on August 28, 2015. The USEPA provided additional comments in a letter dated September 4, 2015.

Scope of Work

In an effort to evaluate the potential VI pathway in the off-site area, additional air data will be collected. Samples collected will include:

- Soil gas
- Ambient air
- Indoor air from select residential buildings
- Sub-slab vapor from select residential buildings

A reconnaissance of any building where indoor air and sub-slab vapor samples will be collected will be conducted prior to sampling.

The USEPA has also requested that sampling of groundwater conditions in the upper aquifer be conducted. Additionally, the USEPA requested the collection of soil samples during the groundwater sampling.

Details on the sampling procedures and data evaluations are provided below.

Any additional sampling beyond what is described in this IMWP will be based on the data evaluation. The evaluation will use the multiple lines of evidence (MLE) approach described in the *USEPA OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air* (USEPA June 2015). If the evaluation indicates that the VI pathway is incomplete, additional VI evaluation is not warranted.

Soil Gas Assessment

ARCADIS proposes to install and sample eight shallow soil gas ports as shown on Figure 1. These eight proposed off-site locations will be installed in proximity to the existing deeper soil gas ports (VP-2 through VP-6, VP-13, and VP-17), including the ones with the elevated TCE concentrations. A desktop review of the available soil borings and geological cross-sections shows that an approximate 8- to 12-foot-thick surficial clay layer underlain by a sand layer is present in this area. The existing soil gas ports with detected volatile organic compound (VOC) concentrations were screened at the clay/sand interface or within the water-bearing sand layer. ARCADIS will use the data to evaluate the migration of concentrations detected in the previously installed soil gas ports.

Soil Gas Port Installation

A truck mounted Geoprobe® will be used to create an open borehole, and a 2.25-inch-diameter Macro-Core® sampler will be used to remove soil from the boring. As part of the reconnaissance, a utility locate will be requested to identify buried utilities in the vicinity of the structures and any proposed soil gas ports prior to intrusive activities. Soil will be classified in the field and certain soil samples may be collected from select borings for soil moisture analysis. Each of the soil gas ports will be installed to a depth of 6 feet below ground surface and will be screened from the 5.5-foot to 6-foot interval below ground surface. Soil gas ports will be constructed of 0.25-inch nylon tubing with 6-inch stainless steel screens. The screen will be installed with filter pack sand placed around the screen to 6 inches above the screen. Granular bentonite will be used to fill the remainder of the borehole above the screen filter pack to the surface and hydrated during installation. A protective cover will be installed at the surface. At the surface, the end of the tubing will be equipped with a Swagelok® fitting and a gas tight valve. Upon completion of the installation and sealing of each soil gas port, the volume of air in the sand pack will be calculated and approximately 3 times this volume of air will be purged using a low-flow air sampling pump set at a rate of 100 milliliters per minute (mL/min).

Soil Gas Port Sampling

A minimum of 24 hours after installation, each soil gas port will be sampled using 1-liter polished stainless steel SUMMA® canisters with calibrated flow controllers that

are cleaned and certified by the laboratory. The flow controllers will be calibrated for a sampling duration of 10 minutes (≈ 80 mL/min). Approximately one to three times the dead volume of air will be purged at a rate of 100 mL/min prior to sampling using a low-flow air sampling pump. The amount and rate of dead volumes purged will be measured and recorded in the field and will remain consistent between sample locations. The sampling procedure consists of connecting the purge pump to the soil gas port, then turning it on, then opening the soil gas port valve to purge the tubing. At completion of purging, the valve on the soil gas port will be closed, the purge pump removed, and then the sampling canister and flow controller will be connected to the soil gas port. The sampling canister will be opened and then the valve on the soil gas port will be opened. At the completion of sampling, the canister will be closed first and then the soil gas port valve. A final canister vacuum between 2 and 5 inches of mercury will signify that sample collection is complete. At the completion of each sample collection, the Summa canisters will be closed and sealed with a brass Swagelok® cap.

Meteorological data (temperature, precipitation, humidity, barometric pressure, and wind speed/direction) will be collected before and during sampling activities.

Residential VI Assessment

In addition to the supplemental soil gas investigation, ARCADIS proposes to complete VI sampling at six residential properties located on Lyon Drive (as shown on Figure 1). Work will be conducted in accordance with *the USEPA OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air* (USEPA June 2015).

The six residential structures on Lyon Drive have been selected based on their relative proximity to known groundwater impacts (MW-20) and potential soil gas impacts (VP-2, VP-3, VP-5, VP-6). Only four of these structures are within 100 feet of the known groundwater or potential soil gas impacts (as shown on Figure 1). The other two properties, east and west of the potentially impacted area, are being assessed as a conservative measure. At this time, no preferential pathways have been identified in the area of potential impacts.

Community Outreach

Prior to engaging property owners regarding the residential VI sampling, the USEPA will conduct outreach with potentially affected community members. The purpose of this outreach will be to disseminate information regarding the Site history, constituents being assessed, vapor intrusion, sampling process, and obtaining access.

Residential VI sampling will be contingent on the USEPA obtaining approval and a signed access agreement from the property owners.

Reconnaissance of Structures

As recommended in USEPA guidance, prior to conducting sampling activities, a reconnaissance of the potentially affected structures will be performed. As appropriate, a visual inspection of the structure's interiors and exteriors will be performed to identify potential preferential pathways (such as utilities) to potential vapor migration into the structures and to identify any background sources or other factors that could affect the quality of indoor air. As part of the reconnaissance, information will be gathered from the homeowner on potential sources within each structure, ventilation systems, and building construction. A copy of the indoor air building survey and sampling form is provided in Attachment B. Identified potential background sources will be removed from the structure during the VI sampling event. Samples collected from the residential structures will be given a unique identification to conceal the identity of the sample locations.

Review of the Grenada County Assessor records indicates that the houses along Lyon Drive are single-story buildings with slab-on-grade construction (no basements) and are less than 1,500 square feet in size. Thus, paired indoor air and sub-slab sampling is recommended at each structure.

The USEPA will collect information on the residences in the community during their outreach campaign.

Indoor Air Sampling

Indoor air samples will be collected using 6-liter polished stainless steel SUMMA® canisters with calibrated flow controllers that are cleaned and certified by the laboratory. The canisters will utilize flow controllers calibrated for a 24-hour sample collection. During the collection process, the indoor air canister will be securely positioned at the breathing zone level for the most sensitive exposed population and located near the center of the structure. Because all six of the structures identified for the residential VI assessment are single-story, slab-on-grade construction and are less than 1,500 square feet in size, one indoor air sample location is appropriate. All indoor air samples will be collected under normal home conditions. A final canister vacuum on the flow controller between 2 and 5 inches of mercury will signify that sample collection is complete. At the completion of sampling, the canister will be closed and the flow controller removed. The canisters will be gauged with an independent gauge and the final vacuum recorded. The canister will then be closed and sealed with a brass Swagelok® cap.

Meteorological data (temperature, precipitation, humidity, barometric pressure, and wind speed/direction) will be collected before and during sampling activities.

Ambient Air Sampling

Ambient air samples will be collected outdoors concurrently with indoor air samples to evaluate potential background contaminant sources from outside the structures. Ambient air samples will be collected using 6-liter polished stainless steel SUMMA® canisters with calibrated flow controllers that are cleaned and certified by the laboratory. The canisters will utilize flow controllers calibrated for a 24-hour sample collection. During the collection process, the sample canister will be securely positioned at breathing height (approximately 5 feet above the ground). It is anticipated that all structures will not be sampled at the same time. It is proposed that, instead of collecting ambient air samples at each structure location, ambient air samples be collected at strategic locations that cover multiple structures at once. One ambient air sample will be collected upwind of multiple groups of buildings. At this time, two ambient air sample locations are proposed (Figure 1). If multiple events are required to collect indoor air samples, additional ambient air samples will be collected during these events. The location of the ambient air sample will be determined based on wind direction at the time of sampling and the forecasted wind direction.

The ambient air sample canister will be placed so as to minimize potential contamination from extraneous sources. The canister will be positioned away from wind shields such as trees or bushes and at least 15 feet away from any buildings. Collection of the ambient air sample will follow the same methodology as described for indoor air samples.

Sub-Slab Port Installation

In accordance with USEPA guidance, a permanent sub-slab vapor port will be installed in the concrete floor near the center of the structure for collecting sub-slab vapor samples. The sub-slab ports will be placed in an unobtrusive location within the home to minimize disturbance of the residents. The home will be returned to its original condition to the extent possible. The ports will be installed after the collection of the indoor air sample from that structure. The sub-slab vapor ports will be designed to lie flush on the upper surface of the concrete floor and to "float" in the slab to enable collection of vapors from sub-slab material in direct contact with the slab or from a pocket of air directly beneath the slab created by sub-slab material subsidence. New stainless steel Vapor Pins™ will be utilized. The Vapor Pins™ will be preassembled for each installation prior to drilling through the floor to minimize exposure time of the sub-slab soils to an open hole.

To install a sub-slab vapor port, a rotary hammer drill will be used to drill a 1.125-inch-outer-diameter hole approximately 2 inches into the floor. The inside of the 1.125-inch-outer-diameter hole will be cleaned with a damp towel and then a 0.625-inch-outer-diameter hole will be drilled through the remainder of the concrete.

Once through the concrete, the drill will be allowed to penetrate an additional 2 to 3 inches into the sub-slab material. The outer-diameter hole will be cleaned once more with a damp towel. The Vapor Pins™ will be pressed into the concrete slab and sealed with the supplied non-volatile organic compound silicone sleeve. After the sub-slab vapor port is set, a small aliquot of air will be purged into a Tedlar® bag so as to not introduce potential vapors to the building interior. A protective cap will be placed on the end of the Vapor Pin™ and finished with a stainless steel thread-on flush-mount cover. Once the sub-slab vapor port is installed, it will be allowed to set for a minimum of 24-hours prior to sampling. These sub-slab vapor ports will remain in place after the initial sampling for use in future sampling events. After all sampling events have been completed, the sub-slab vapor ports will be removed, the holes will be patched, and the home will be returned to its original condition to the extent possible.

Sub-Slab Port Sampling

The sub-slab vapor samples will be collected using 1-liter polished stainless steel SUMMA® canisters that are cleaned and certified by the laboratory with a calibrated flow controller. The flow controller will be calibrated for a sampling duration of 10 minutes (≈80 mL/min). The sub-slab samples will be collected by assembling a short (≈16 inches) length of 0.25-inch-diameter nylon tubing fitted with stainless steel Swagelok® tube connectors at each end that connect directly to the sub-slab vapor port and the sampling canister. A stainless steel gas-tight valve will be installed near the canister end of the sample tubing. The sample assembly will be connected to the sub-slab vapor port and approximately three volumes of dead air will be purged from the sample assembly at a rate of approximately 100 mL/min prior to sampling using a 60-mL syringe into a Tedlar® bag so as to not introduce potential vapors to the building interior. The sampling canister will then be connected, opened, and then the valve on the sample assembly will be opened. A final canister vacuum on the flow controller between 2 and 5 inches of mercury will signify that sample collection is complete. At the completion of sampling, the canister will be closed first and then the sample assembly to the sub-slab vapor port valve. The canisters will be disconnected from the port and the flow controller removed. The canisters will be gauged with an independent gauge and the final vacuum recorded. The canister will then be closed and sealed with a brass Swagelok® cap.

Meteorological data (temperature, precipitation, humidity, barometric pressure, and wind speed/direction) will be collected before and during sampling activities.

Residential VI Seasonal Sampling

In accordance with USEPA guidance, multiple VI sampling events will be performed to demonstrate that the VI pathway is not complete. Thus, a second seasonal sampling event will be performed in the opposite season as the initial sampling

event. The seasonal sampling event will follow the procedures detailed above for soil gas, sub-slab, indoor air, and ambient air sampling.

Air Sample Laboratory Analysis

Air samples will be analyzed for the following VOCs:

- 1,1-Dichloroethene (1,1-DCE)
- 1,2-Dichloroethane (1,2-DCA)
- cis-1,2-Dichloroethene (cis-1,2-DCE)
- trans-1,2-Chloroethene (trans-1,2-DCE)
- Tetrachloroethene (PCE)
- 1,1,2-Trichloroethane (1,1,2-TCA)
- Trichloroethene (TCE)
- Vinyl chloride
- Benzene
- Toluene
- Ethylbenzene*
- Xylenes*
- 1,2,4-Trimethylbenzene
- Chloroform
- Methylene chloride

*Ethylbenzene and xylenes are being analyzed at USEPA's request to evaluate background concentrations in the structures that are being sampled.

Analysis of the air samples will use USEPA Compendium Method TO-15. Sample media will be ordered from Eurofins Air Toxics, Inc. (Eurofins) in Folsom, California, using proper quality assurance/quality control (QA/QC) procedures and chain-of-custody protocols. Analysis of air samples will also be conducted by Eurofins. Analytical results will be reported in concentration units of parts per million by volume (ppmv) and micrograms per cubic meter (µg/m3). Eurofins will be instructed to report data with constituent detection limits at or below screening levels. To minimize potential effects on the sample integrity, samples will be shipped within 24 hours following collection and the samples will not be chilled during storage. To improve the confidence in measured concentrations, a duplicate sample will be collected and analyzed for the same parameters as the parent samples. Duplicate samples will be collected by connecting two canisters together so that they have the same intake port. One duplicate sample will be collected per 20 samples of each media sampled, with the exception of the ambient air (e.g., one duplicate soil gas sample, one duplicate sub-slab sample, and one indoor air sample).

Leak Testing

In accordance with USEPA guidance, leak testing will be performed on the soil gas and sub-slab vapor ports. Leak testing will be accomplished by enriching the atmosphere in the immediate vicinity of the area where the port intersects the ground with a tracer gas and measure a vapor sample from the port for the presence of high concentrations (>10 percent) of the tracer gas. A shroud consisting of a 1-gallon container equipped with two gas valves will be placed over the sub-slab vapor ports and sealed to the ground with modeling clay. The tubing assembly will be passed through the shroud to the outside through a hole that will then be sealed with modeling clay. A cylinder of laboratory-grade compressed helium gas will be connected to one gas valve, and helium will be introduced to the shroud at a slow rate in order to not pressurize the shroud. A Dielectric MGD-2002 Helium Detector (or equivalent) will be used to measure the amount of helium in the shroud by inserting the detector probe into the second gas valve in the shroud. Once a minimum of 60 percent helium is detected in the shroud, the port will then be purged and the purged air will be collected in a Tedlar® bag. The helium detector will then be used to screen the sample aliquot in the Tedlar® bag. If less than 10 percent helium is detected in the Tedlar® bag, a SUMMA® canister will then be attached to the tubing assembly and the sample collected while the helium concentration within the shroud is maintained at a minimum of 60 percent. At the completion of the sample collection, an aliquot of air will be purged again from the port and screened for helium. If less than 10 percent helium is detected in the Tedlar® bag, the sample will be submitted to the laboratory for analysis. If greater than 10 percent helium is detected in the Tedlar® bag, the sample will not be analyzed. The sub-slab vapor port will be removed and reinstalled following the procedures detailed above. The sub-slab vapor port will then be leak tested and re-sampled.

Groundwater Sampling

The USEPA also has requested that additional groundwater sampling be conducted in the residential neighborhood north of the facility to assess the constituent concentrations. At the request of the USEPA, ten locations were selected. ARCADIS will install and sample ten Vertical Aquifer Profiling (VAP) borings as shown on Figure 1 to further evaluate the stratification of constituent concentrations in the groundwater of the upper aquifer. Groundwater samples collected in the fall of 2012 and the spring of 2013 from sample locations WL-1, WL-2, WL-6, WL-10, WL-11, WL-12, WL-13, WL-15, WL-16, WL-17, and TW-18S/D indicated that VOC detections, if any, at or near the groundwater table are very low, with VOC concentrations increasing with depth. ARCADIS will evaluate the data from the new borings. The extent of VOCs in groundwater will be assessed and considered in the context of the MLE approach to determine whether supplemental VI assessments are needed. At USEPA's request, other constituents will also be evaluated.

Vertical Aquifer Profiling (VAP) Boring Installation and Sampling

A truck-mounted Geoprobe® rig will be used to advance the ten VAP borings to a depth of approximately 50 feet below ground surface (bgs) or refusal. This depth is the approximate base of the upper aquifer. Beginning at the groundwater table (anticipated to be encountered approximately 10 to 12 feet bgs), ARCADIS will collect a grab groundwater sample at first encountered groundwater, then at 5-foot intervals to a total depth of approximately 50 feet bgs. After the samples have been collected, the Geoprobe® boreholes will be properly abandoned.

As required by state law, ARCADIS will initiate the call-before-you-dig procedure at least 48 hours before the investigation is conducted to determine the location of utilities. Furthermore, a utility locate company (GPRS) will be utilized to assist in identifying the utilities in the vicinity. The VAP grab groundwater samples will be collected in a manner that will minimize interference and/or cross-impacts from the various vertical water-bearing zones within the upper aquifer. Duplicate, trip blank, and matrix spike/matrix spike duplicate samples will be collected during the sampling event for QA/QC purposes.

Groundwater Sample Laboratory Analysis

Groundwater samples will be shipped on ice under proper chain-of-custody to TestAmerica Laboratory for analysis of the following parameters:

VOCs (USEPA Method 8260)

SVOCs (USEPA Method 8270)

Metals:

- Total Metals (RCRA metals plus Nickle and Zinc) (USEPA Method 6020)
- Hexavalent chromium (USEPA Method 7196)

Groundwater samples for metals analysis will be filtered in the field or at the laboratory using a 0.45-micron filter. Filtering will be necessary because the groundwater samples are being collected from temporary points.

Soil Sampling

The USEPA has requested that soil samples be collected during the groundwater assessment activities. As specified in the September 4, 2015, USEPA comment letter, a lithologic description will be prepared for all borings and an organic vapor analyzer (OVA) will be used to field screen soil from the boreholes. A single soil sample will be collected from each borehole and will correspond to the interval with the highest measured OVA reading.

Soil Boring Installation and Sampling

The soil sampling activities will be conducted with the truck-mounted Geoprobe® unit that will be utilized during the VAP sampling. The soil borings will be co-located with or adjacent to the VAP locations. A soil coring device with a new acetate sleeve will be driven into the ground by the Geoprobe® unit and retrieved to the surface. Upon retrieval of the soil core and removal from the acetate sleeve, a qualified geologist will conduct a visual inspection of the core. The following information will be recorded on Sample/Core logs, which will be prepared for each location:

- Major soil type and percentage;
- Composition of the soil;
- Moisture, texture, and color of the soil;
- Other geologic observations such as bedding characteristics, structure and orientation, and primary and secondary permeability/porosity (if possible); and
- Observations on drilling progress including sample interval loss and recovery.

The soil core will be screened in the field using an OVA (e.g., photoionization detector [PID] or flame ionization detector [FID]) to document the levels of organic vapors present. To collect volatile organic headspace readings, a portion of the soil core will be placed in a sealed plastic bag. The bag will be placed in a dry area and allowed to warm to ambient temperatures. After a minimum of 10 minutes, the OVA will be inserted into the bag to measure the vapors that have accumulated. OVA readings will be recorded on the Sample/Core Log. The soil interval in the zone above the water table (vadose zone) exhibiting the highest OVA reading in each borehole will be selected for sampling. VOC samples will be collected directly from the target depth interval of the soil core to minimize disturbance using an EnCore™ sampler or equivalent (Terra Core). SVOC and metal samples will be collected in containers provided by the laboratory. Duplicate, trip blank, and matrix spike/matrix spike duplicate samples will also be collected during the sampling event for QA/QC purposes. If no OVA readings are obtained above background levels in a given soil boring within the vadose zone, a soil sample will be collected from the upper 5 feet of the boring.

Soil Sample Laboratory Analysis

Soil samples will be shipped on ice under proper chain-of-custody to TestAmerica Laboratory for analysis of the following parameters:

VOCs (USEPA Method 8260)

SVOCs (USEPA Method 8270)

Metals:

- Total Metals (RCRA metals plus Nickle and Zinc) (USEPA Method 6020)
- Hexavalent chromium (USEPA Method 7196)

Data Evaluation and Reporting

Upon receiving the air data, which should be available approximately 14 days after completion of sampling, the analytical package will be reviewed for completeness. Once reviewed, the data package will be shared with the USEPA. The data obtained from this VI assessment will be evaluated and compared to the calculated Vapor Intrusion Screening Levels. Any additional sampling beyond what is described in this IMWP will be based on the data evaluation. The evaluation will use the MLE approach described in the *USEPA OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air* (USEPA June 2015). Additionally, data will be evaluated against indoor air background concentrations as identified in the *Background Indoor Air Concentrations of Volatile Organic Compounds in North American Residences (1990-2005): A Compilation of Statistics for Assessing Vapor Intrusion* (USEPA 2011). Data from the background ambient air samples collected during the event will assist in the MLE evaluation. If the evaluation of the initial and seasonal sampling events indicate that the VI pathway is incomplete, additional VI evaluation is not warranted.

Soil and groundwater data will also be evaluated upon receipt and reviewed for completeness. The data will be summarized and the electronic data package will be shared with the USEPA. The electronic format will be compatible with the USEPA's EQuIS system. The need for additional sampling will be evaluated with the USEPA.

Data validation will be conducted on the air samples collected during this assessment. Soil and groundwater data validation will be conducted in accordance with procedures described in the Quality Assurance Project Plan for the site monitoring program previously approved by the USEPA.

ARCADIS will prepare a Summary Report of the results from this assessment for Grenada Manufacturing to submit to the USEPA. Communication of the sample results to the residential property owners will be handled by the USEPA.

Schedule

Upon receiving the executed access agreements, personnel will mobilize to the area to conduct the structure reconnaissance and the sampling. In the event that potential source materials are found, they will be removed or isolated and the structure will be allowed to ventilate for approximately 24 hours. Installation and sampling of the soil gas ports are expected to take approximately 3 days. Installation of the sub-slab sample ports will take approximately 1 hour per structure. Indoor air sampling will

take approximately 24 hours per structure. This sampling effort will take approximately 3 to 5 days to complete, assuming all access agreements are in place. The soil and groundwater sampling is anticipated to take an additional 10 to 15 days to complete and likely will occur under a separate mobilization. Data will be available to the USEPA approximately 30 days following sample collection.

Closing

If you have any questions regarding this IMWP, please do not hesitate to contact us at 225-292-1004.

Sincerely,

ARCADIS U.S., Inc.

I have reviewed this document in sufficient depth to accept full responsibility for its contents.



George E. Cook, RPG
Staff Geologist
Mississippi Registration Number 0889

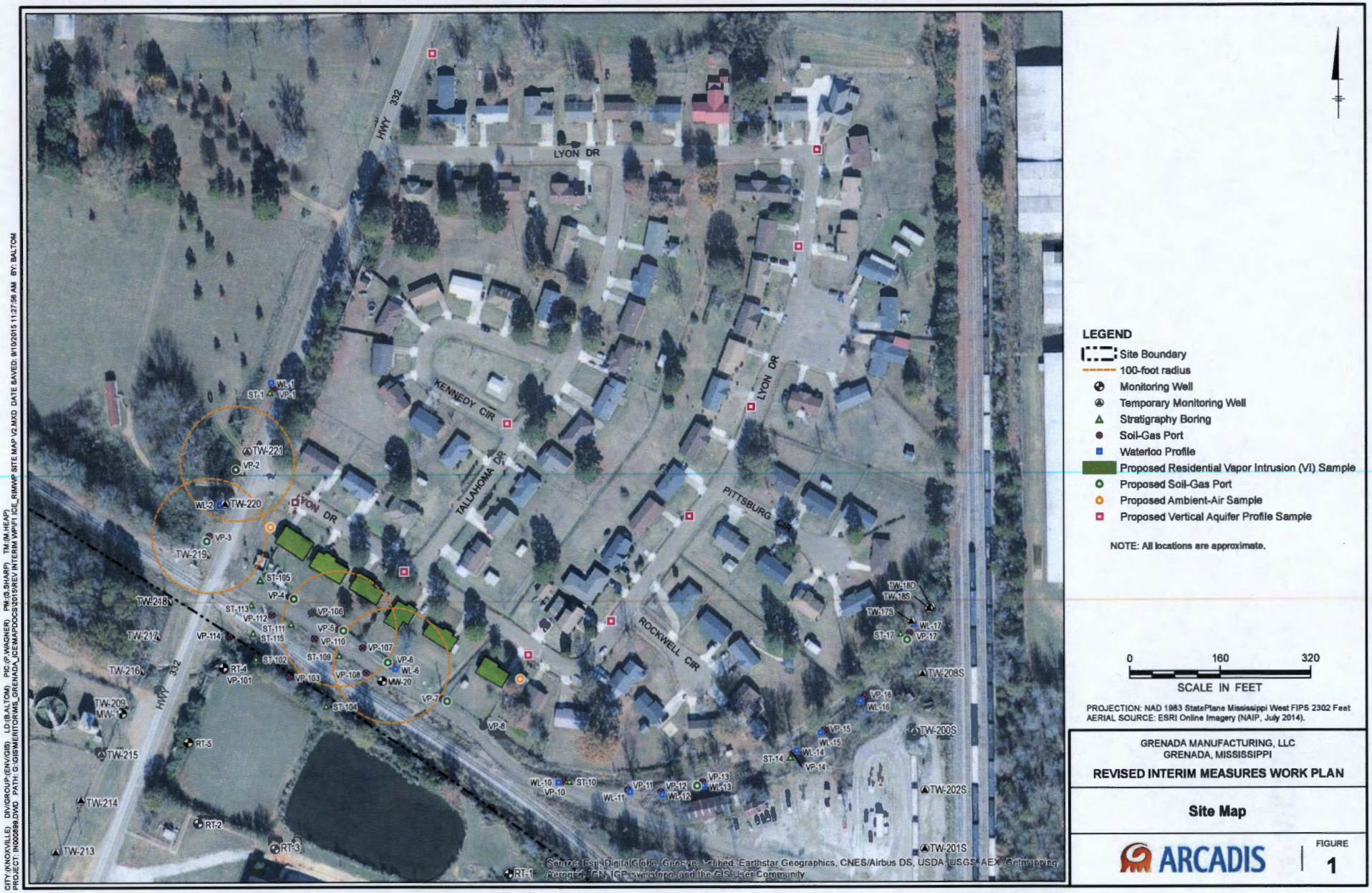
John Ellis
Certified Project Manager

Attachments

Copies:
Steven Sharp – ARCADIS

ARCADIS

Figure



LEGEND

- Site Boundary
- 100-foot radius
- Monitoring Well
- Temporary Monitoring Well
- Stratigraphy Boring
- Soil-Gas Port
- Waterloo Profile
- Proposed Residential Vapor Intrusion (VI) Sample
- Proposed Soil-Gas Port
- Proposed Ambient-Air Sample
- Proposed Vertical Aquifer Profile Sample

NOTE: All locations are approximate.

0 160 320

SCALE IN FEET

PROJECTION: NAD 1983 StatePlane Mississippi West FIPS 2302 Feet
AERIAL SOURCE: ESRI Online Imagery (NAIP, July 2014).

GRENADA MANUFACTURING, LLC
GRENADA, MISSISSIPPI

REVISED INTERIM MEASURES WORK PLAN

Site Map

ARCADIS

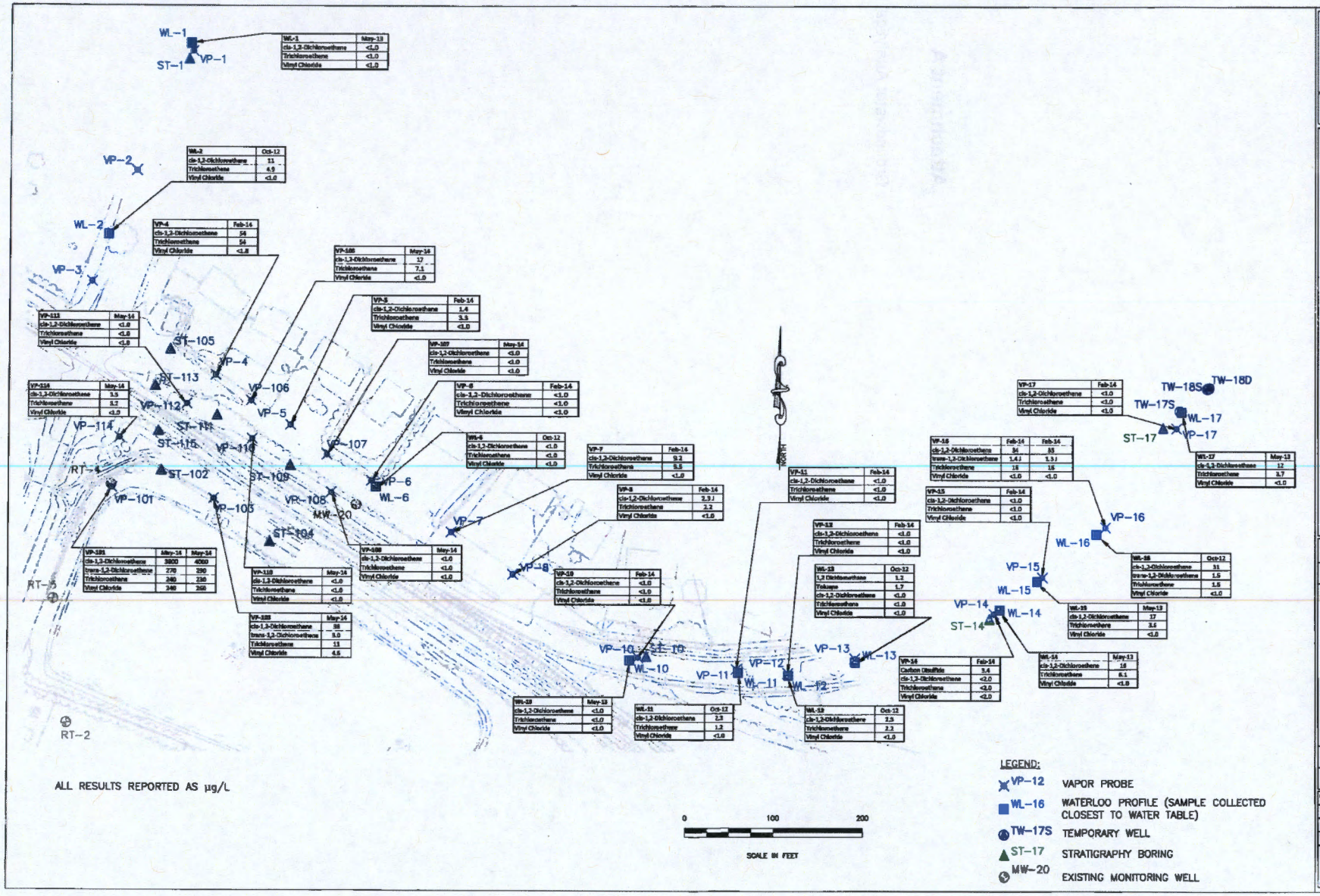
FIGURE 1

CITY:(KNOXVILLE) DIV/GROUP:(ENV/GIS) LD:(B.ALTON) PIC:(P.WAGNER) PM:(S.SHARP) TM:(M.HEAP)
PROJECT: IN000899.DWD PATH: G:\GIS\MERITOR\MS_GRENADA_ICE\MAPDOCS\2015\REV INTERIM WP\F1 ICE_RIMWP SITE MAP V2.MXD DATE SAVED: 9/10/2015 11:27:56 AM BY: BALTON

ARCADIS

Attachment A

Groundwater Analytical Data Figure



T&M ASSOCIATES
4675 LAKEHURST COURT
SUITE 200
COLUMBUS, OHIO 43016
TEL: 614-339-2020
WWW.TANDMASSOCIATES.COM

MERITOR, INC.

GRENADA MANUFACTURING, LLC PLANT
GRENADA, MISSISSIPPI

GROUNDWATER ANALYTICAL DATA
SHALLOW/WATER TABLE

NO.	DATE	REVISION	BY	CHECKED

PROJECT NO.
DATE 12/16/13
SCALE 1"=100'
CADD FILE
DESIGNED BY
DWG PATH
CHECKED BY
DRAWN BY

FIGURE X

ARCADIS

Attachment B

Building Survey and Product Inventory Form

Building Survey and Product Inventory Form

Directions: This form must be completed for each residence or area involved in indoor air testing.

Preparer's Name: _____

Date/Time Prepared: _____

Preparer's Affiliation: _____

Phone No.: _____

Purpose of Investigation: _____

1. OCCUPANT:

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

Number of Occupants/Persons at this Location: _____

Age of Occupants: _____

2. OWNER OR LANDLORD: (Check if Same as Occupant ___)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS:

Type of Building: (circle appropriate response)

Residential	School	Commercial/Multi-use
Industrial	Church	Other: _____

If the Property is Residential, Type? (circle appropriate response)

Ranch		2-Family 3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If Multiple Units, How Many? _____

If the Property is Commercial, Type?

Business Type(s) _____

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other Characteristics:

Number of Floors_____ Building Age_____

Is the Building Insulated? Y / N How Air-Tight? Tight / Average / Not Tight

4. AIRFLOW:

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow Between Floors

_____

_____

_____

Airflow Near Source

Outdoor Air Infiltration

Infiltration Into Air Ducts

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS: (circle all that apply)

a.	**Above grade construction:**	wood frame	concrete	stone brick
b.	**Basement type:**	full	crawlspace	slab other _____
c.	**Basement floor:**	concrete	dirt	stone other _____
d.	**Basement floor:**	uncovered	covered	covered with _____
e.	**Concrete floor:**	unsealed	sealed	sealed with _____
f.	**Foundation walls:**	poured	block stone	other _____
g.	**Foundation walls:**	unsealed	sealed	sealed with _____
h.	**The basement is:**	wet	damp	dry moldy
i.	**The basement is:**	finished	unfinished	partially finished

j. Sump present? Y / N

k. Water in sump? Y / N / NA

Basement/lowest level depth below grade: _____(feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

_____

_____

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? Y / N

6. HEATING, VENTILATING, AND AIR CONDITIONING: (circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard
Space heaters	Stream radiation	Radiant floor
Electric baseboard	Wood stove	Outdoor wood boiler
Other _____		

The primary type of fuel used is:

Natural base	Fuel oil	Kerosene
Electric	Propane	Solar
Wood coal		

Domestic hot water tank fueled by: _____

Boiler/furnace located in: Basement Outdoors Main Floor Other_____

Air conditioning: Central Air Window Units Open Windows None

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

_____

_____

_____

7. OCCUPANCY:

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

General Use of Each Floor (e.g., family room, bedroom, laundry, workshop, storage):

Basement _____

1st Floor _____

2nd Floor _____

3rd Floor _____

4th Floor _____

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY:

a. Is there an attached garage? Y / N

b. Does the garage have a separate heating unit? Y / N / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, ATV, car)?

Y / N / NA Please specify: _____

d. Has the building ever had a fire? Y / N When? _____

e. Is a kerosene or unvented gas space heater present? Y / N Where? _____

f. Is there a workshop or hobby/craft area? Y / N Where & Type? _____

g. Is there smoking in the building? Y / N How frequently? _____

h. Have cleaning products been used recently? Y / N When & Type? _____

i. Have cosmetic products been used recently? Y / N When & Type? _____

j. Has painting/staining been done in the last 6 months? Y / N Where & When? _____

k. Is there new carpet, drapes or other textiles? Y / N Where & When? _____

l. Have air fresheners been used recently? Y / N When & Type? _____

m. Is there a kitchen exhaust fan? Y / N If yes, where _____

n. Is there a bathroom exhaust fan? Y / N If yes, where vented? _____

o. Is there a clothes dryer? Y / N If yes, is it vented outside? Y / N

p. Has there been a pesticide application? Y / N When & Type? _____

q. Are there odors in the building? Y / N

If yes, please describe: _____

Do any of the building occupants use solvents (e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist) at work? Y / N

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No

Yes, use dry-cleaning infrequently (monthly or less) Unknown

Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / N

Date of Installation: _____

Is the system active or passive? Active/Passive

Are there any Outside Contaminant Sources? (circle appropriate responses)

Contaminated site with 1000-foot radius? Y / N Specify _____

Other stationary sources nearby (e.g., gas stations, emission stacks, etc.): _____

_____

Heavy vehicle traffic nearby (or other mobile sources): _____

9. WATER AND SEWAGE:

Water Supply: Public Water Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: Public Sewer Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION: (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

_____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

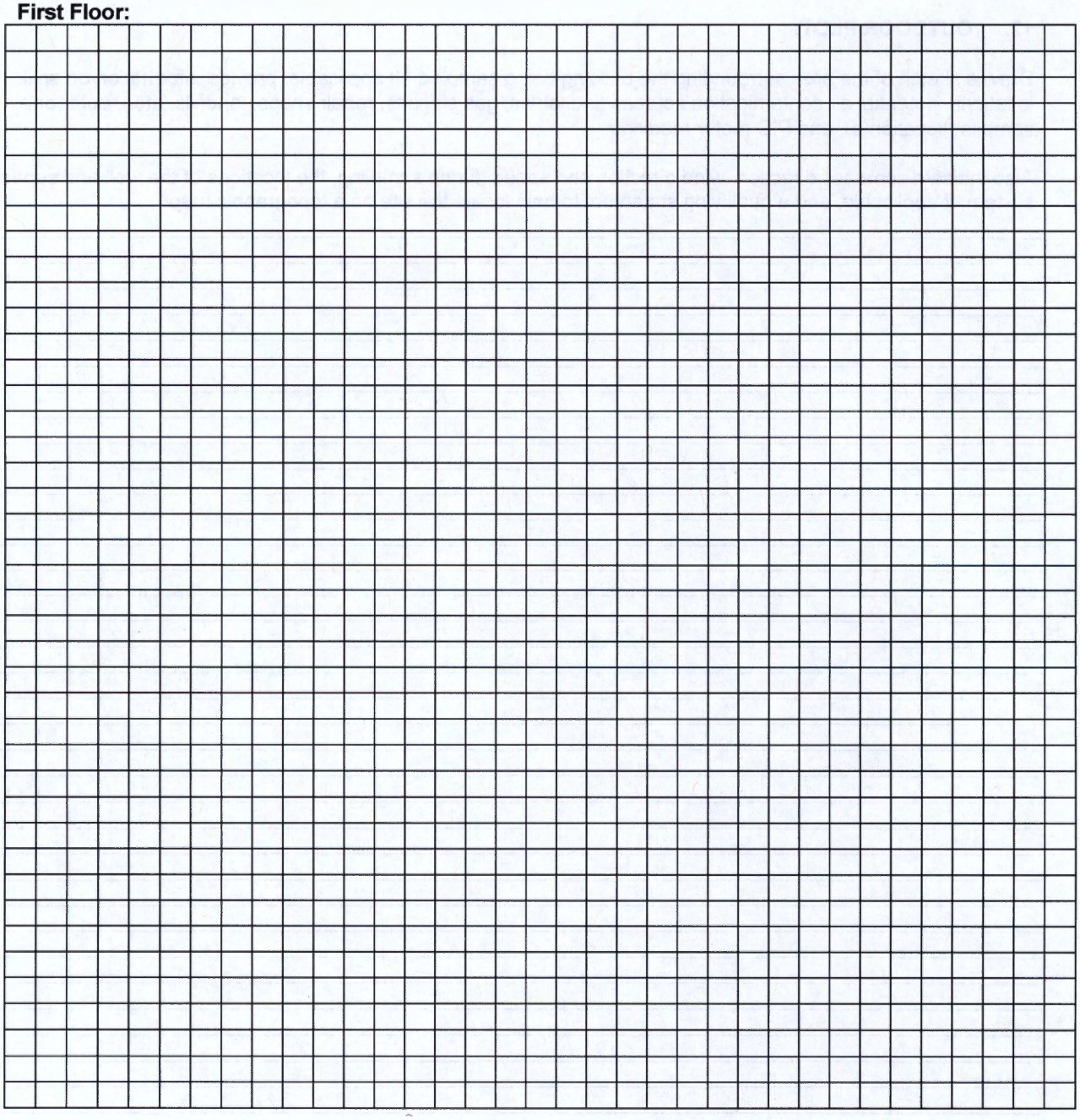
d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS:

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:

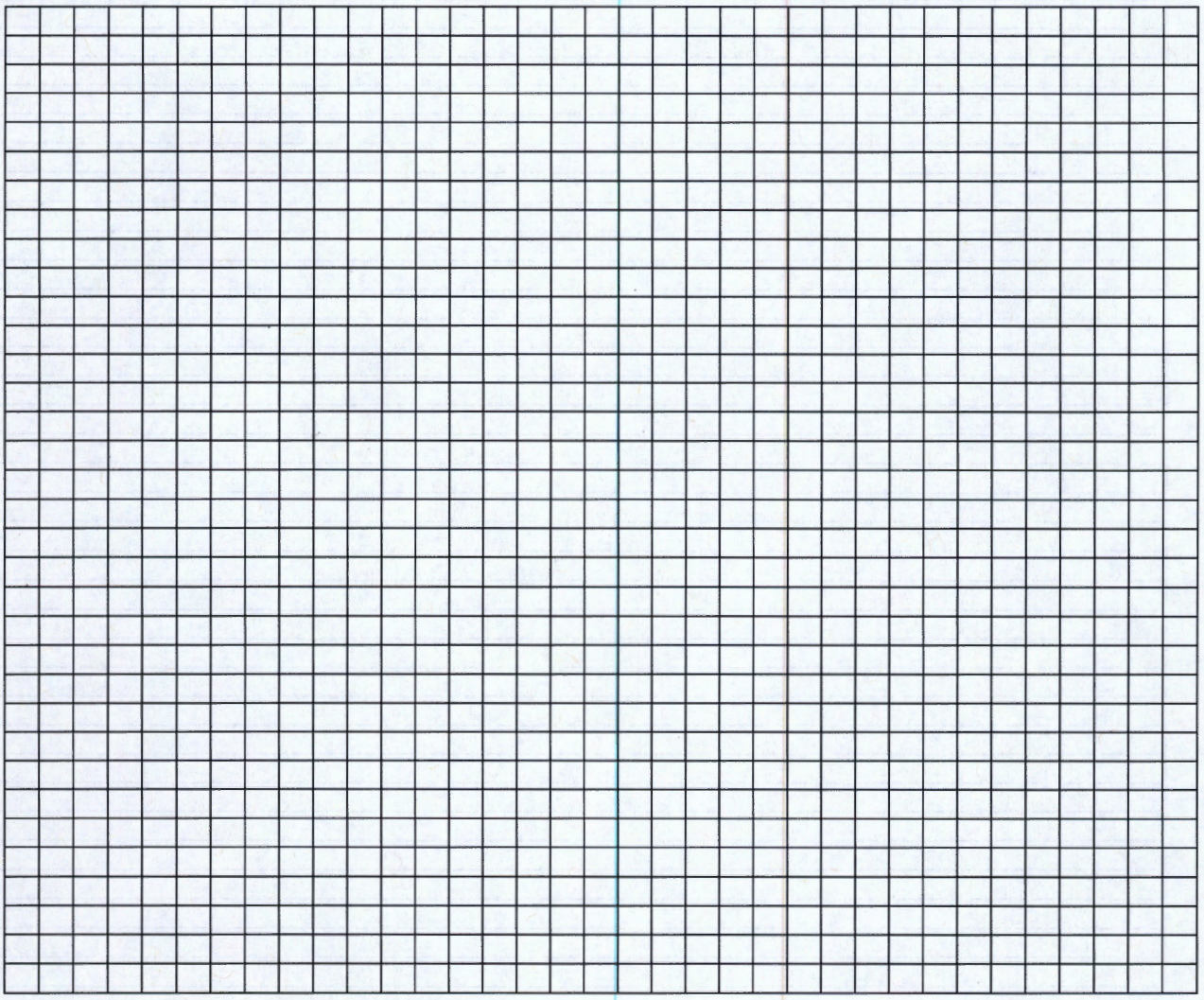
First Floor:



12. OUTDOOR PLOT:

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s), and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM:

Make and Model of field instrument used: _____

List specific products found in the residence or area that have the potential to affect indoor air quality (e.g., gasoline or kerosene storage cans, glues, paints, cleaning solvents/products, polishes/waxes, new furniture/ carpet, nail polish/hairspray/cologne).

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y/N

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

September 4, 2015

Grenada Manufacturing, LLC.
c/o John Ellis
ARCADIS U.S., Inc.
10352 Plaza Americana
Baton Rouge, LA 70816

SUBJ: Conditional Approval for Vapor Intrusion Assessment - Interim Measures Work Plan
Grenada Manufacturing, LLC
MSD 007 037 278
Grenada, Mississippi

Dear Mr. Ellis:

The EPA has reviewed the Grenada Manufacturing, LLC (Grenada) revised draft Vapor Intrusion (VI) Interim Measures Work Plan (IMWP). This work plan is approved with the following conditions listed below. Meredith Anderson and I discussed these items with you on Tuesday, September 1, 2015.

As we stated during our conversation, several items still need to be included or modified in the work plan and are summarized as follows:

- Consistent with the *USEPA OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air* (USEPA, June 2015), along with soil gas, sub-slab, indoor, and ambient air sampling, groundwater sampling is an important component of a VI investigation. Though the revised work plan included 6 sampling locations, the EPA had asked for a minimum of 10. The program feels that at least 10 will be necessary to determine the nature and extent of groundwater contamination. As discussed, a minimum of 4 additional wells should be located along the northern perimeter of the neighborhood, as well as in the interior. The lithology at all geoprobe borings should be identified and logged by a professional geologist. OVA readings should be obtained and a soil sample should be collected and analyzed at the location of the highest OVA readings. All soil and groundwater samples should be analyzed for VOCs, SVOCs, and metals (including speciated chromium) using SW846 methods.

- All sampling and analysis activities for this VI study should be conducted in accordance with the appropriate EPA Region 4 protocols (http://www.epa.gov/region4/sesd/fbqstp/index.html).

- All sub-slab sampling ports will be installed in a discrete location within the home to minimize disturbance, and the home will be returned to its original condition, to the extent possible.

- Based on the review of groundwater and air (soil gas, sub-slab, indoor, and ambient) data from the initial 2 seasonal sampling events, it may be necessary to conduct additional groundwater and air sampling to provide adequate multiple lines of evidence to determine the presence or absence of a complete VI pathway. This determination will be made by the EPA and will be communicated promptly to the permittee.

- All data from this investigation should be submitted promptly to the EPA in an electronic format using the EPA's Equis system.

- The EPA requests that the permittee and their consultants participate in outreach activities in the community, as needed, and support the production of outreach materials.

- Upon request, comprehensive data validation procedures will be performed on all data obtained from this investigation.

Due to the potentially very serious human health concerns, please update the latest draft VI IMWP previously submitted to the EPA and re-submit a final VI IMWP to the EPA by September 10, 2015, so that sampling can begin no later than the week of September 21, 2015. You may contact me at 404-562-8511 if you any questions about the contents of this letter.

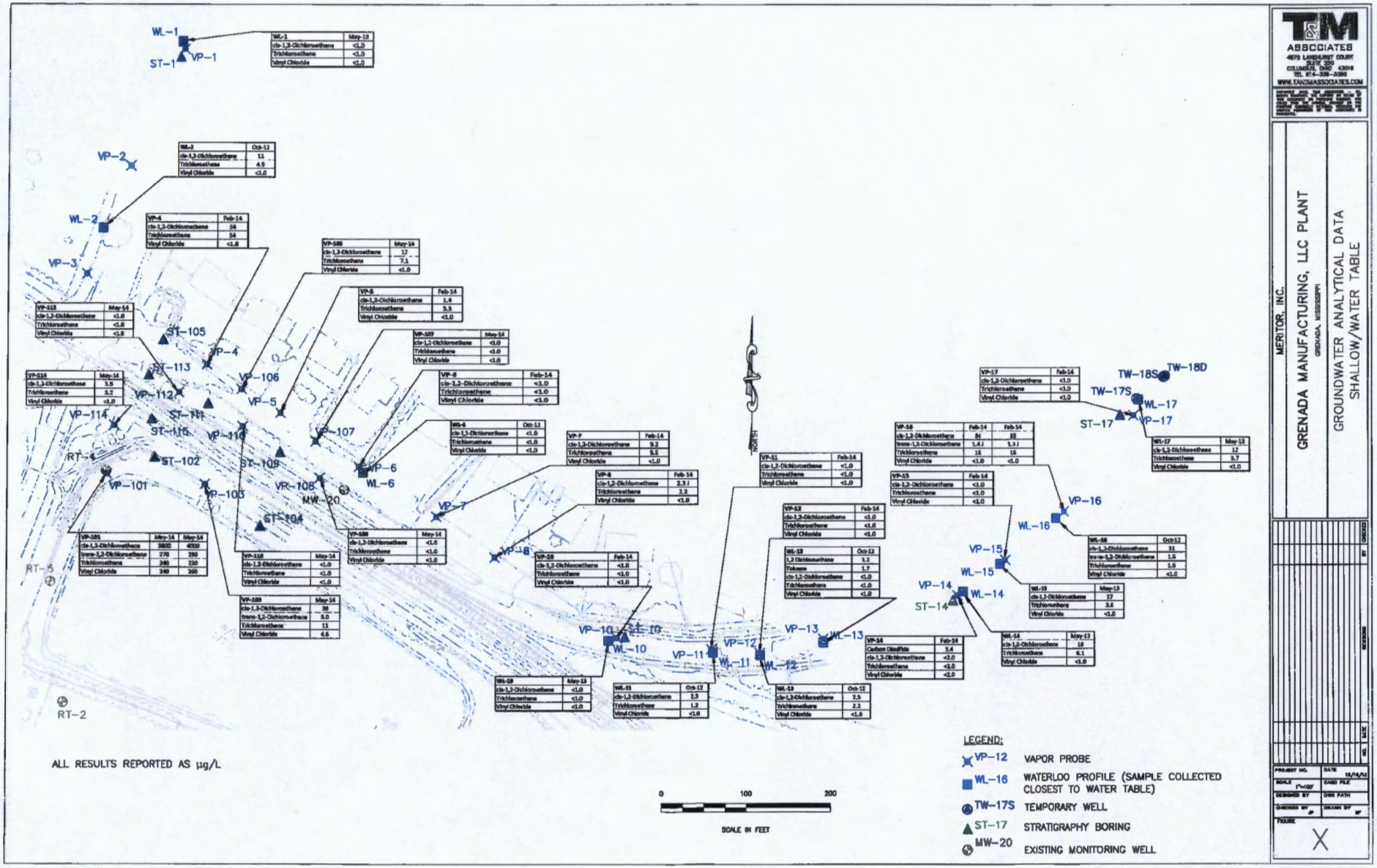
Sincerely,

Brian Bastek
RCRA Corrective Action and Permitting Section
Resource Conservation and Restoration Division

cc: Carla Brown, MDEQ
Donald Williams, Grenada Manufacturing, LLC

APPENDIX B

T&M Associates Groundwater Analytical Results 2012-2014



TM ASSOCIATES
4879 LANDHURST COURT
SUITE 200
COLUMBUS, OHIO 43016
TEL 614-339-3380
WWW.TANDMASSOCIATES.COM

MERITOR, INC.

GRENADA MANUFACTURING, LLC PLANT
GRENADA, MISSISSIPPI

GROUNDWATER ANALYTICAL DATA
SHALLOW/WATER TABLE

PROJECT NO.
DATE 10/16/13
SCALE 1"=100'
CADD FILE
DESIGNED BY
DWG PATH
CHECKED BY
DRAWN BY
FIGURE X

APPENDIX C

Soil Gas Port Boring and Construction Logs

ARCADIS Design & Consultancy for natural and built assets

SOIL BORING / SAMPLING LOG

Boring/Well: SG-1 Project/No.: Grenada Manufacturing / LA003307.0001 Page: 1 of 1

Site Location: Grenada, MS

Drilling Date/Time Started: 9/15/15 / 10:05 Drilling Date/Time Completed: 9/15/2015

Drilling Contractor: Devonian Group Driller: Lonny Gaudet

Drilling Fluid Used: None Drilling Method: Hand auger / Geoprobe-Macrocore

Length and Diameter of Coring Device: 5.0' / 3" Sampling Interval: 1.0 feet

Land-Surface Elev.: N/A feet ☐ Surveyed ☐ Estimated Datu: NAD 83

Total Depth Drilled: 6.0 Feet Hole Diameter: 3" Coring Devic: Hand Auger

Prepared By: Randall Woodruff Hammer Weight: N/A Hammer Drop: N/A ins.

GPS Coordinates: N/A

Sampling Data:

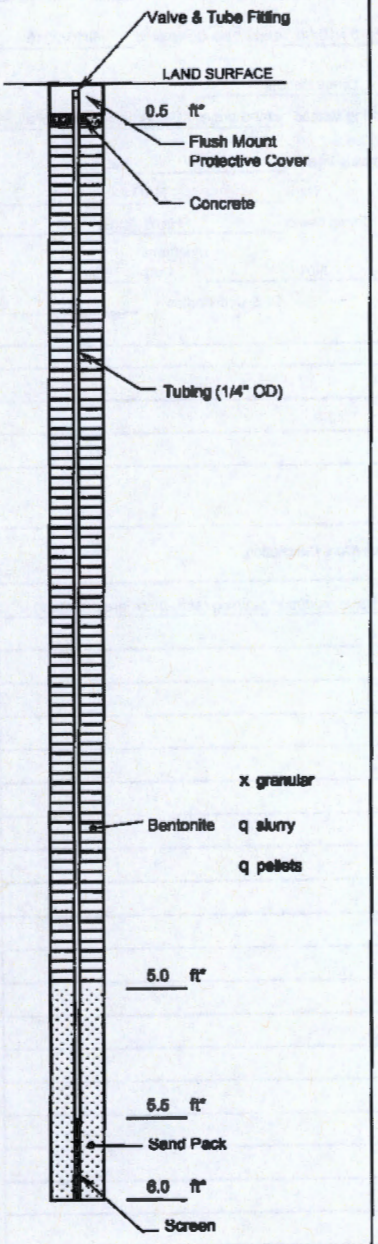
Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
N/A				

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 Inches	Interval From - To (feet bgs)	Sample/Core Description
0.0	5.0	100	--	--	0.0 - 6.0'	Clay, light brown, dry, friable, pebbles, trace oxidation staining, stiff; trace grey mottling
5.0	6.0	100	--	--		
						EOB @ 6.0'

ARCADIS | Design & Consultancy for natural and built assets

SOIL GAS PORT CONSTRUCTION DIAGRAM



* Depth Below Land Surface

Project: Grenada Manufacturing Port: SG-1

City: Grenada

County: Grenada State: MS

GPS Coordinates:

Latitude: NA

Longitude: NA

Land-Surface Elevation and Datum:

NA feet

q Surveyed

q Estimated

Installation Date: 9/15/2015

Weather Conditions at Installation: Sunny, 85° F

Drilling Contractor: Devonian Group

Driller: Lonny Gaudet

Drilling Method: Hand Auger, Geoprobe - Macrocore

Screen:

Construction: Stainless Steel Mesh

Length: 6 - inches

Tubing:

Construction: Nylon

Diameter: 1/4 - inch OD

End Valve:

Type/Construction: Stainless Steel Ball Valve

End Connection: Stainless Steel Swagelok Tube Fitting

Remarks:

Prepared by: Randall Woodruff

ARCADIS Design & Consultancy for natural and built assets

SOIL BORING / SAMPLING LOG

Boring/Well: SG-2 Project/No.: Grenada Manufacturing / LA003307.0001 Page: 1 of 1

Site Location: Grenada, MS

Drilling Date/Time Started: 9/15/15 / 10:05 Drilling Date/Time Completed: 9/15/2015

Drilling Contractor: Devonian Group Driller: Lonny Gaudet

Drilling Fluid Used: None Drilling Method: Hand auger / Geoprobe-Macrocore

Length and Diameter of Coring Device: 5.0' / 3" Sampling Interval: 1.0 feet

Land-Surface Elev.: N/A feet ☐ Surveyed ☐ Estimated Datu: NAD 83

Total Depth Drilled: 6.0 Feet Hole Diameter: 3" Coring Devic: Hand Auger

Prepared By: Randall Woodruff Hammer Weight: N/A Hammer Drop: N/A ins.

GPS Coordinates: N/A

Sampling Data:

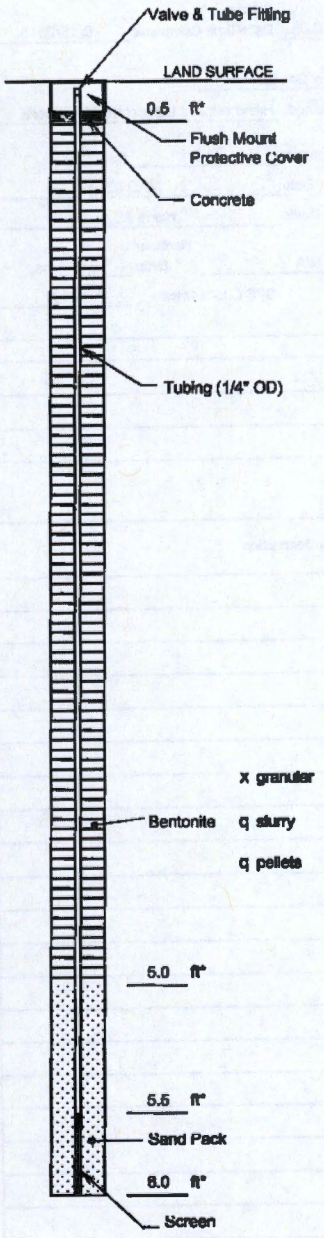
Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
N/A				

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 inches	Interval From - To (feet bgs)	Sample/Core Description
0.0	5.0	100	--	--	0.0 - 6.0	Clay, light brown, dry, friable, pebbles, stiff
5.0	6.0	100	--	--		
						EOB @ 6.0'

ARCADIS | Design & Consultancy for natural and built assets

SOIL GAS PORT CONSTRUCTION DIAGRAM



* Depth Below Land Surface

Project: Grenada Manufacturing Port: SG-2

City: Grenada

County: Grenada State: MS

GPS Coordinates:

Latitude: NA

Longitude: NA

Land-Surface Elevation and Datum:

NA feet

q Surveyed

q Estimated

Installation Date: 9/15/2015

Weather Conditions at Installation: Sunny, 85° F

Drilling Contractor: Devonian Group

Driller: Lonny Gaudet

Drilling Method: Hand Auger, Geoprobe - Macrocore

Screen:

Construction: Stainless Steel Mesh

Length: 6 - inches

Tubing:

Construction: Nylon

Diameter: 1/4 - inch OD

End Valve:

Type/Construction: Stainless Steel Ball Valve

End Connection: Stainless Steel Swagelok Tube Fitting

Remarks:

Prepared by: Randall Woodruff

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SOIL BORING / SAMPLING LOG

Boring/Well: SG-3 Project/No.: Grenada Manufacturing / LA003307.0001 Page: 1 of 1

Site Location: Grenada, MS

Drilling Date/Time Started: 9/15/15 / 10:55 Drilling Date/Time Completed: 9/15/2015

Drilling Contractor: Devonian Group Driller: Lonny Gaudet

Drilling Fluid Used: None Drilling Method: Hand auger / Geoprobe-Macrocore

Length and Diameter of Coring Device: 5.0' / 3" Sampling Interval: 1.0 feet

Land-Surface Elev.: N/A feet ☐ Surveyed ☐ Estimated Datu: NAD 83

Total Depth Drilled: 6.0 Feet Hole Diameter: 3" Coring Devic: Hand Auger

Prepered By: Randall Woodruff Hammer Weight: N/A Hammer Drop: N/A ins.

GPS Coordinates: N/A

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
N/A				

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 inches	Interval From - To (feet bgs)	Sample/Core Description
0.0	5.0	100	--	--	0.0 - 0.25'	**Topsoil**, organics
5.0	6.0	100	--	--	0.25' - 6.0'	**Clay**, light brown, with trace oxidation staining, dry, friable, pebbles, stiff; gray mottling
						-slightly plastic and firm starting at 4.0', trace moisture
						-color change to brown starting at 5.0'
						EOB @ 6.0'

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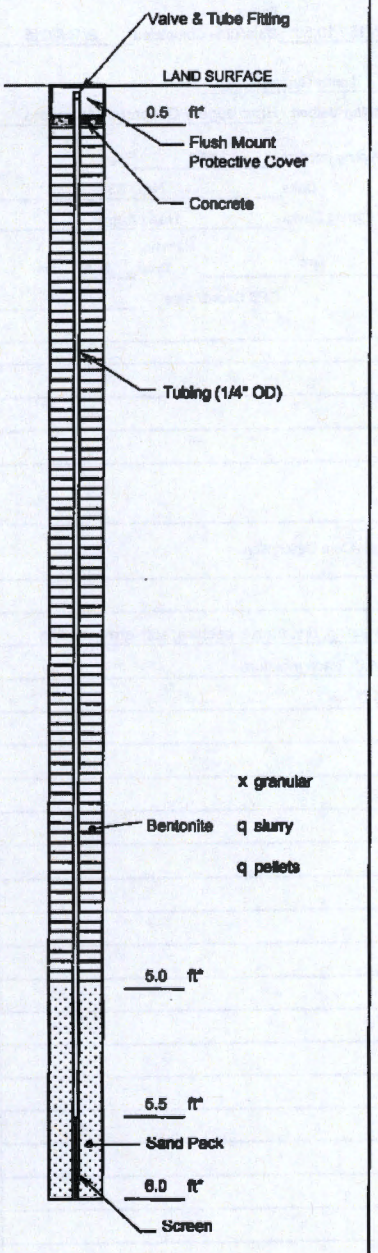
SOIL GAS PORT CONSTRUCTION DIAGRAM



* Depth Below Land Surface

Project: Grenada Manufacturing Port: SG-3

City: Grenada

County: Grenada State: MS

GPS Coordinates:

Latitude: NA

Longitude: NA

Land-Surface Elevation and Datum:

NA feet q Surveyed q Estimated

Installation Date: 9/15/2015

Weather Conditions at Installation: Sunny, 85° F

Drilling Contractor: Devonian Group

Driller: Lonny Gaudet

Drilling Method: Hand Auger, Geoprobe - Macrocore

Screen:

Construction: Stainless Steel Mesh

Length: 6 - Inches

Tubing:

Construction: Nylon

Diameter: 1/4 - Inch OD

End Valve:

Type/Construction: Stainless Steel Ball Valve

End Connection: Stainless Steel Swagelok Tube Fitting

Remarks:

Prepared by: Randall Woodruff

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SOIL BORING / SAMPLING LOG

Boring/Well: SG-4 Project/No.: Grenada Manufacturing / LA003307.0001 Page: 1 of 1

Site Location: Grenada, MS

Drilling Date/Time Started: 9/15/15 / 11:25 Drilling Date/Time Completed: 9/15/2015

Drilling Contractor: Devonian Group Driller: Lonny Gaudet

Drilling Fluid Used: None Drilling Method: Hand auger / Geoprobe-Macrocore

Length and Diameter of Coring Device: 5.0' / 3" Sampling Interval: 1.0 feet

Land-Surface Elev.: N/A feet ☐ Surveyed ☐ Estimated Datu: NAD 83

Total Depth Drilled: 6.0 Feet Hole Diameter: 3" Coring Devic: Hand Auger

Prepared By: Randall Woodruff Hammer Weight: N/A Hammer Drop: N/A ins.

GPS Coordinates: N/A

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
N/A				

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 inches	Interval From - To (feet bgs)	Sample/Core Description
0.0	5.0	100	--	--	0.0 - 0.25'	**Topsoil**, organics
5.0	6.0	100	--	--	0.25' - 6.0'	**Clay**, light brown, dry, friable, pebbles, stiff
						-firm, trace moisture starting at 5.0'; gray mottling
						EOB @6.0'

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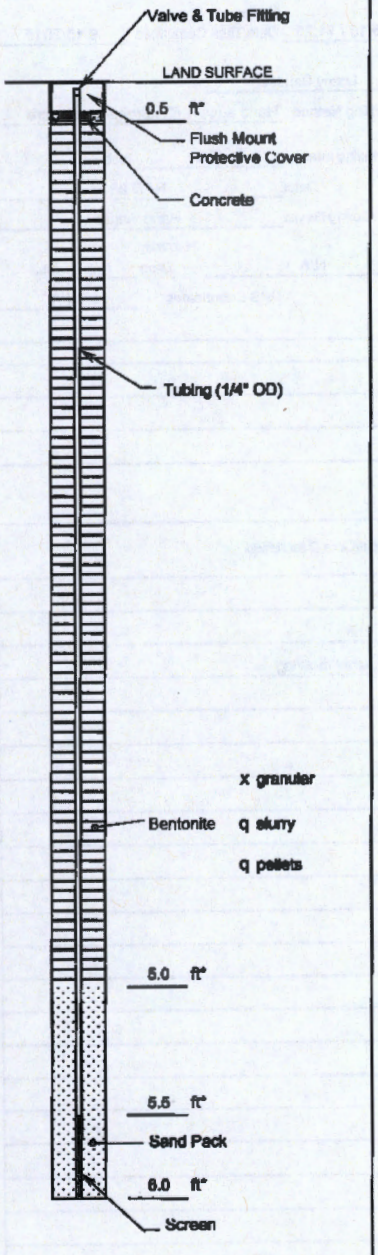
SOIL GAS PORT CONSTRUCTION DIAGRAM



* Depth Below Land Surface

Project: Grenada Manufacturing Port: SG-4

City: Grenada

County: Grenada State: MS

GPS Coordinates:

Latitude: NA

Longitude: NA

Land-Surface Elevation and Datum:

NA feet q Surveyed q Estimated

Installation Date: 9/15/2015

Weather Conditions at Installation: Sunny, 85° F

Drilling Contractor: Devonian Group

Driller: Lonny Gaudet

Drilling Method: Hand Auger, Geoprobe - Macrocore

Screen:

Construction: Stainless Steel Mesh

Length: 6 - inches

Tubing:

Construction: Nylon

Diameter: 1/4 - inch OD

End Valve:

Type/Construction: Stainless Steel Ball Valve

End Connection: Stainless Steel Swagelok Tube Fitting

Remarks:

Prepared by: Randall Woodruff

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SOIL BORING / SAMPLING LOG

Boring/Well: SG-5 | Project/No.: Grenada Manufacturing / LA003307.0001 | Page: 1 of 1

Site Location: Grenada, MS | Drilling Date/Time Started: 9/15/15 / 11:30 | Drilling Date/Time Completed: 9/15/2015

Drilling Contractor: Devonian Group | Driller: Lonny Gaudet

Drilling Fluid Used: None | Drilling Method: Hand auger / Geoprobe-Macrocore

Length and Diameter of Coring Device: 5.0' / 3" | Sampling Interval: 1.0 feet

Land-Surface Elev.: N/A feet ☐ Surveyed ☐ Estimated | Datum: NAD 83

Total Depth Drilled: 6.0 Feet | Hole Diameter: 3" | Coring Device: Hand Auger

Prepared By: Randall Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

GPS Coordinates: N/A

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
N/A				

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 inches	Interval From - To (feet bgs)	Sample/Core Description
0.0	5.0	100	--	--	0.0 - 0.25'	**Topsoil**, organics
5.0	6.0	100	--	--	0.25' - 6.0'	**Clay**, brown to light brown, dry, friable, pebbles, stiff
						-soft clay from 5.6' to 5.8'; slightly moist
						EOB @ 6.0'

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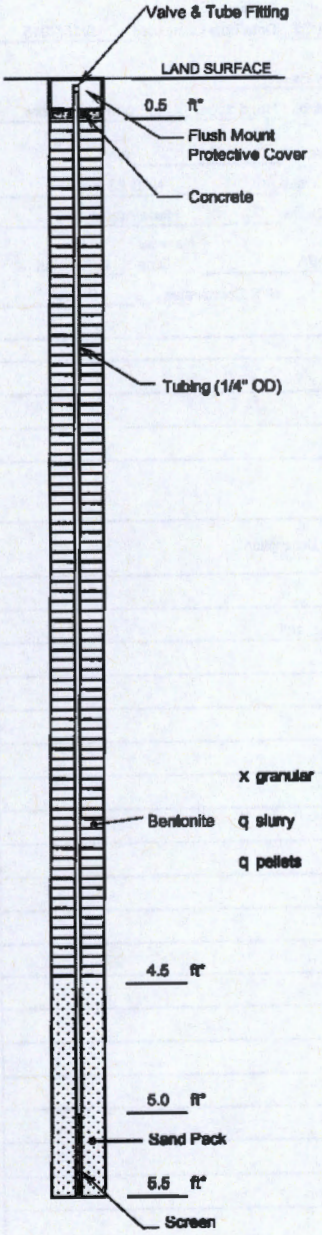
SOIL GAS PORT CONSTRUCTION DIAGRAM



* Depth Below Land Surface

Project: Grenada Manufacturing Port: SG-5

City: Grenada

County: Grenada State: MS

GPS Coordinates:

Latitude: NA

Longitude: NA

Land-Surface Elevation and Datum:

NA feet

q Surveyed

q Estimated

Installation Date: 9/15/2015

Weather Conditions at Installation: Sunny, 85° F

Drilling Contractor: Devonian Group

Driller: Lonny Gaudet

Drilling Method: Hand Auger, Geoprobe - Macrocore

Screen:

Construction: Stainless Steel Mesh

Length: 6 - inches

Tubing:

Construction: Nylon

Diameter: 1/4 - inch OD

End Valve:

Type/Construction: Stainless Steel Ball Valve

End Connection: Stainless Steel Swagelok Tube Fitting

Remarks:

Prepared by: Randall Woodruff

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SOIL BORING / SAMPLING LOG

Boring/Well SG-6 Project/No. Grenada Manufacturing / LA003307.0001 Page 1 of 1

Site Location Grenada, MS

Drilling Date/Time Started 9/15/15 / 11:40

Drilling Date/Time Completed 9/15/2015

Drilling Contractor Devonian Group

Driller Lonny Gaudet

Drilling Fluid Used None

Drilling Method Hand auger / Geoprobe-Macrocore

Length and Diameter of Coring Device 5.0' / 3"

Sampling Interval 1.0 feet

Land-Surface Elev. N/A feet ☐ Surveyed ☐ Estimated

Datu NAD 83

Total Depth Drilled 6.0 Feet

Hole Diameter 3"

Coring Devic Hand Auger

Prepared By Randall Woodruff

Hammer Weight N/A

Hammer Drop N/A ins.

GPS Coordinates N/A

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
N/A				

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 inches	Interval From - To (feet bgs)	Sample/Core Description
0.0	5.0	100	--	--	0.0 - 0.25'	Topsoil, organics
5.0	6.0	100	--	--	0.25' - 6.0'	Clay, light brown with gray mottling dry, friable, pebbles, stiff
						EOB @ 6.0'

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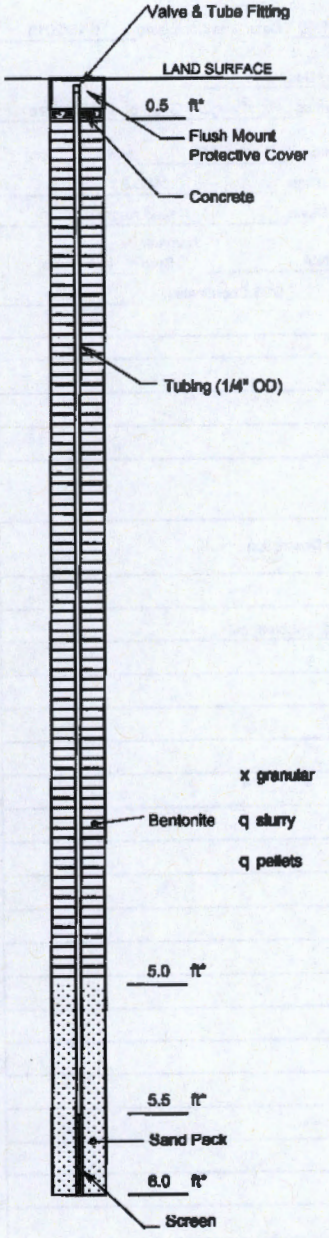
SOIL GAS PORT CONSTRUCTION DIAGRAM



* Depth Below Land Surface

Project: Grenada Manufacturing Port: SG-6

City: Grenada

County: Grenada State: MS

GPS Coordinates:

Latitude: NA

Longitude: NA

Land-Surface Elevation and Datum:

NA feet

q Surveyed

q Estimated

Installation Date: 9/15/2015

Weather Conditions at Installation: Sunny, 85° F

Drilling Contractor: Devonian Group

Driller: Lonny Gaudet

Drilling Method: Hand Auger, Geoprobe - Macrocore

Screen:

Construction: Stainless Steel Mesh

Length: 6 - inches

Tubing:

Construction: Nylon

Diameter: 1/4 - inch OD

End Valve:

Type/Construction: Stainless Steel Ball Valve

End Connection: Stainless Steel Swagelok Tube Fitting

Remarks:

Prepared by: Randall Woodruff

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SOIL BORING / SAMPLING LOG

Boring/Well: SG-7 Project/No.: Grenada Manufacturing / LA003307.0001 Page: 1 of 1

Site Location: Grenada, MS

Drilling Date/Time Started: 9/16/15 / 09:50 Drilling Date/Time Completed: 9/16/2015

Drilling Contractor: Devonian Group Driller: Lonny Gaudet

Drilling Fluid Used: None Drilling Method: Hand auger

Length and Diameter of Coring Device: 5.0' / 3" Sampling Interval: 1.0 feet

Land-Surface Elev.: N/A feet ☐ Surveyed ☐ Estimated Datu: NAD 83

Total Depth Drilled: 4.0 Feet Hole Diameter: 3" Coring Devic: Hand Auger

Prepared By: Randall Woodruff Hammer Weight: N/A Hammer Drop: N/A ins.

GPS Coordinates: N/A

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
N/A				

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 inches	Interval From - To (feet bgs)	Sample/Core Description
0.0	4.0	100	--	--	0.0 - 0.25'	Gravel, organics, clay
					0.25' - 3.75'	Clay, light brown to brown, dry, friable, pebbles, stiff
						-slightly plactic starting at 3.5'; firm
					3.75' - 4.0'	Sandy clay to clayey sand, brown, slightly moist, trace pebbles, firm, cohesive to
						slightly plastic
						EOB @ 4.0'

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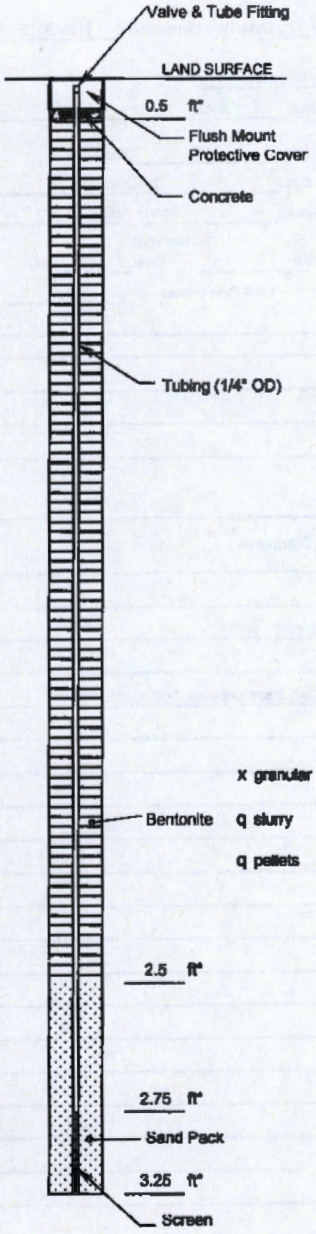
SOIL GAS PORT CONSTRUCTION DIAGRAM



* Depth Below Land Surface

Project: Grenada Manufacturing Port: SG-7

City: Grenada

County: Grenada State: MS

GPS Coordinates:

Latitude: NA

Longitude: NA

Land-Surface Elevation and Datum:

NA feet

q Surveyed

q Estimated

Installation Date: 9/16/2015

Weather Conditions at Installation: Sunny, 85° F

Drilling Contractor: Devonian Group

Driller: Lonny Gaudet

Drilling Method: Hand Auger, Geoprobe - Macrocore

Screen:

Construction: Stainless Steel Mesh

Length: 6 - inches

Tubing:

Construction: Nylon

Diameter: 1/4 - inch OD

End Valve:

Type/Construction: Stainless Steel Ball Valve

End Connection: Stainless Steel Swagelok Tube Fitting

Remarks:

Prepared by: Randall Woodruff

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SOIL BORING / SAMPLING LOG

Boring/Well: SG-8 | Project/No.: Grenada Manufacturing / LA003307.0001 | Page: 1 of 1

Site Location: Grenada, MS

Drilling Date/Time Started: 9/16/15 / 09:50 | Drilling Date/Time Completed: 9/16/2015

Drilling Contractor: Devonian Group | Driller: Lonny Gaudet

Drilling Fluid Used: None | Drilling Method: Hand auger / Geoprobe-Macrocore

Length and Diameter of Coring Device: 5.0' / 3" | Sampling Interval: 1.0 feet

Land-Surface Elev.: N/A feet ☐ Surveyed ☐ Estimated | Datu: NAD 83

Total Depth Drilled: 4.25 Feet | Hole Diameter: 3" | Coring Devic: Hand Auger

Prepared By: Randall Woodruff | Hammer Weight: N/A | Hammer Drop: N/A ins.

GPS Coordinates: N/A

Sampling Data:

Depth	Grab/Composite	Time	QA/QC Samples	Laboratory Analysis
N/A				

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (%)	PID Reading (ppm)	Blow Counts per 6 Inches	Interval From - To (feet bgs)	Sample/Core Description
0.0	4.25	100	--	--	0.0 - 0.25'	**Topsoil, organics**
					0.25' - 4.0'	**Clay**, light brown, dry, friable, pebbles, stiff
					4.0' - 4.25'	**Sandy clay to clayey sand**, brown, slightly moist, trace pebbles, firm, cohesive to slightly plastic
						EOB @ 4.25'

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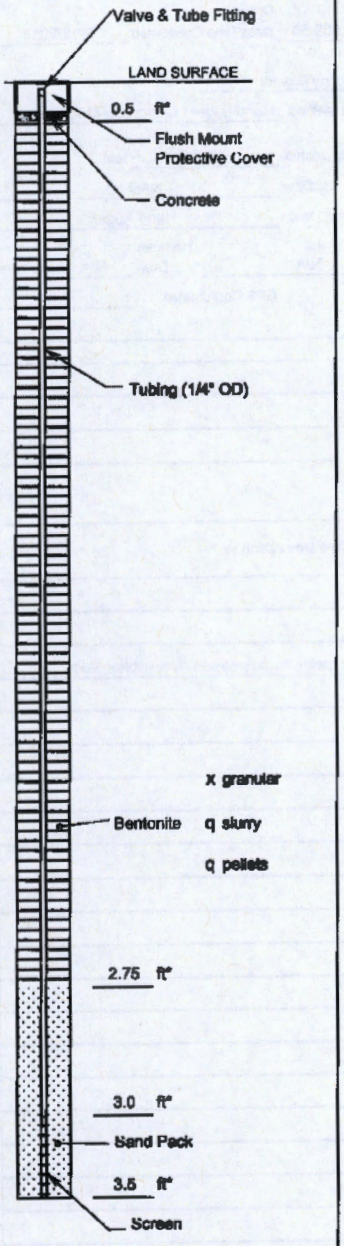
SOIL GAS PORT CONSTRUCTION DIAGRAM



Project: Grenada Manufacturing Port: SG-8

City: Grenada

County: Grenada State: MS

GPS Coordinates:

Latitude: NA

Longitude: NA

Land-Surface Elevation and Datum:

NA feet

q Surveyed

q Estimated

Installation Date: 9/16/2015

Weather Conditions at Installation: Sunny, 85° F

Drilling Contractor: Devonian Group

Driller: Lonny Gaudet

Drilling Method: Hand Auger, Geoprobe - Macrocore

Screen:

Construction: Stainless Steel Mesh

Length: 6 - inches

Tubing:

Construction: Nylon

Diameter: 1/4 - inch OD

End Valve:

Type/Construction: Stainless Steel Ball Valve

End Connection: Stainless Steel Swagelok Tube Fitting

Remarks:

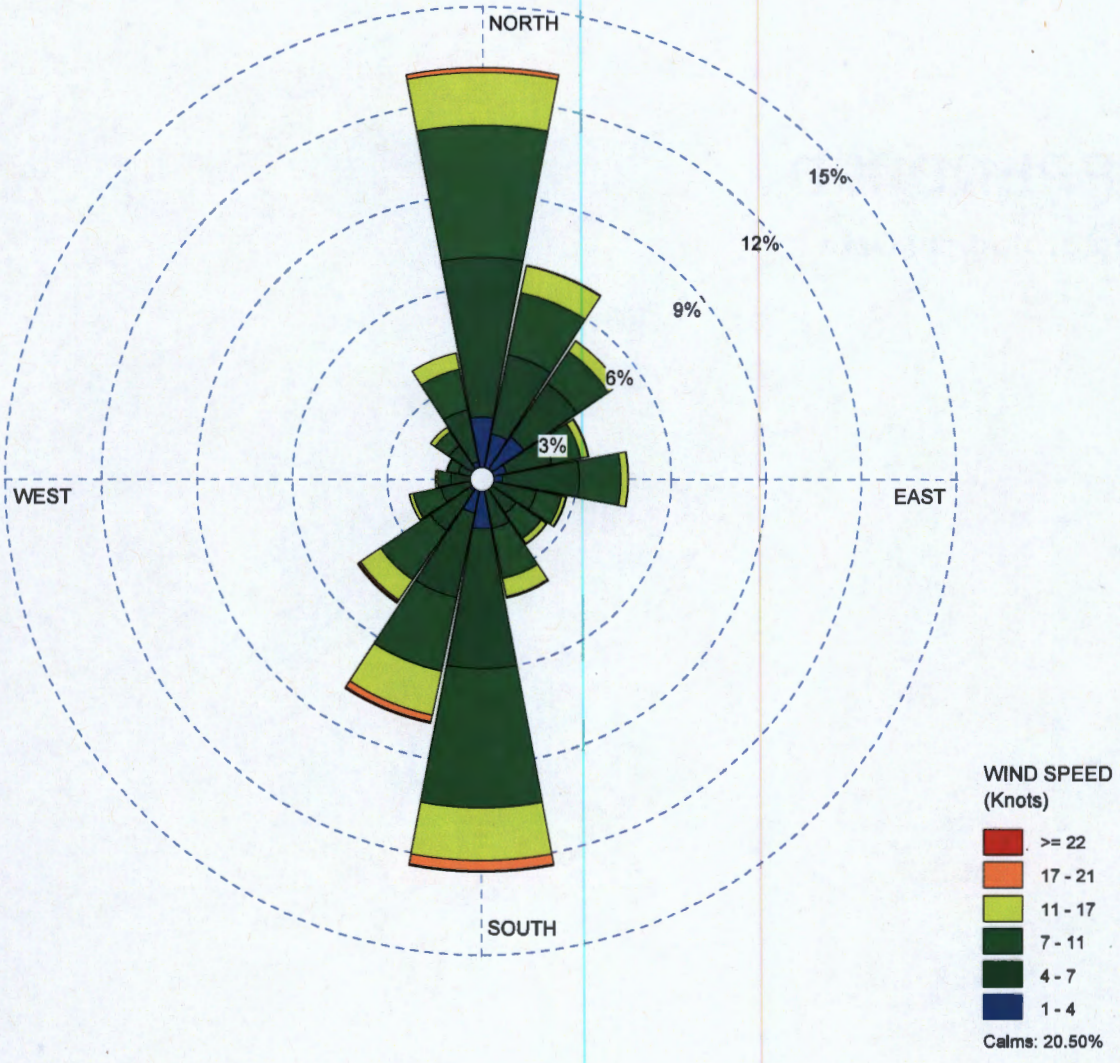
Prepared by: Randall Woodruff

APPENDIX D

Meteorological Data

WIND ROSE PLOT:
Station #13978

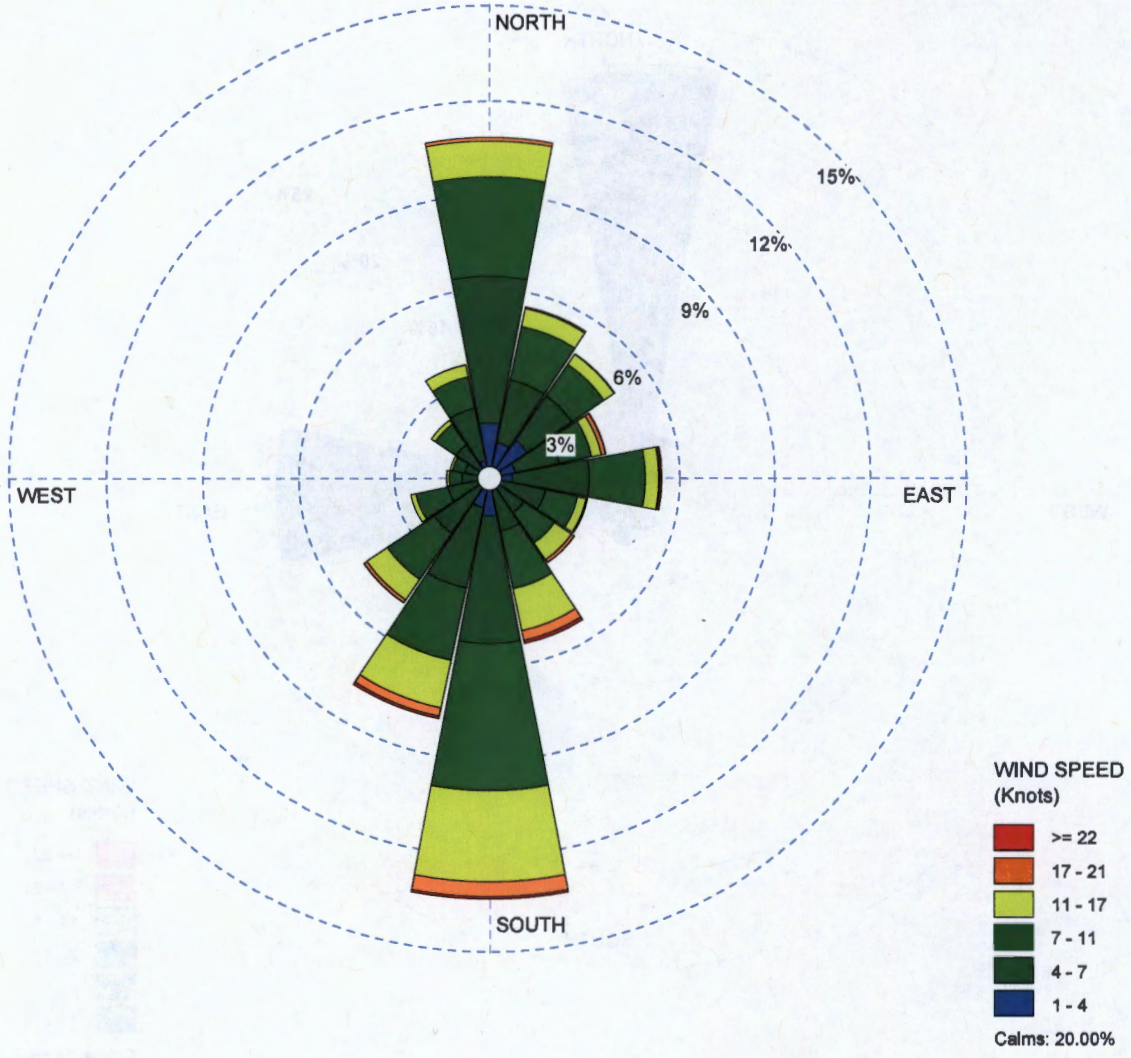
DISPLAY:
Wind Speed
Direction (blowing from)



COMMENTS:	DATA PERIOD:	COMPANY NAME:	
	Start Date: 9/1/2014 - 00:00 **End Date: 9/30/2015 - 23:00**	**ARCADIS**	
		MODELER: **JEC**	
	CALM WINDS: **20.50%**	TOTAL COUNT: **11463 observations**	
	AVG. WIND SPEED: **5.27 Knots**	DATE: **4/22/2016**	PROJECT NO.:

WIND ROSE PLOT:
Station #13978

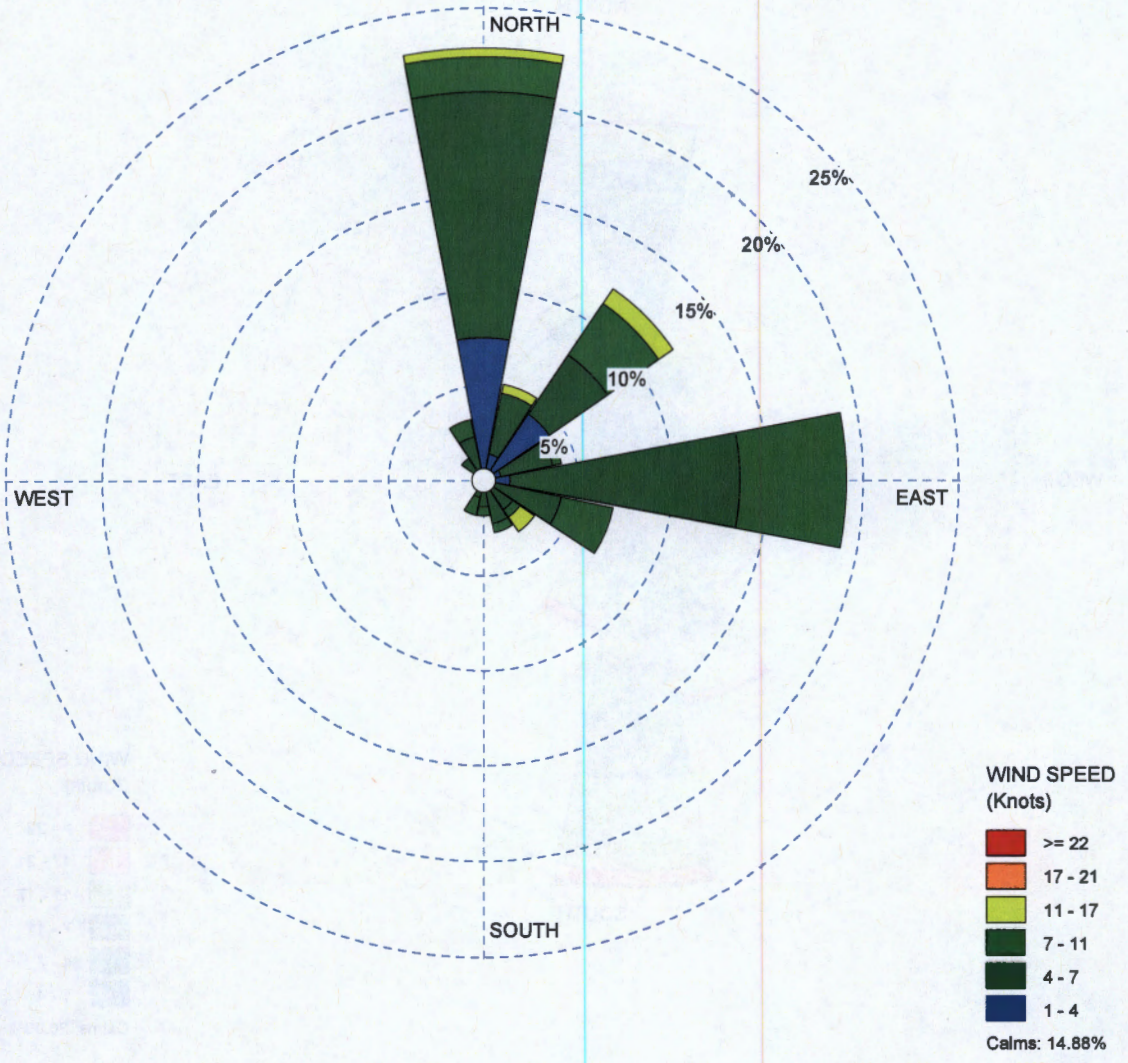
DISPLAY:
Wind Speed
Direction (blowing from)



COMMENTS:	DATA PERIOD: **Start Date: 3/2/2015 - 00:00** **End Date: 3/31/2016 - 22:00**	COMPANY NAME: **ARCADIS**	
		MODELER: **JEC**	
	CALM WINDS: **20.00%**	TOTAL COUNT: **12082 observations**	
	AVG. WIND SPEED: **5.66 Knots**	DATE: **4/22/2016**	PROJECT NO.:

WIND ROSE PLOT:
Station #13978

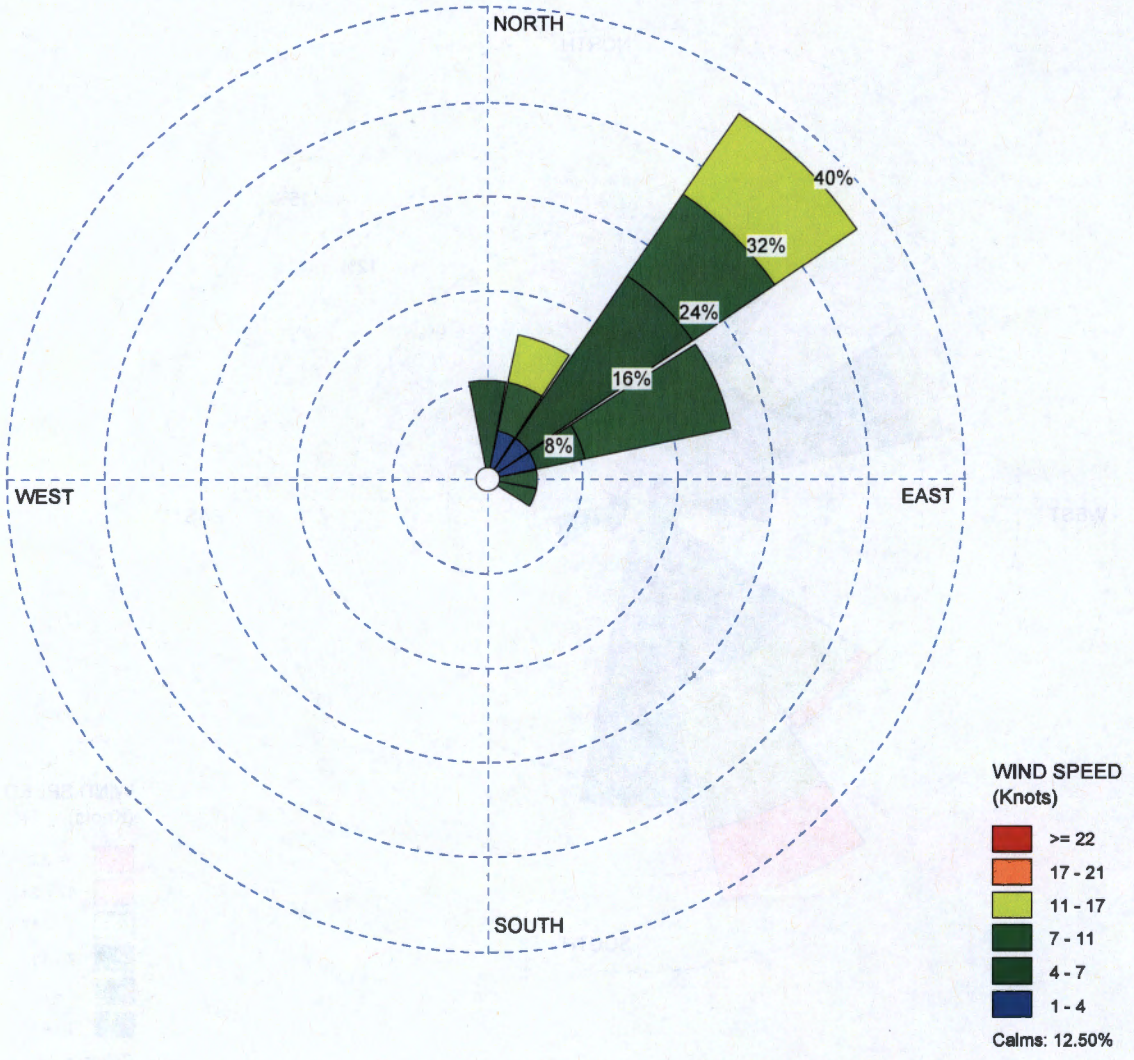
DISPLAY:
Wind Speed
Direction (blowing from)



COMMENTS:	DATA PERIOD:	COMPANY NAME:	
	Start Date: 9/14/2015 - 00:00 **End Date: 9/22/2015 - 23:00**	**ARCADIS**	
		MODELER: **JEC**	
	CALM WINDS: **14.88%**	TOTAL COUNT: **215 observations**	
	AVG. WIND SPEED: **4.68 Knots**	DATE: **4/21/2016**	PROJECT NO.:

WIND ROSE PLOT:
Station #13978

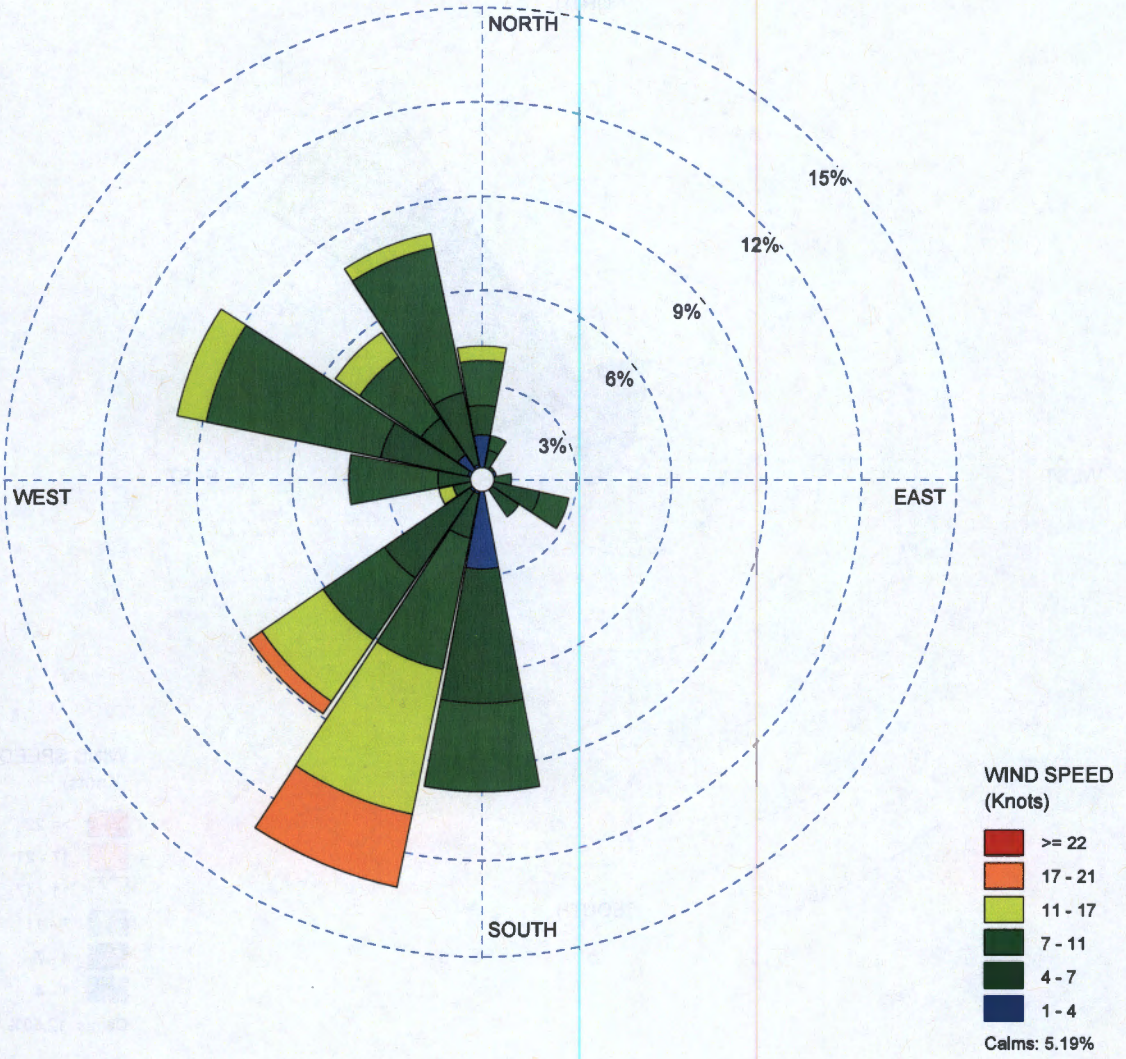
DISPLAY:
Wind Speed
Direction (blowing from)



COMMENTS:	DATA PERIOD: **Start Date: 9/22/2015 - 12:00** **End Date: 9/23/2015 - 23:00**	COMPANY NAME: **ARCADIS**	
		MODELER: **JEC**	
	CALM WINDS: **12.50%**	TOTAL COUNT: **24 observations**	
	AVG. WIND SPEED: **6.03 Knots**	DATE: **4/21/2016**	PROJECT NO.:

WIND ROSE PLOT:
Station #13978

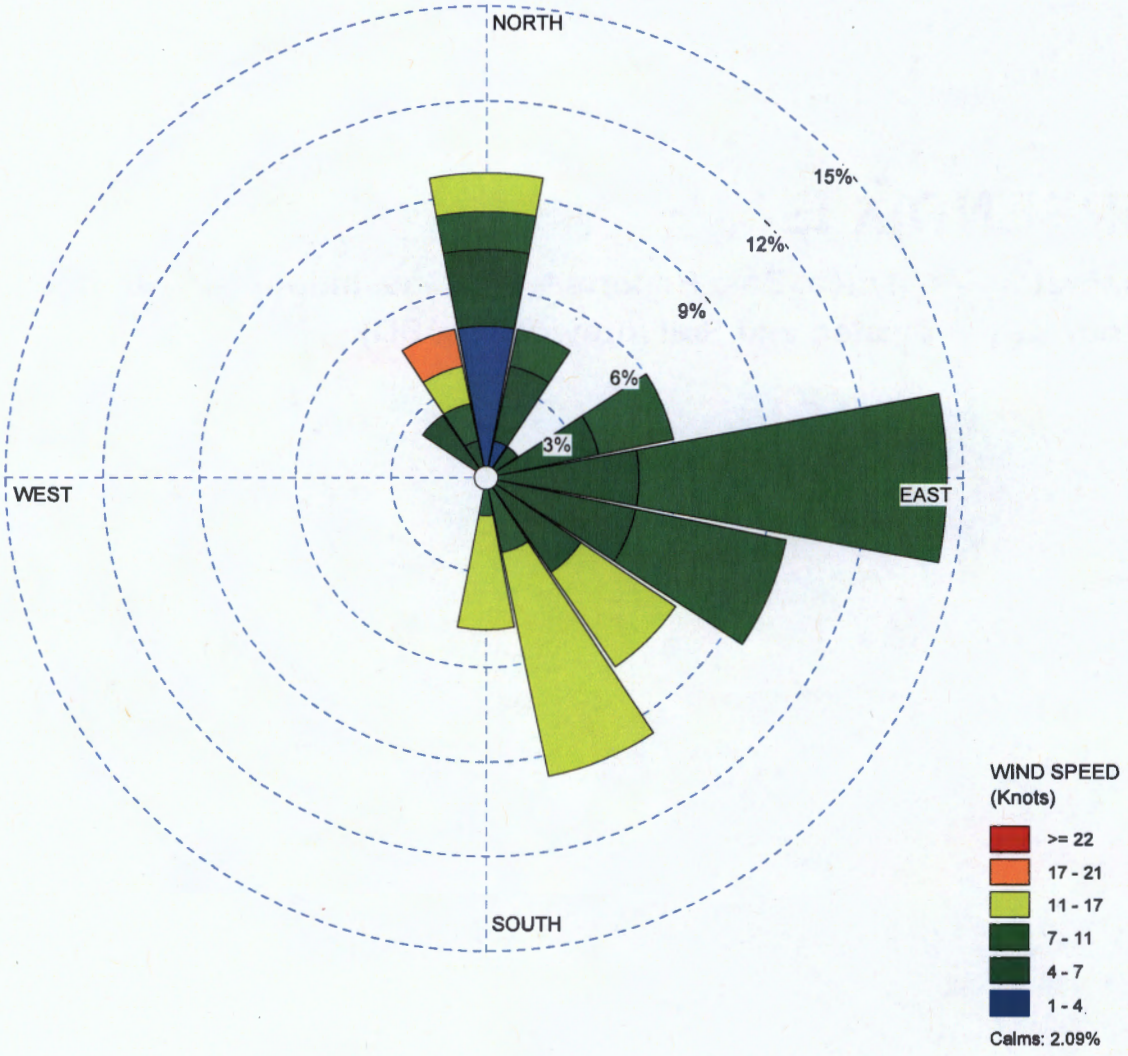
DISPLAY:
Wind Speed
Direction (blowing from)



COMMENTS:	DATA PERIOD: **Start Date: 2/24/2016 - 00:00** **End Date: 3/2/2016 - 23:00**	COMPANY NAME: **ARCADIS**	
		MODELER: **JEC**	
	CALM WINDS: **5.19%**	TOTAL COUNT: **214 observations**	
	AVG. WIND SPEED: **5.57 Knots**	DATE: **4/22/2016**	PROJECT NO.:

WIND ROSE PLOT:
Station #13978

DISPLAY:
Wind Speed
Direction (blowing from)



COMMENTS:	DATA PERIOD: **Start Date: 3/2/2016 - 00:00** **End Date: 3/3/2016 - 23:00**	COMPANY NAME: **ARCADIS**	
		MODELER: **JEC**	
	CALM WINDS: **2.09%**	TOTAL COUNT: **83 observations**	
	AVG. WIND SPEED: **5.85 Knots**	DATE: **4/22/2016**	PROJECT NO.:

WRPLOT View - Lakes Environmental Software

APPENDIX E

Laboratory Analytical Data Reports – Soil Gas, Indoor Air, Sub-Slab Vapor, Groundwater, and Soil (provided on CD)

APPENDIX F

Indoor Air Building and Sampling Surveys

Building Survey and Product Inventory Form

Directions: This form must be completed for each residence or area involved in indoor air testing.

Preparer's Name: Marie Heap / Randy Woodruff

Date/Time Prepared: 9-21-15 / 1215

House #1

Preparer's Affiliation: ARCADIS

Phone No.: 317 231 6500

Purpose of Investigation: VI Assessment

1. OCCUPANT:

Interviewed: Y / N

Last Name: (b) (6) First Name: (b) (6)

Address: (b) (6) Grenada MS

County: Grenada

Home Phone: (b) (6) Office Phone: (b) (6)

Number of Occupants/Persons at this Location: 2

Age of Occupants: adult (b) (6)

Best time to call-anytime

2. OWNER OR LANDLORD: (Check if Same as Occupant X)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

window a/c unit

na

3. BUILDING CHARACTERISTICS:

Type of Building: (circle appropriate response)

(Residential)	School	Commercial/Multi-use
Industrial	Church	Other: _____

If the Property is Residential, Type? (circle appropriate response)

(Ranch)		2-Family 3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other: _____

If Multiple Units, How Many? na

If the Property is Commercial, Type?

Business Type(s) na

Does it include residences (i.e., multi-use)? Y / N If yes, how many? na

Other Characteristics:

Number of Floors 1 Building Age 1980s (original owner)

Is the Building Insulated? (Y) / N How Air-Tight? Tight / (Average) / Not Tight

4. AIRFLOW:

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow Between Floors na

Airflow Near Source

na

Outdoor Air Infiltration

na

Infiltration Into Air Ducts

na

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS: (circle all that apply)

a.	**Above grade construction:**	wood frame	concrete	stone brick
b.	**Basement type:**	full	crawlspace	slab other _____
c.	**Basement floor:**	concrete	dirt	stone other na
d.	**Basement floor:**	uncovered	covered	covered with na
e.	**Concrete floor:**	unsealed	sealed	sealed with unknown
f.	**Foundation walls:**	poured	block stone	other na
g.	**Foundation walls:**	unsealed	sealed	sealed with na
h.	**The basement is:**	wet	damp	dry moldy na
i.	**The basement is:**	finished	unfinished	partially finished na
j.	**Sump present?**	Y / N		
k.	**Water in sump?**	Y / N / NA		

Basement/lowest level depth below grade: _____(feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

None observed

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? Y / N na

6. HEATING, VENTILATING, AND AIR CONDITIONING: (circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

(Hot air circulation)	Heat pump	Hot water baseboard	Central gas heating
Space heaters	Stream radiation	Radiant floor	central air
Electric baseboard	Wood stove	Outdoor wood boiler	
Other _____			

The primary type of fuel used is:

Natural base	Fuel oil	Kerosene
(Electric)	Propane	Solar
Wood coal	natural gas.	

Domestic hot water tank fueled by: gas

Boiler/furnace located in: Basement Outdoors (Main Floor) Other_____

Air conditioning: (Central Air) both (Window Units) Open Windows None

Are there air distribution ducts present? (Y) N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY:

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never na

General Use of Each Floor (e.g., family room, bedroom, laundry, workshop, storage):

Basement na

1st Floor Bed / Bath / kitchen / Living

2nd Floor na

3rd Floor na

4th Floor na

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY:

a. Is there an attached garage? Y / N carport

b. Does the garage have a separate heating unit? Y / N / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, ATV, car)?
Y / N / NA Please specify: kept in shed

d. Has the building ever had a fire? Y / N When? _____

e. Is a kerosene or unvented gas space heater present? Y / N Where? _____

f. Is there a workshop or hobby/craft area? Y / N Where & Type? shed.

g. Is there smoking in the building? Y / N How frequently? outside

h. Have cleaning products been used recently? Y / N When & Type? _____

i. Have cosmetic products been used recently? Y / N When & Type? _____

j. Has painting/staining been done in the last 6 months? Y / N Where & When? no.

k. Is there new carpet, drapes or other textiles? Y / N Where & When? no

l. Have air fresheners been used recently? Y / N When & Type? no

m. Is there a kitchen exhaust fan? Y / N If yes, where stove

n. Is there a bathroom exhaust fan? Y / N If yes, where vented? _____

o. Is there a clothes dryer? Y / N **If yes, is it vented outside?** Y / N

p. Has there been a pesticide application? Y / N When & Type? few weeks ago
termite treatment.

q. **Are there odors in the building?** Y / (N)

If yes, please describe: _____

Do any of the building occupants use solvents (e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist) at work? Y / (N)

If yes, what types of solvents are used? retired

If yes, are their clothes washed at work? Y / N na

Do any of the building occupants regularly use or work at a dry-cleaning service? (circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No monthly

(Yes, use dry-cleaning infrequently (monthly or less)) Unknown not recently

Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / (N)

Date of Installation: na

Is the system active or passive? Active/Passive na

Are there any Outside Contaminant Sources? (circle appropriate responses)

Contaminated site with 1000-foot radius? Y / N Specify _____

Other stationary sources nearby (e.g., gas stations, emission stacks, etc.): _____

_____

Heavy vehicle traffic nearby (or other mobile sources): _____

9. WATER AND SEWAGE:

Water Supply: (Public Water) Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: (Public Sewer) Septic Tank Leach Field Dry Well Other: _____

- Standing water occasionally noted

10. RELOCATION INFORMATION: (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

_____

NA

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

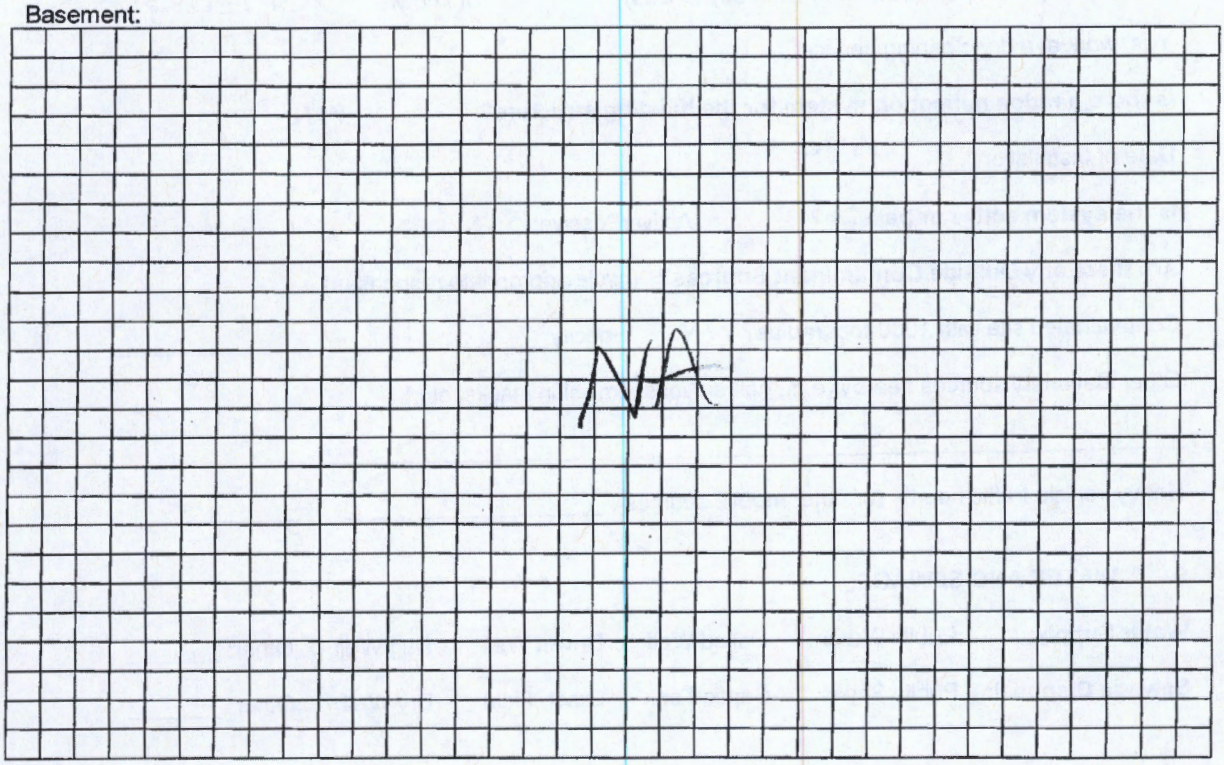
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS:

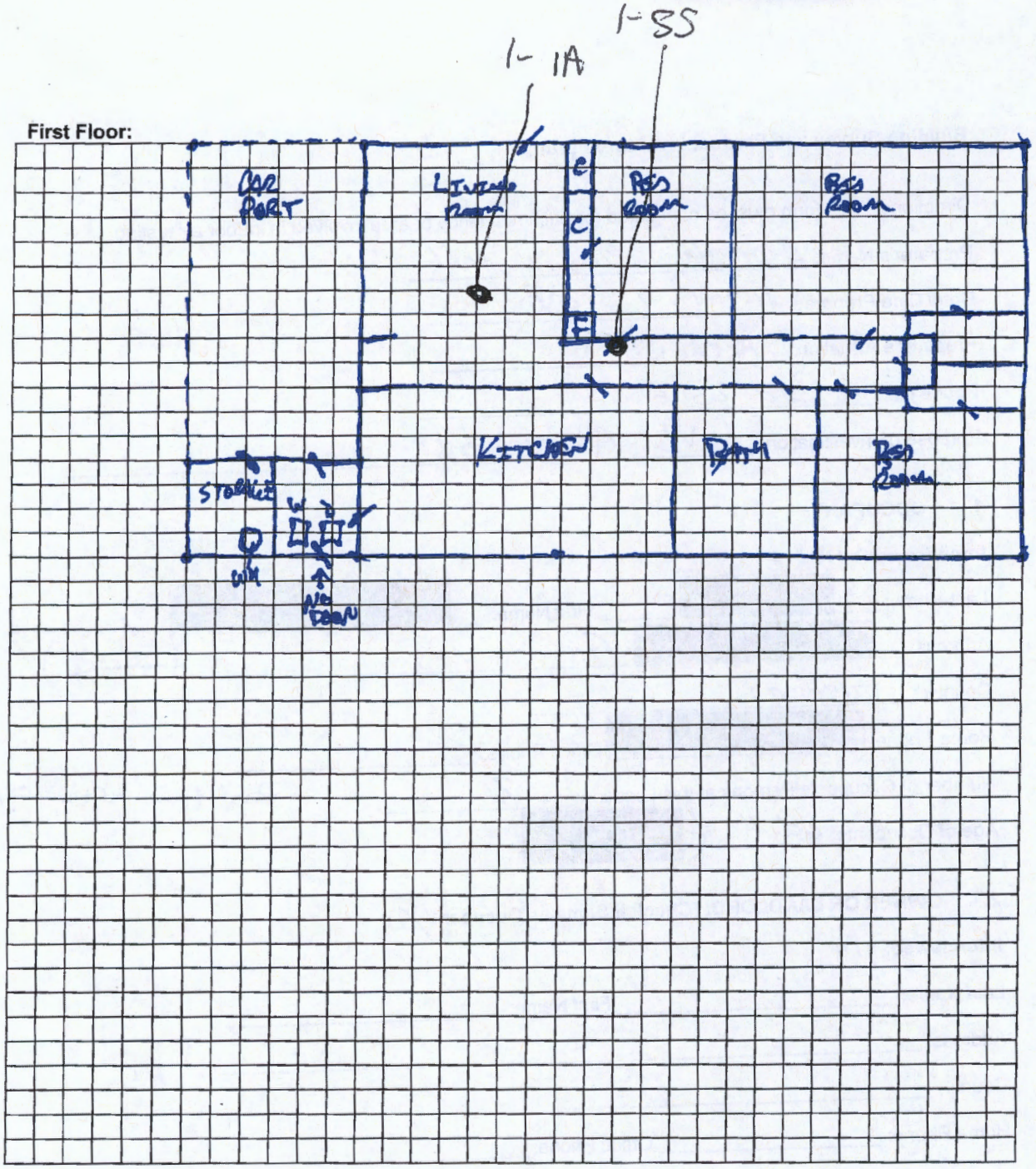
Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



[redacted]

First Floor:


I-1A
I-55
CAR PORT
LIVING ROOM
BED ROOM
BED ROOM
KITCHEN
BATH
BED ROOM
STORAGE
W/H
W
W
W

Building Survey and Product Inventory Form

Directions: This form must be completed for each residence or area involved in indoor air testing.

Preparer's Name: Marie Harp / Randy Woodruff

Date/Time Prepared: 9-21-15 / 1335

House #2

Preparer's Affiliation: ARCADIS

Phone No.: 317 231 6526

Purpose of Investigation: VI Assessment.

1. OCCUPANT:

Interviewed: Y / N

Last Name: (b) (6) First Name: (b) (6) ~~interviewed~~ ~~Sister~~

Address: (b) (6) Grenada MS

County: Grenada

Home Phone: (b) (6) Office Phone: _____

Number of Occupants/Persons at this Location: 2

Best time after 9am.

Age of Occupants: adults (b) (6)

2. OWNER OR LANDLORD: (Check if Same as Occupant X)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____ na

County: _____

Home Phone: _____ Office Phone: _____

3. **BUILDING CHARACTERISTICS:**

Type of Building: (circle appropriate response)

(Residential)	School	Commercial/Multi-use
Industrial	Church	Other: _____

If the Property is Residential, Type? (circle appropriate response)

(Ranch)		2-Family 3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If Multiple Units, How Many? na

If the Property is Commercial, Type?

Business Type(s) na

Does it include residences (i.e., multi-use)? Y / N If yes, how many? na

Other Characteristics:

Number of Floors 1 Building Age 1980

Is the Building Insulated? Y / N How Air-Tight? Tight / (Average) / Not Tight

4. **AIRFLOW:**

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow Between Floors na

Airflow Near Source

na

Outdoor Air Infiltration

na

Infiltration Into Air Ducts

na

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS: (circle all that apply)

a.	**Above grade construction:**	wood frame	concrete	stone brick	
b.	**Basement type:**	full	crawlspace	slab	other _____
c.	**Basement floor:**	concrete	dirt	stone	other na
d.	**Basement floor:**	uncovered	covered	covered with na	
e.	**Concrete floor:**	unsealed	sealed	sealed with unknown	
f.	**Foundation walls:**	poured	block stone	other na	
g.	**Foundation walls:**	unsealed	sealed	sealed with na	
h.	**The basement is:**	wet	damp	dry	moldy na
i.	**The basement is:**	finished	unfinished	partially finished	na
j.	**Sump present?**	Y / N			
k.	**Water in sump?**	Y / N / NA			

Basement/lowest level depth below grade: _____(feet) na

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

none observed

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? Y / N na

6. HEATING, VENTILATING, AND AIR CONDITIONING: (circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

(Hot air circulation)	Heat pump	Hot water baseboard	electric or gas.
Space heaters	Stream radiation	Radiant floor	electric stove
Electric baseboard	Wood stove	Outdoor wood boiler	public water
Other _____	furnace (gas.) central		public sewer.

The primary type of fuel used is: central AC no window units

Natural base	Fuel oil	Kerosene
(Electric)	Propane	Solar
Wood coal	natural gas	

Domestic hot water tank fueled by: nat. gas.

Boiler/furnace located in: Basement Outdoors (Main Floor) Other_____

Air conditioning: (Central Air) Window Units Open Windows None

Are there air distribution ducts present? (Y) / N attic install.

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY:

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never na

General Use of Each Floor (e.g., family room, bedroom, laundry, workshop, storage):

Basement na

1st Floor Bed/Bath/Kitchen/Living

2nd Floor na

3rd Floor na

4th Floor na.

8. **FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY:**

a. **Is there an attached garage?** Y / N carport w/ attached shed

b. **Does the garage have a separate heating unit?** Y / N (NA)

c. **Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, ATV, car)?**
Y / N / NA Please specify: Shed (detached.)

d. **Has the building ever had a fire?** Y / (N) When? _____

e. **Is a kerosene or unvented gas space heater present?** Y / (N) Where? _____

f. **Is there a workshop or hobby/craft area?** Y / (N) Where & Type? _____

g. **Is there smoking in the building?** Y / (N) How frequently? _____

h. **Have cleaning products been used recently?** Y / N When & Type? floor cleaner ~1 week ago.

i. **Have cosmetic products been used recently?** Y / N When & Type? _____

j. Has painting/staining been done in the last 6 months? Y / (N) Where & When? _____

k. **Is there new carpet, drapes or other textiles?** Y / (N) **Where & When?** _____

l. **Have air fresheners been used recently?** (Y) / N When & Type? yesterday

m. **Is there a kitchen exhaust fan?** Y / (N) If yes, where _____

n. **Is there a bathroom exhaust fan?** Y / N If yes, where vented? 1 yes / 1 no

o. **Is there a clothes dryer?** Y / (N) **If yes, is it vented outside?** Y / N

p. **Has there been a pesticide application?** (Y) / N When & Type? _____

- no hornspray
- bug spray outside ~2 weeks ago.
- start of summer - weed killer

q. **Are there odors in the building?** Y / (N)

If yes, please describe: _____

Do any of the building occupants use solvents (e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist) at work? Y / (N) no AC unit job.

If yes, what types of solvents are used? _____

If yes, are their clothes washed at work? Y / N na

Do any of the building occupants regularly use or work at a dry-cleaning service? (circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No over a month since dry cleaner clothes brought in

(Yes,) use dry-cleaning infrequently (monthly or less) Unknown

Yes, work at a dry-cleaning service 3 x year.

Is there a radon mitigation system for the building/structure? Y / (N)

Date of Installation: na

Is the system active or passive? Active/Passive na.

Are there any Outside Contaminant Sources? (circle appropriate responses)

Contaminated site with 1000-foot radius? Y / N Specify _____

Other stationary sources nearby (e.g., gas stations, emission stacks, etc.): _____

_____

Heavy vehicle traffic nearby (or other mobile sources): _____

9. **WATER AND SEWAGE:**

Water Supply:	(Public Water)	Drilled Well	Driven Well	Dug Well	Other: _____
Sewage Disposal:	(Public Sewer)	Septic Tank	Leach Field	Dry Well	Other: _____

10. **RELOCATION INFORMATION:** (for oil spill residential emergency)

a. **Provide reasons why relocation is recommended:** _____

_____

b. **Residents choose to:** remain in home relocate to friends/family relocate to hotel/motel

c. **Responsibility for costs associated with reimbursement explained?** Y / N

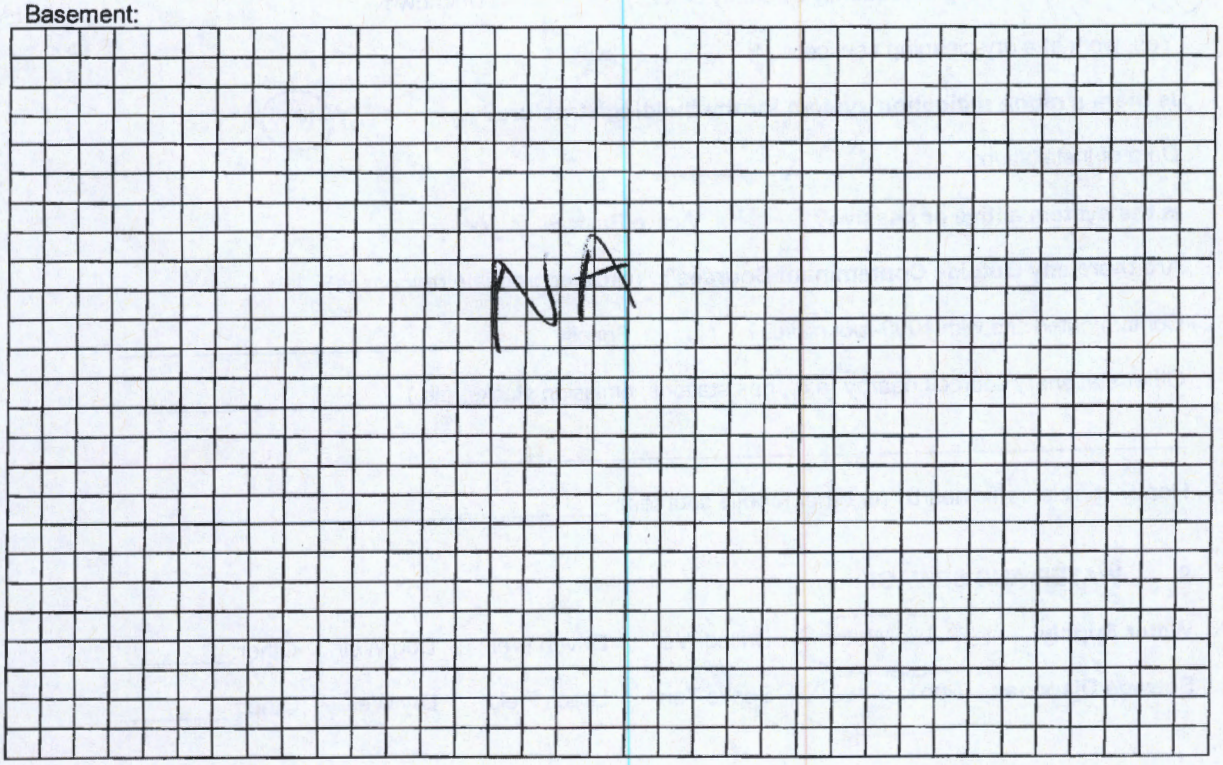
d. **Relocation package provided and explained to residents?** Y / N

n/a

11. **FLOOR PLANS:**

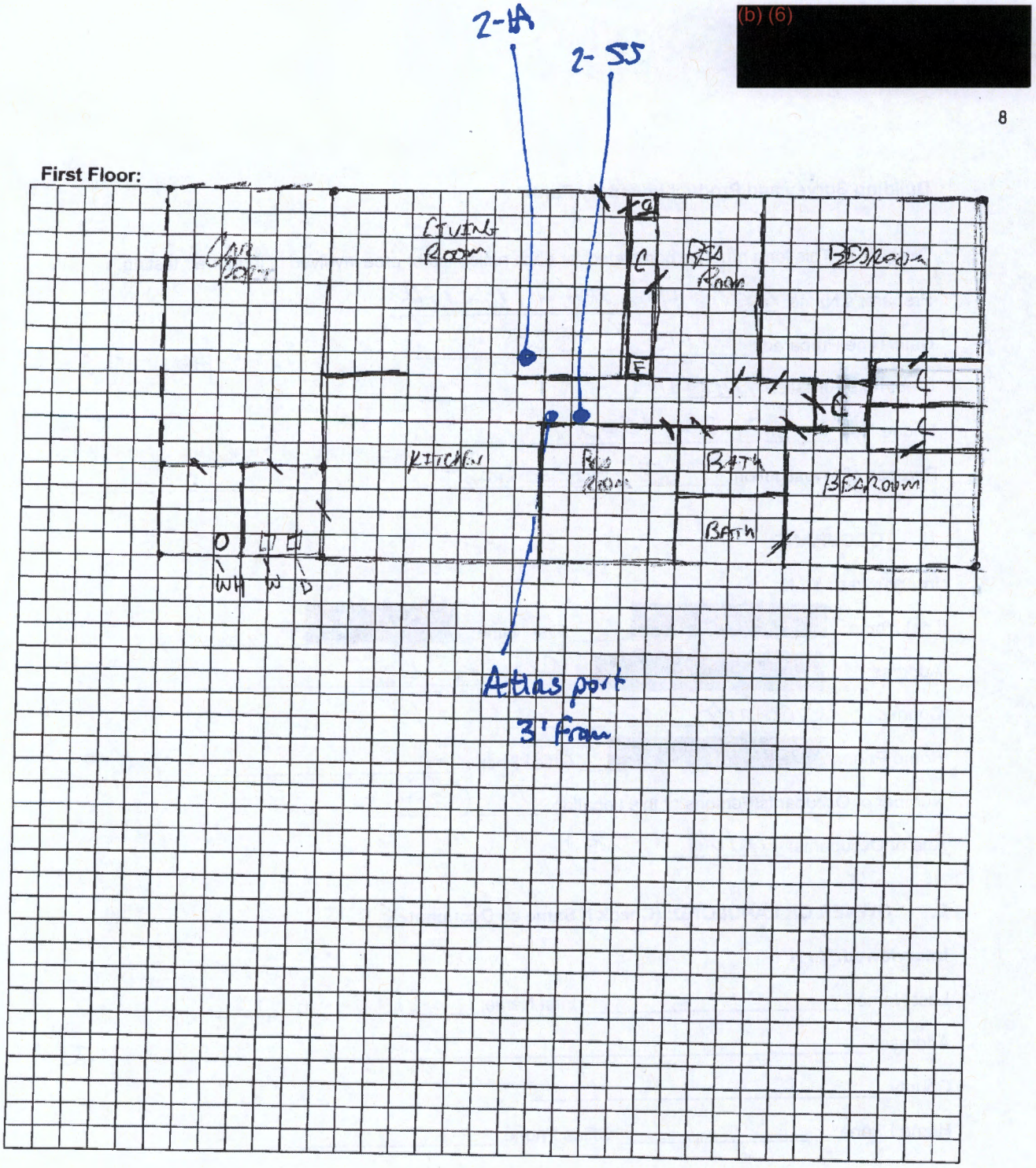
Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



(b) (6) [redacted]

First Floor:



H+P
mobile
cyc

Building Survey and Product Inventory Form

Directions: This form must be completed for each residence or area involved in indoor air testing.

Preparer's Name: Marie Harp / Randy Wadkiff

Date/Time Prepared: 9-21-15 / 1525

House #3

Preparer's Affiliation: ARCADIS

Phone No.: 317-231-6500

Purpose of Investigation: VI Assessment

1. OCCUPANT:

Interviewed: Y / N

Last Name: (b) (6) First Name: (b) (6)

Address: (b) (6) Grenada MS

County: Grenada

Home Phone: (b) (6) Office Phone: _____

Number of Occupants/Persons at this Location: 1 (2nd story)

Age of Occupants: adult (78)

2. OWNER OR LANDLORD: (Check if Same as Occupant X)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____ na

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS:

Type of Building: (circle appropriate response)

(Residential)	School	Commercial/Multi-use
Industrial	Church	Other: _____

If the Property is Residential, Type? (circle appropriate response)

(Ranch)		2-Family 3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other: _____

If Multiple Units, How Many? na

If the Property is Commercial, Type?

Business Type(s) na

Does it include residences (i.e., multi-use)? Y / N If yes, how many? na

Other Characteristics:

Number of Floors 1 Building Age 1970's or 1980

Is the Building Insulated? (Y) / N How Air-Tight? Tight / (Average) / Not Tight

4. AIRFLOW:

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow Between Floors

na

Airflow Near Source

na

Outdoor Air Infiltration

na

Infiltration Into Air Ducts

na

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS: (circle all that apply)

a.	**Above grade construction:**	wood frame	concrete	stone brick	
b.	**Basement type:**	full	crawlspace	slab	other _____
c.	**Basement floor:**	concrete	dirt	stone	other na
d.	**Basement floor:**	uncovered	covered	covered with na	
e.	**Concrete floor:**	unsealed	sealed	sealed with unknown over vinyl flooring Concrete	
f.	**Foundation walls:**	poured	block stone	other na	
g.	**Foundation walls:**	unsealed	sealed	sealed with na	
h.	**The basement is:**	wet	damp	dry	moldy na
i.	**The basement is:**	finished	unfinished	partially finished	na
j.	**Sump present?**	Y / N			
k.	**Water in sump?**	Y / N / NA			

Basement/lowest level depth below grade: _____(feet) na

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

none observed

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? Y / N na

6. **HEATING, VENTILATING, AND AIR CONDITIONING:** (circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

(Hot air circulation)	Heat pump	Hot water baseboard
Space heaters	Stream radiation	Radiant floor
Electric baseboard	Wood stove	Outdoor wood boiler
Other _____		

wall AC

gas furnace

The primary type of fuel used is:

Natural ~~gas~~ gas	Fuel oil	Kerosene
(Electric)	Propane	Solar
Wood coal		

Domestic hot water tank fueled by: natural gas

Boiler/furnace located in: Basement Outdoors (Main Floor) Other_____

Air conditioning: Central Air (Window Units) Open Windows None wall unit.

Are there air distribution ducts present? (Y)/N attic wall

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. **OCCUPANCY:**

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never na

General Use of Each Floor (e.g., family room, bedroom, laundry, workshop, storage):

Basement na

1st Floor Bed / Bath / Kitchen / Living

2nd Floor na

3rd Floor na

4th Floor na

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY:

a. **Is there an attached garage?** Y / N carport.

b. **Does the garage have a separate heating unit?** Y / N / NA

c. **Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, ATV, car)?**
Y / N / NA Please specify: na

d. **Has the building ever had a fire?** Y / N When? _____

e. **Is a kerosene or unvented gas space heater present?** Y / N Where? _____

f. **Is there a workshop or hobby/craft area?** Y / N Where & Type? _____

g. **Is there smoking in the building?** Y / N How frequently? _____

h. **Have cleaning products been used recently?** Y / N When & Type? _____

i. **Have cosmetic products been used recently?** Y / N When & Type? _____

j. Has painting/staining been done in the last 6 months? Y / N Where & When? _____

k. **Is there new carpet, drapes or other textiles?** **Y / N Where & When?** _____

l. **Have air fresheners been used recently?** Y / N When & Type? _____

m. **Is there a kitchen exhaust fan?** Y / N If yes, where _____

n. **Is there a bathroom exhaust fan?** Y / N If yes, where vented? _____

o. **Is there a clothes dryer?** Y / N **If yes, is it vented outside?** Y / N

p. **Has there been a pesticide application?** Y / N When & Type? _____

no air fresheners
no mothballs

q. **Are there odors in the building?** Y / (N)

If yes, please describe: _____

Do any of the building occupants use solvents (e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist) at work? Y / (N)

If yes, what types of solvents are used? na

If yes, are their clothes washed at work? Y / N na

Do any of the building occupants regularly use or work at a dry-cleaning service? (circle appropriate response)

Yes, use dry-cleaning regularly (weekly) (No)

Yes, use dry-cleaning infrequently (monthly or less) Unknown

Yes, work at a dry-cleaning service none.

Is there a radon mitigation system for the building/structure? Y / (N)

Date of Installation: na

Is the system active or passive? Active/Passive na

Are there any Outside Contaminant Sources? (circle appropriate responses)

Contaminated site with 1000-foot radius? Y / N Specify _____

Other stationary sources nearby (e.g., gas stations, emission stacks, etc.): _____

_____

Heavy vehicle traffic nearby (or other mobile sources): _____

9. **WATER AND SEWAGE:**

Water Supply: (Public Water) Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: (Public Sewer) Septic Tank Leach Field Dry Well Other: _____

10. **RELOCATION INFORMATION:** (for oil spill residential emergency)

a. **Provide reasons why relocation is recommended:** _____

_____

b. **Residents choose to:** remain in home relocate to friends/family relocate to hotel/motel

c. **Responsibility for costs associated with reimbursement explained?** Y / N

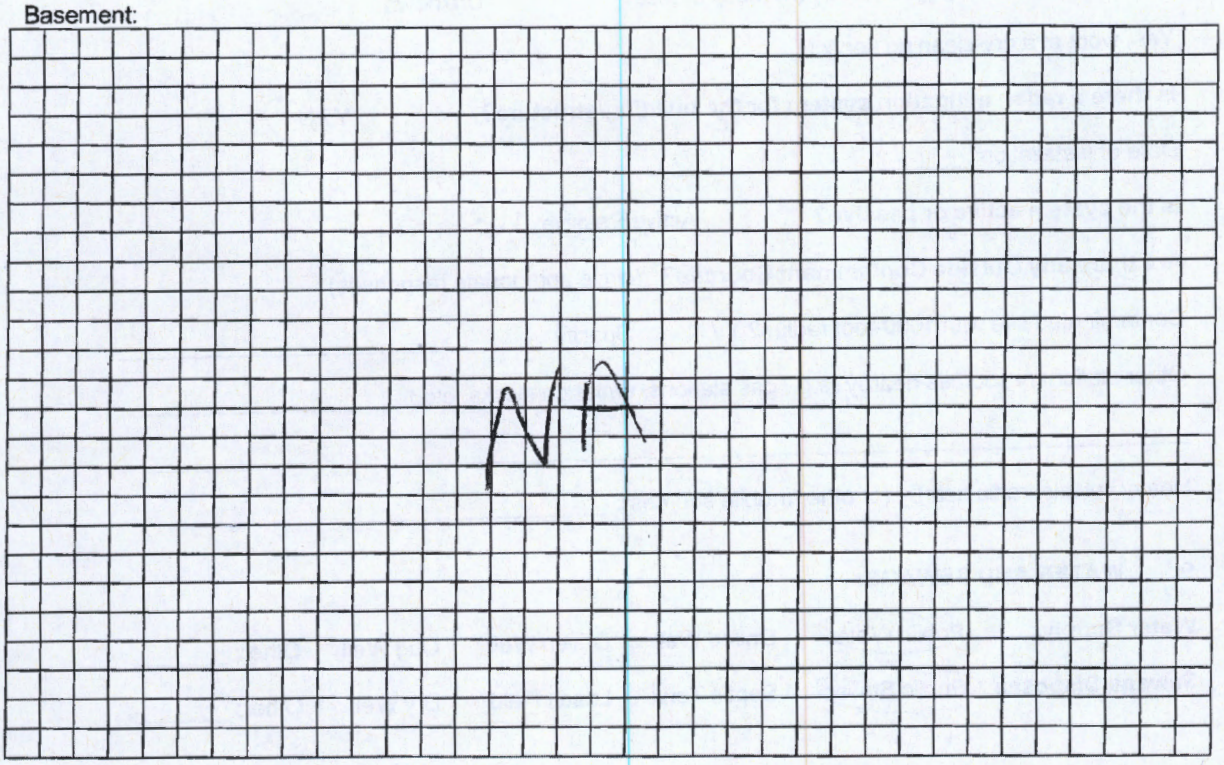
d. **Relocation package provided and explained to residents?** Y / N

Na

11. **FLOOR PLANS:**

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



(b) (6) [redacted]

4 totes of products

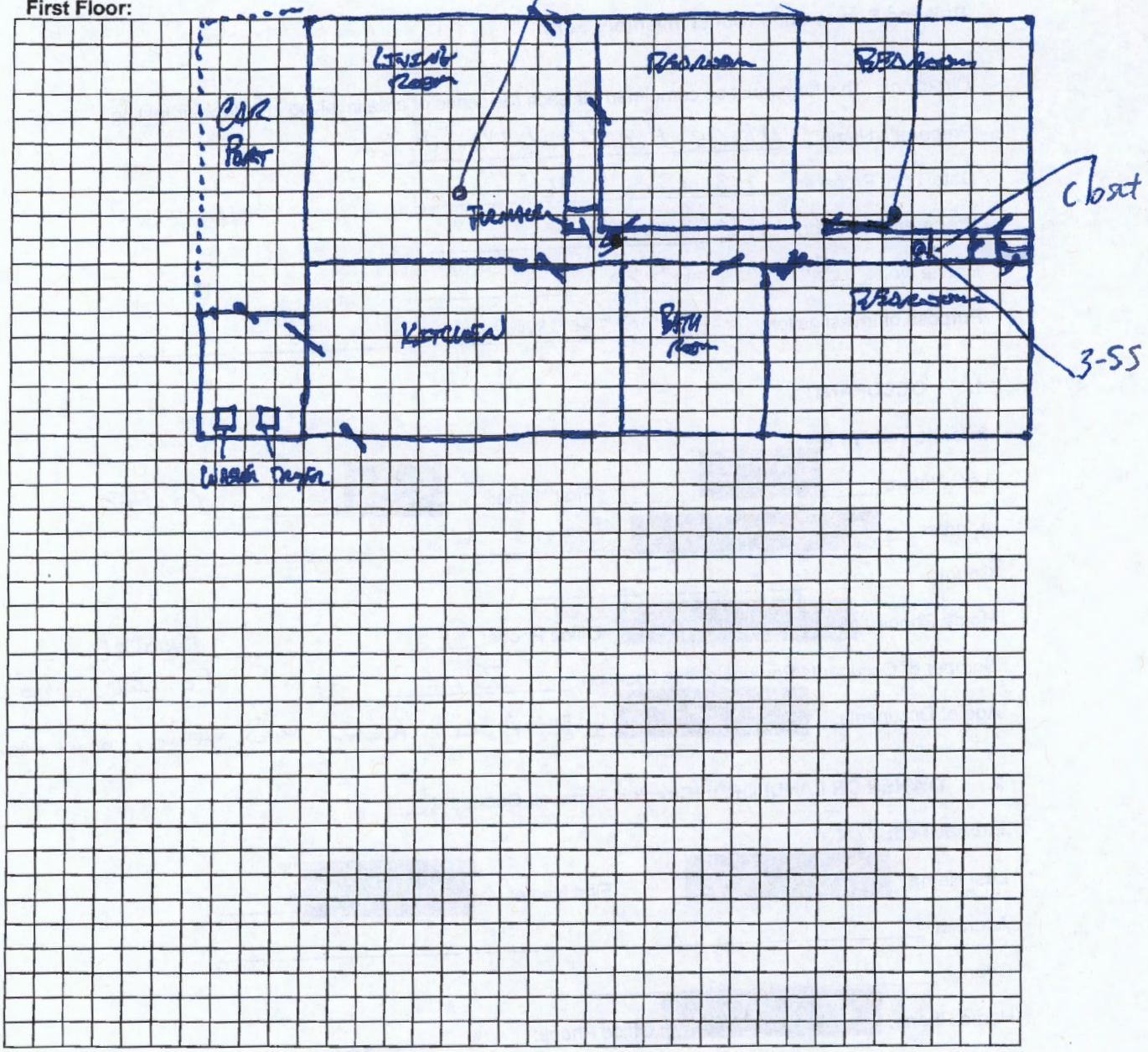
3

3 IAQ

Atlas 55

8

First Floor:



Building Survey and Product Inventory Form

Directions: This form must be completed for each residence or area involved in indoor air testing.

Preparer's Name: Marie Heap/Randy Wadkff

Date/Time Prepared: 9-21-15/ 1640

House # 4

Preparer's Affiliation: ARCADIS

Phone No.: 317-231-6500

Purpose of Investigation: VI Assessment

1. OCCUPANT:

Interviewed: Y / N

Last Name: (b) (6) First Name: (b) (6) renter

Address: (b) (6) Grenada MS

County: Grenada

Home Phone: (b) (6) cell Office Phone: Best time to call after 3pm

Number of Occupants/Persons at this Location: 2

Age of Occupants: (b) (6) & lived here ~3 years & moving

son

2. OWNER OR LANDLORD: (Check if Same as Occupant ___)

Interviewed: Y / N

Last Name: (b) (6) First Name: (b) (6)

Address:

County:

Home Phone: (b) (6) Office Phone:

3. BUILDING CHARACTERISTICS:

Type of Building: (circle appropriate response)

Residential	School	Commercial/Multi-use
Industrial	Church	Other: _____

If the Property is Residential, Type? (circle appropriate response)

Ranch		2-Family 3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If Multiple Units, How Many? na

If the Property is Commercial, Type?

Business Type(s) na

Does it include residences (i.e., multi-use)? Y / N **If yes, how many?** na

Other Characteristics:

Number of Floors 1 Building Age 1974

Is the Building Insulated? Y / N How Air-Tight? Tight / Average / Not Tight

4. AIRFLOW:

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow Between Floors

na

Airflow Near Source

na

Outdoor Air Infiltration

na

Infiltration Into Air Ducts

na

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS: (circle all that apply)

a.	**Above grade construction:**	wood frame	concrete	stone	brick
b.	**Basement type:**	full	crawlspace	slab	other _____
c.	**Basement floor:**	concrete	dirt	stone	other na
d.	**Basement floor:**	uncovered	covered	covered with	na
e.	**Concrete floor:**	unsealed	sealed	sealed with	unknown
f.	**Foundation walls:**	poured	block stone	other	na
g.	**Foundation walls:**	unsealed	sealed	sealed with	na
h.	**The basement is:**	wet	damp	dry	moldy na
i.	**The basement is:**	finished	unfinished	partially finished	na

j. **Sump present?** Y / N

k. **Water in sump?** Y / N / NA

Basement/lowest level depth below grade: _____(feet) na

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

none observed

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? Y / N na

6. HEATING, VENTILATING, AND AIR CONDITIONING: (circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

(Hot air circulation)	Heat pump	Hot water baseboard	central heat
Space heaters	Stream radiation	Radiant floor	window ac units
Electric baseboard	Wood stove	Outdoor wood boiler	
Other _____			

The primary type of fuel used is:

Natural base	Fuel oil	Kerosene
(Electric)	Propane	Solar
Wood coal	natural gas	

Domestic hot water tank fueled by: gas

Boiler/furnace located in: Basement Outdoors (Main Floor) Other Hall

Air conditioning: Central Air Window Units Open Windows None

Are there air distribution ducts present? (Y) / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY:

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never na

General Use of Each Floor (e.g., family room, bedroom, laundry, workshop, storage):

Basement na

1st Floor Bed/Bath/. Kitchin/living

2nd Floor na

3rd Floor na

4th Floor na

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY:

a. **Is there an attached garage?** Y / N carport

b. **Does the garage have a separate heating unit?** Y / N / NA

c. **Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, ATV, car)?**
Y / N / NA Please specify: _____

d. **Has the building ever had a fire?** Y / N When? _____

e. **Is a kerosene or unvented gas space heater present?** Y (N) Where? _____

f. **Is there a workshop or hobby/craft area?** Y (N) Where & Type? _____

g. **Is there smoking in the building?** Y (N) How frequently? _____

h. **Have cleaning products been used recently?** (Y) N When & Type? _____

i. **Have cosmetic products been used recently?** Y (N) When & Type? _____

j. Has painting/staining been done in the last 6 months? Y (N) Where & When? _____

k. **Is there new carpet, drapes or other textiles?** Y (N) **Where & When?** _____

l. **Have air fresheners been used recently?** (Y) N When & Type? Febreeze lysol.

m. **Is there a kitchen exhaust fan?** (Y) N If yes, where _____

n. **Is there a bathroom exhaust fan?** (Y) N If yes, where vented? _____

o. **Is there a clothes dryer?** (Y) N **If yes, is it vented outside?** Y / N

p. **Has there been a pesticide application?** (Y) N When & Type? _____

raid. Fogger last year.
Clorox. lysol used. Febreeze used
carpet cleaner. pledge. no wax floor.

q. **Are there odors in the building?** Y / (N)

If yes, please describe: _____

Do any of the building occupants use solvents (e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist) at work? Y / (N)

If yes, what types of solvents are used? na

If yes, are their clothes washed at work? Y / N na

Do any of the building occupants regularly use or work at a dry-cleaning service? (circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No Monthly

(Yes), use dry-cleaning infrequently (monthly or less) Unknown dry cleaning brought home last week.

Yes, work at a dry-cleaning service works at a place that makes absorbant.

Is there a radon mitigation system for the building/structure? Y (N)

Date of Installation: na

Is the system active or passive? Active/Passive na

Are there any Outside Contaminant Sources? (circle appropriate responses)

Contaminated site with 1000-foot radius? Y / N Specify _____

Other stationary sources nearby (e.g., gas stations, emission stacks, etc.): _____

_____

Heavy vehicle traffic nearby (or other mobile sources): _____

9. **WATER AND SEWAGE:**

Water Supply: (Public Water) Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: (Public Sewer) Septic Tank Leach Field Dry Well Other: _____

flooding present when it rains

10. RELOCATION INFORMATION: (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

_____

NA

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

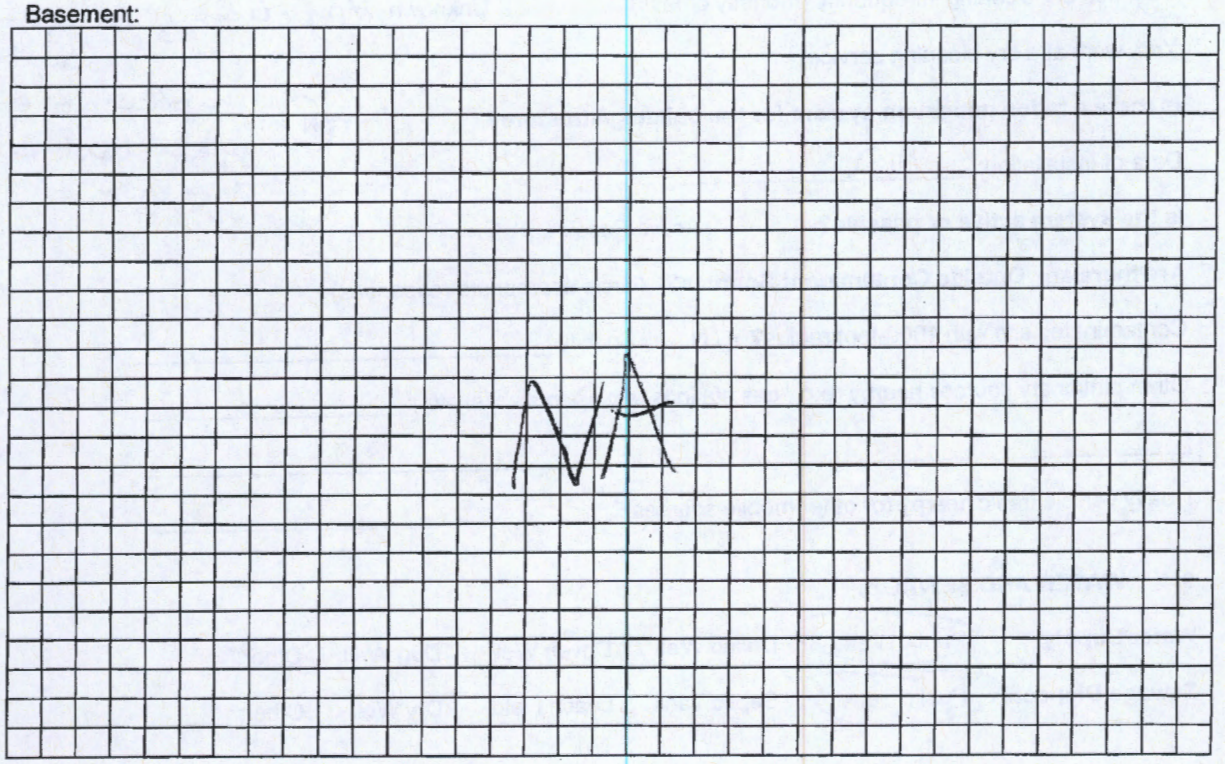
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS:

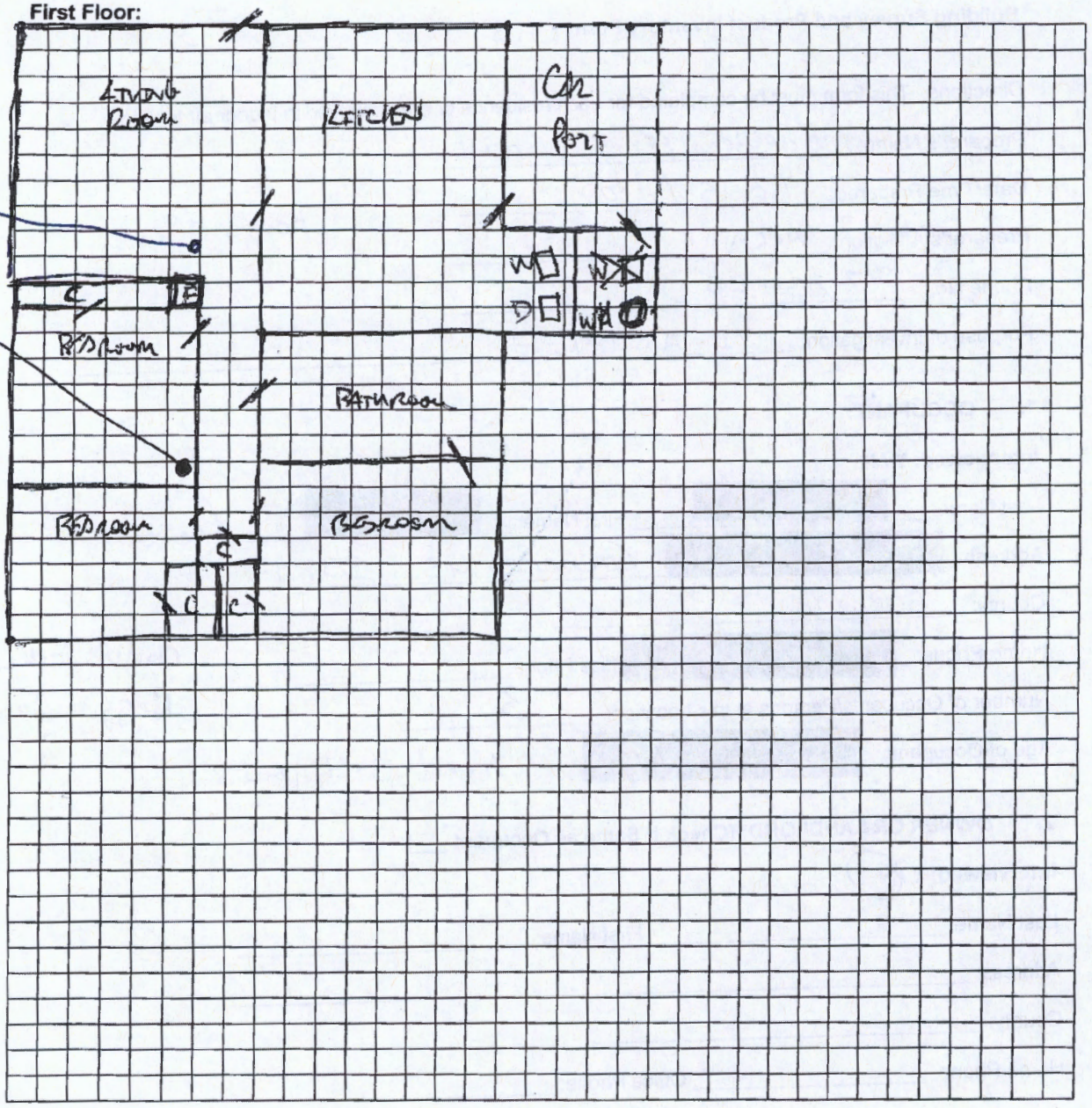
Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



(b) (6)

First Floor:



Building Survey and Product Inventory Form

Directions: This form must be completed for each residence or area involved in indoor air testing.

Preparer's Name: Marie Heap / Randy Woodruff

Date/Time Prepared: 9-21-15 / 1300

House #5

Preparer's Affiliation: AECADIS

Phone No.: 317-231-6500

Purpose of Investigation: VI Assessment

1. OCCUPANT:

Interviewed: Y / N

Last Name: (b) (6) First Name: (b) (6) (enter)

Address: (b) (6) Grenada MS 38901

County: Grenada

Home Phone: (b) (6) Office Phone: _____

Child's father Reggie Jones.

Number of Occupants/Persons at this Location: 3

Age of Occupants: (b) (6) lived 3-4 years

2. OWNER OR LANDLORD: (Check if Same as Occupant ___)

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS:

Type of Building: (circle appropriate response)

(Residential)	School	Commercial/Multi-use
Industrial	Church	Other: _____

If the Property is Residential, Type? (circle appropriate response)

(Ranch)		2-Family 3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If Multiple Units, How Many? _____

If the Property is Commercial, Type?

Business Type(s) _____

Does it include residences (i.e., multi-use)? Y / N If yes, how many? _____

Other Characteristics:

Number of Floors 1 Building Age ~1980

Is the Building Insulated? (Y) / N How Air-Tight? Tight / (Average) / Not Tight

4. AIRFLOW:

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow Between Floors na

Airflow Near Source

na

Outdoor Air Infiltration

na

Infiltration Into Air Ducts

na

5. **BASEMENT AND CONSTRUCTION CHARACTERISTICS:** (circle all that apply)

a.	**Above grade construction:**	wood frame	concrete	stone brick	
b.	**Basement type:**	full	crawlspace	slab	other _____
c.	**Basement floor:**	concrete	dirt	stone	other na
d.	**Basement floor:**	uncovered	covered	covered with na	
e.	**Concrete floor:**	unsealed	sealed	sealed with unknown (covered w/ vinyl floor epoxy)	
f.	**Foundation walls:**	poured	block stone	other na	
g.	**Foundation walls:**	unsealed	sealed	sealed with na	
h.	**The basement is:**	wet	damp	dry	moldy na
i.	**The basement is:**	finished	unfinished	partially finished	na

j. **Sump present?** Y / N

k. **Water in sump?** Y / N / NA

Basement/lowest level depth below grade: _____(feet) na

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

none observed

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? Y / N na

6. HEATING, VENTILATING, AND AIR CONDITIONING: (circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

(Hot air circulation)	Heat pump	Hot water baseboard
Space heaters	Stream radiation	Radiant floor
Electric baseboard	Wood stove	Outdoor wood boiler
Other _____		

A/C. 3 window units central heat

The primary type of fuel used is:

Natural base	Fuel oil	Kerosene
Electric	Propane	Solar
Wood coal		

natural gas.

Domestic hot water tank fueled by: natural gas.

Boiler/furnace located in: Basement Outdoors (Main Floor) Other gas. _____

Air conditioning: Central Air (Window Units) Open Windows None (3)

Are there air distribution ducts present? (Y) / N attic + walls

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY:

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never n/a

General Use of Each Floor (e.g., family room, bedroom, laundry, workshop, storage):

Basement na

1st Floor 3 bed / 1 bath / kitchen / living room

2nd Floor na

3rd Floor na

4th Floor na

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY:

a. **Is there an attached garage?** Y / N carport

b. **Does the garage have a separate heating unit?** Y / N / NA

c. **Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, ATV, car)?**
Y / N / NA Please specify: not in house or carport

d. **Has the building ever had a fire?** Y / N When? _____

e. **Is a kerosene or unvented gas space heater present?** Y / N Where? _____

f. **Is there a workshop or hobby/craft area?** Y / N Where & Type? _____

g. **Is there smoking in the building?** Y / N How frequently? _____

h. **Have cleaning products been used recently?** Y / N When & Type? > week (see photos)

i. **Have cosmetic products been used recently?** Y / N When & Type? non-aerosol, nail polish remover used recently

j. Has painting/staining been done in the last 6 months? Y / N Where & When? _____

k. **Is there new carpet, drapes or other textiles?** Y / N **Where & When?** _____

l. **Have air fresheners been used recently?** Y / N When & Type? wax burners, air freshener

m. **Is there a kitchen exhaust fan?** Y / N If yes, where _____

n. **Is there a bathroom exhaust fan?** Y / N If yes, where vented? _____

o. **Is there a clothes dryer?** Y / N **If yes, is it vented outside?** Y / N

p. **Has there been a pesticide application?** Y / N When & Type? in past (> 3 months)

nail polish remover used

q. **Are there odors in the building?** Y / (N)

If yes, please describe: _____

Do any of the building occupants use solvents (e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist) at work? Y / (N) work at walmart

If yes, what types of solvents are used? na

If yes, are their clothes washed at work? Y / N na

Do any of the building occupants regularly use or work at a dry-cleaning service? (circle appropriate response)

Yes, use dry-cleaning regularly (weekly) (No)

Yes, use dry-cleaning infrequently (monthly or less) Unknown

Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / (N)

Date of Installation: na

Is the system active or passive? Active/Passive na

Are there any Outside Contaminant Sources? (circle appropriate responses)

Contaminated site with 1000-foot radius? Y / N Specify _____

Other stationary sources nearby (e.g., gas stations, emission stacks, etc.): _____

_____

Heavy vehicle traffic nearby (or other mobile sources): _____

9. **WATER AND SEWAGE:**

Water Supply:	(Public Water)	Drilled Well	Driven Well	Dug Well	Other: _____
Sewage Disposal:	(Public Sewer)	Septic Tank	Leach Field	Dry Well	Other: _____

10. **RELOCATION INFORMATION:** (for oil spill residential emergency)

a. **Provide reasons why relocation is recommended:** _____

_____

b. **Residents choose to:** remain in home relocate to friends/family relocate to hotel/motel

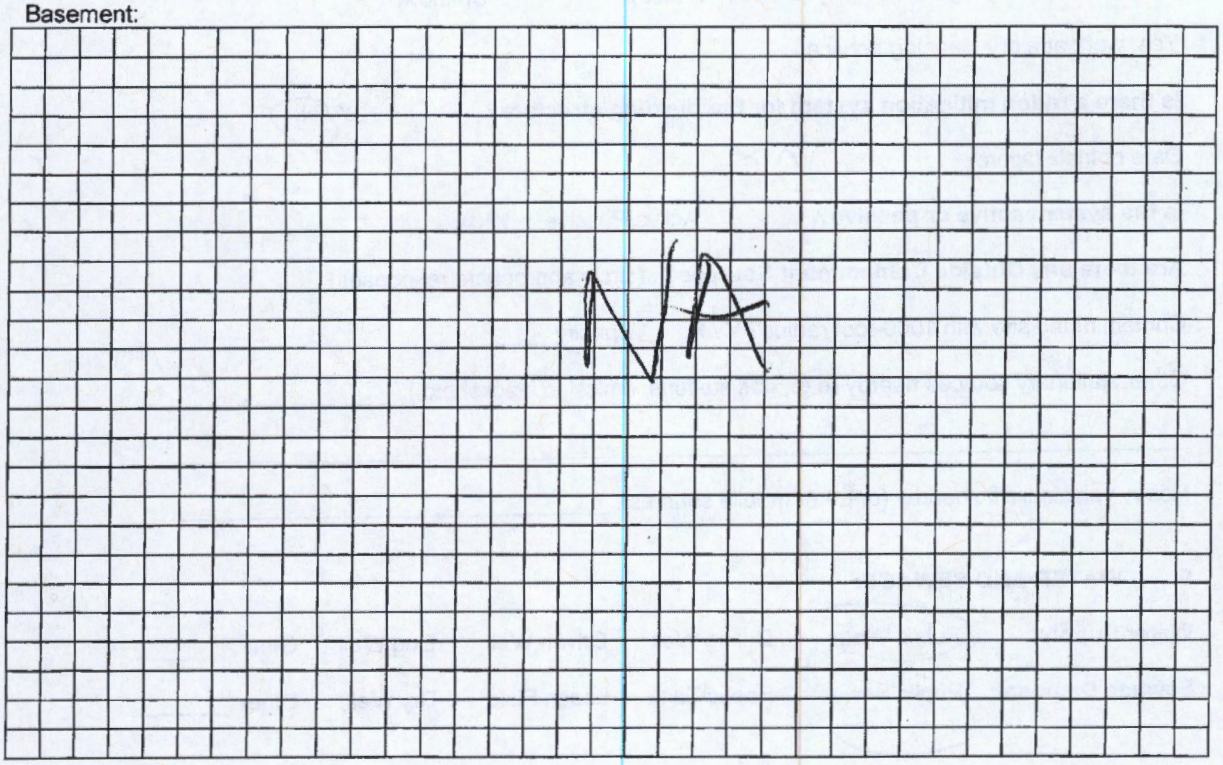
c. **Responsibility for costs associated with reimbursement explained?** Y / N

d. **Relocation package provided and explained to residents?** Y / N

11. **FLOOR PLANS:**

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



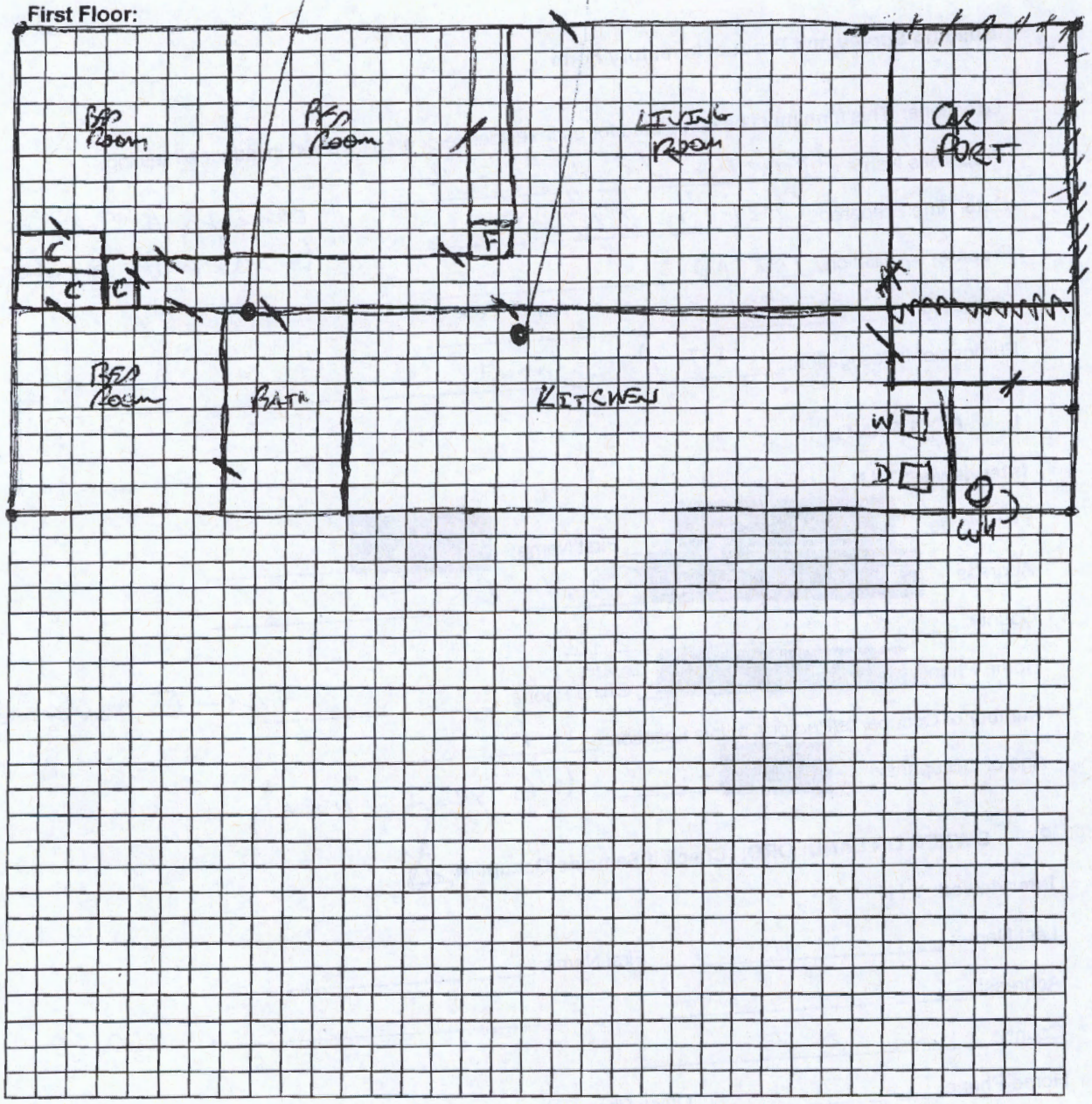
(b) (6) [redacted]

5-SS

5-1A-

(5)

First Floor:



Building Survey and Product Inventory Form

Directions: This form must be completed for each residence or area involved in indoor air testing.

Preparer's Name: Marie Heep / Randy Woodruff

Date/Time Prepared: 9-21-15 / 1730

Preparer's Affiliation: ARCADIS

Phone No.: 317-231-6507

Purpose of Investigation: VI Assessment.

came back 9-22-15 @ 11 am to set up IA canister (6-IA)

House # 6

1. OCCUPANT:

Interviewed: Y / N

Last Name: (b) (6) First Name: (b) (6)

Address: (b) (6) Grenada MS

County: Grenada

Home Phone: (b) (6) cell. Office Phone: M-F evenings)

Number of Occupants/Persons at this Location: 1

Age of Occupants: (b) (6) (6 years here)

2. OWNER OR LANDLORD: (Check if Same as Occupant X

Interviewed: Y / N

Last Name: _____ First Name: _____

Address: _____ na

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS:

Type of Building: (circle appropriate response)

(Residential)	School	Commercial/Multi-use
Industrial	Church	Other: _____

If the Property is Residential, Type? (circle appropriate response)

(Ranch)		2-Family 3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other:_____

If Multiple Units, How Many? na

If the Property is Commercial, Type?

Business Type(s) na

Does it include residences (i.e., multi-use)? Y / N If yes, how many? na

Other Characteristics:

Number of Floors 1 Building Age 1979.

Is the Building Insulated? (Y) / N How Air-Tight? Tight / (Average) / Not Tight

4. AIRFLOW:

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow Between Floors

na

Airflow Near Source

na

Outdoor Air Infiltration

na

Infiltration Into Air Ducts

na

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS: (circle all that apply)

a.	**Above grade construction:**	wood frame	concrete	stone brick	
b.	**Basement type:**	full	crawlspace	slab	other _____
c.	**Basement floor:**	concrete	dirt	stone	other na
d.	**Basement floor:**	uncovered	covered	covered with na	
e.	**Concrete floor:**	unsealed	sealed	sealed with Covered w/ Vinyl glued on (unknown)	
f.	**Foundation walls:**	poured	block stone	other na	
g.	**Foundation walls:**	unsealed	sealed	sealed with na	
h.	**The basement is:**	wet	damp	dry	moldy na
i.	**The basement is:**	finished	unfinished	partially finished	na
j.	**Sump present?**	Y / N			
k.	**Water in sump?**	Y / N / NA			

Basement/lowest level depth below grade: _____(feet) na

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

none observed.

Are the basement walls or floor sealed with waterproof paint or epoxy coatings? Y / N na

6. HEATING, VENTILATING, AND AIR CONDITIONING: (circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

(Hot air circulation)	Heat pump	Hot water baseboard
Space heaters	Stream radiation	Radiant floor
Electric baseboard	Wood stove	Outdoor wood boiler
Other _____		

historically Septic system.

The primary type of fuel used is:

Central A C + heat

Natural base	Fuel oil	Kerosene
(Electric)	Propane	Solar
Wood coal		

natural gas.

Domestic hot water tank fueled by: natural gas

Boiler/furnace located in: Basement Outdoors (Main Floor) Other_____

Air conditioning: (Central Air) Window Units Open Windows None

Are there air distribution ducts present? (Y)/N attic + walls

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY:

5.5" thick

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never na

General Use of Each Floor (e.g., family room, bedroom, laundry, workshop, storage): 1 floor only

Basement na

1st Floor 3 bed / 2 bath / kitchen / living

2nd Floor na

3rd Floor na

4th Floor na.

8. FACTORS THAT MAY influence INDOOR AIR QUALITY:

a. **Is there an attached garage?** Y / N ~~carport~~. no carport (converted to room

b. **Does the garage have a separate heating unit?** Y / N / NA

c. **Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, ATV, car)?**
Y / N / NA Please specify: shed in yard w/ lawnmower / weedeater

d. **Has the building ever had a fire?** Y / N When? _____

e. **Is a kerosene or unvented gas space heater present?** Y / N Where? _____

f. **Is there a workshop or hobby/craft area?** Y / N Where & Type? _____

g. **Is there smoking in the building?** Y / N How frequently? _____

h. **Have cleaning products been used recently?** Y / N When & Type? glade.

i. **Have cosmetic products been used recently?** Y / N When & Type? _____

j. Has painting/staining been done in the last 6 months? Y / N Where & When? _____

k. **Is there new carpet, drapes or other textiles?** Y / N **Where & When?** _____

l. **Have air fresheners been used recently?** Y / N When & Type? glade. febreeze

m. **Is there a kitchen exhaust fan?** Y / N If yes, where _____

n. **Is there a bathroom exhaust fan?** Y / N If yes, where vented? _____

o. **Is there a clothes dryer?** **Y / N If yes, is it vented outside?** Y / N

p. **Has there been a pesticide application?** Y / N When & Type? _____

Spray as needed
bla
oven cleaner (several months ago)
pledge dusting

q. **Are there odors in the building?** Y (N)

If yes, please describe: _____

Do any of the building occupants use solvents (e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist) at work? Y / (N)

If yes, what types of solvents are used? work at walmart starter

If yes, are their clothes washed at work? Y / N na

Do any of the building occupants regularly use or work at a dry-cleaning service? (circle appropriate response)

Yes, use dry-cleaning regularly (weekly) (No)

Yes, use dry-cleaning infrequently (monthly or less) Unknown

Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y / (N)

Date of Installation: na

Is the system active or passive? Active/Passive na

Are there any Outside Contaminant Sources? (circle appropriate responses)

Contaminated site with 1000-foot radius? Y / N Specify _____

Other stationary sources nearby (e.g., gas stations, emission stacks, etc.): _____

_____

Heavy vehicle traffic nearby (or other mobile sources): _____

9. **WATER AND SEWAGE:**

Water Supply: (Public Water) Drilled Well Driven Well Dug Well Other: _____

Sewage Disposal: (Public Sewer) Septic Tank Leach Field Dry Well Other: _____

10. RELOCATION INFORMATION: (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: _____

_____

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

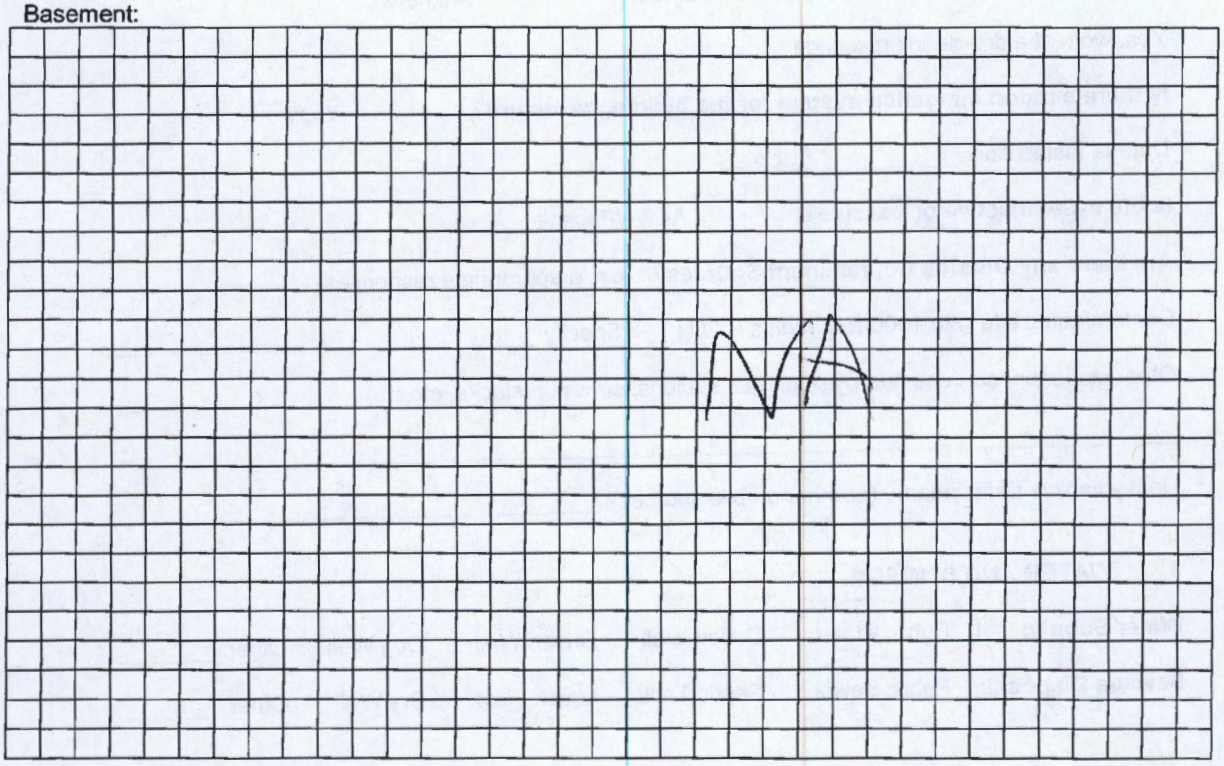
d. Relocation package provided and explained to residents? Y / N

n/a

11. FLOOR PLANS:

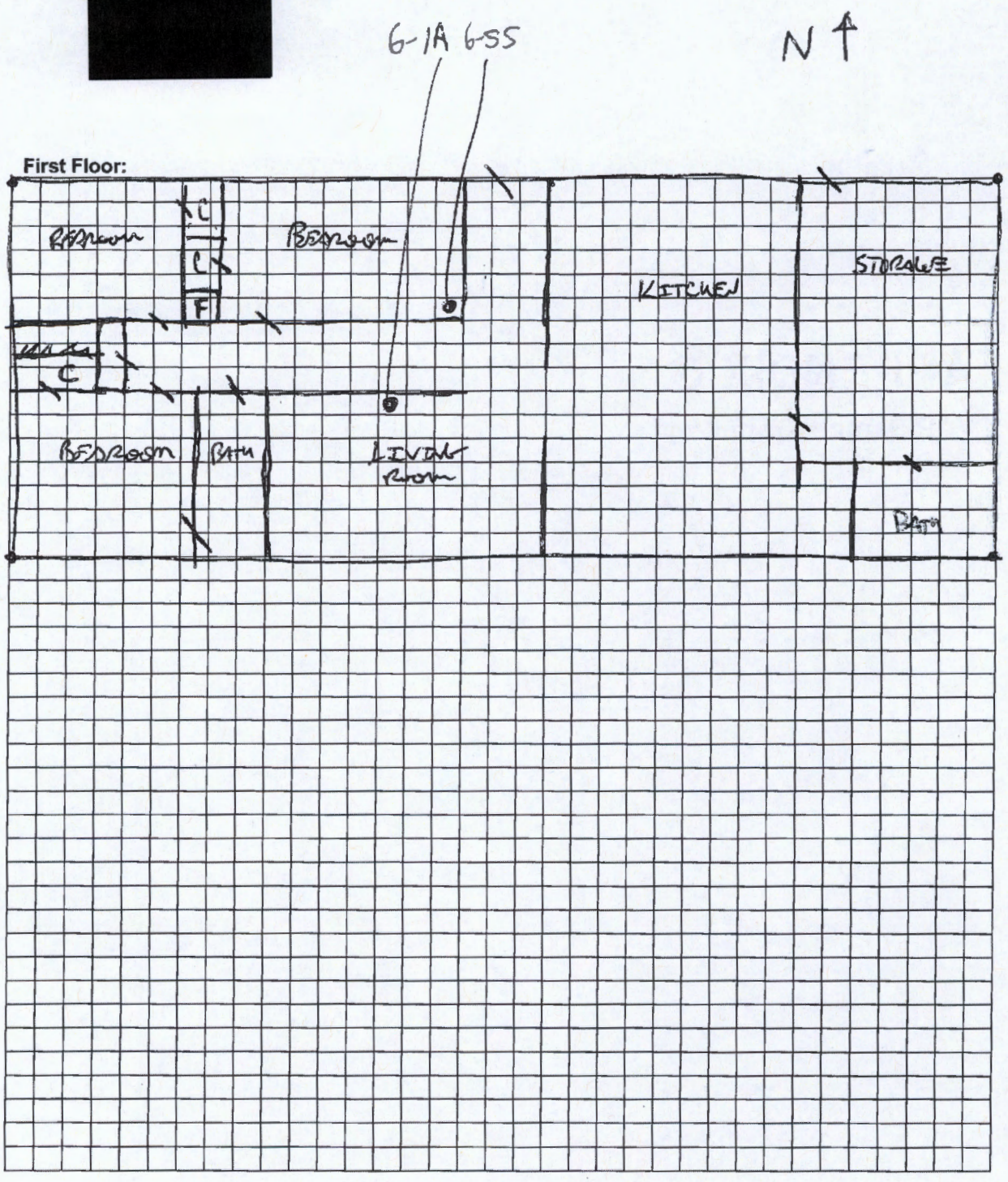
Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



(b) (6)

First Floor:



Samples 6-1A(092215)
6-SS(092315)

APPENDIX G

VAP Sample/Core Logs

ARCADIS | Design & Consultancy for natural and built assets

SAMPLE / CORE LOG

Boring/Well: VAP-1 **Project No.:** Grenada Manufacturing/LA003307.0001.00005

Site Location: Grenada, Mississippi **Drilling Started:** 9/28/2015 **Drilling Completed:** 9/28/2015

Land-Surface Elev.: _____ **Surveyed:** ____ **Estimated:** ____ **Datum:** _____

Drilling Fluid: None **Drilling Method Used:** HA 1-5'/Direct Push

Drilling Contractor: Devonian **Driller:** Lonny **Helper:** Derrick/Tremaine

Prepared By: G. Cook **Hammer Weight:** _____ **Hammer Drop (inches):** _____

Fill | Silty Clay | Silt | Sandy Silt | Silty Sand | Acetate Sleeve | Water First Encountered

Clay | Sandy Clay | Clayey Silt | Sand | Clayey Sand | Hand Auger | Water Level After 10 Minutes

SAMPLE DEPTH (ft)	SAMPLE TYPE	RECOVERY (ft)	SYMBOL	VISUAL DESCRIPTION	USCS (LL/PL/PI)	PP H	PP V	PID (ppm)	REMARKS
0				FILL: Asphalt					
1		2		SILT: Brown and tan, trace of asphalt, loose, dry				212	Sampled.
2				SILTY CLAY: Brown and tan, ferrous stain, nodules, stiff, dry					
3		2						150.1	
4									
5		1						75.8	
6				- brown, dark brown, tan, streaks of black natural organic stain, soft					
7				- slight increase in silt				96.1	
8		5							
9				- damp - trace of very fine grain sand				116.0	
10				- increase in sand, damp					
11				SAND: Brown and tan, trace of silt, damp				24.0	
12				- wet					⧖
13		3.0						55.5	
14				- trace of fine grain silt					
15								98.7	
16									
17				- very fine to fine grain, brown and tan, dark brown, wet				68.8	
18		3.5							
19				- streaks of dark orange brown with ferrous nodules - fine grain with some coarse grain				62.2	
20									
21				- fine to coarse grain, tan and white, saturated				76.2	
22									
23		3.5		- coarse grain, white, light gray				76.9	
24									
25				- fine grain, tan, loose, some silt				50.9	

ARCADIS Design & Consultancy for natural and built assets

SAMPLE / CORE LOG

Boring/Well: VAP-1 **Project No.:** Grenada Manufacturing/LA003307.0001.00005

Site Location: Grenada, Mississippi **Drilling Started:** 9/28/2015 **Drilling Completed:** 9/28/2015

Land-Surface Elev.: _____ **Surveyed:** ____ **Estimated:** ____ **Datum:** _____

Drilling Fluid: None **Drilling Method Used:** HA 1-5'/Direct Push

Drilling Contractor: Devonian **Driller:** Lonny **Helper:** Derrick/Tremaine

Prepared By: G. Cook **Hammer Weight:** _____ **Hammer Drop (inches):** _____

Fill | Silty Clay | Silt | Sandy Silt | Silty Sand | Acetate Sleeve | ⧖ Water First Encountered

Clay | Sandy Clay | Clayey Silt | Sand | Clayey Sand | Hand Auger | ⧗ Water Level After 10 Minutes

SAMPLE DEPTH (ft)	SAMPLE TYPE	RECOVERY (ft)	SYMBOL	VISUAL DESCRIPTION	USCS (LL/PL/PI)	PP H V	PID (ppm)	REMARKS
27				- very fine to fine grain, light grayish white, saturated			50.8	
28		3.5		- loose, medium dense				
29							67.7	
30				- dark reddish brown, loose, saturated				
31							24.6	
32								
33		3.5		- fine to coarse grain			34.3	
34				- 4-inch silty clay layer				
35							22.9	
36				- saturated				
37				- fine grain with some coarse			113.9	
38		3.5						
39				- light gray, trace of clay			30.7	
40				- gray, fine grain, wet				
41				CLAYEY SAND: Gray, damp			57.2	
42								
43		5.0		SAND: Gray, fine grain, medium dense, wet CLAYEY SAND: Gray, damp			8.3	
44								
45				SAND: Very fine to fine grain, light gray, medium dense, saturated			17.1	
46								
47				CLAYEY SAND: Gray, trace of wood fragments, wet			17.8	
48		5.0						
49				SILTY SAND: Gray, trace of clay, wet			12.9	
50				- Total Depth 50 ft bls; Background PID 0.0 ppm.				

ARCADIS Design & Consultancy for natural and built assets

SAMPLE / CORE LOG

Boring/Well: VAP-2 **Project No.:** Grenada Manufacturing/LA003307.0001.00005

Site Location: Grenada, Mississippi **Drilling Started:** 9/28/2015 **Drilling Completed:** 9/28/2015

Land-Surface Elev.: _____ **Surveyed:** ____ **Estimated:** ____ **Datum:** _____

Drilling Fluid: None **Drilling Method Used:** HA 1-5'/Direct Push

Drilling Contractor: Devonian **Driller:** Lonny **Helper:** Derrick/Tremaine

Prepared By: G. Cook **Hammer Weight:** _____ **Hammer Drop (inches):** _____

Fill | Silty Clay | Silt | Sandy Silt | Silty Sand | Acetate Sleeve | ▽ Water First Encountered

Clay | Sandy Clay | Clayey Silt | Sand | Clayey Sand | Hand Auger | ▼ Water Level After 10 Minutes

SAMPLE DEPTH (ft)	SAMPLE TYPE	RECOVERY (ft)	SYMBOL	VISUAL DESCRIPTION	USCS (LL/PL/PI)	PP H	PP V	PID (ppm)	REMARKS
0				FILL: Asphalt					
1		2		SILT: Brownish gray, dry, loose				0	
2				CLAYEY SILT: Gray, trace of ferrous stain, dry, loose					
3		2		SILTY CLAY: Gray, some dull green, damp, very soft				0	Sampled.
4									
5		1						0	
6				- gray, damp, very stiff					
7								0	
8		5.0		- gray with dark brown streaks, damp, soft					
9								0	
10									
11				- streaks of black natural organic stain, dry				0	
12				- increase in clay, very stiff					
13		5.0						0	
14									
15				SAND: Gray, very fine grain, streaks of dark brown				0	
16									
17				- fine to coarse grain, brown to dark brown, wet				0	
18		4.0		- 2 inch silty clay layer					
19								0	
20				- gray, saturated					
21				- no recovery				0	
22									
23		3.0		SAND				0	
24				- fine to coarse grain, brown to dark brown, dense, wet					
25				- 2 inch silty clay layer				16.1	

ARCADIS Design & Consultancy for natural and built assets

SAMPLE / CORE LOG

Boring/Well: VAP-2 **Project No.:** Grenada Manufacturing/LA003307.0001.00005

Site Location: Grenada, Mississippi **Drilling Started:** 9/28/2015 **Drilling Completed:** 9/28/2015

Land-Surface Elev.: _____ **Surveyed:** ____ **Estimated:** ____ **Datum:** _____

Drilling Fluid: None **Drilling Method Used:** HA 1-5'/Direct Push

Drilling Contractor: Devonian **Driller:** Lonny **Helper:** Derrick/Tremaine

Prepared By: G. Cook **Hammer Weight:** _____ **Hammer Drop (inches):** _____

Fill | Silty Clay | Silt | Sandy Silt | Silty Sand | Acetate Sleeve | Water First Encountered

Clay | Sandy Clay | Clayey Silt | Sand | Clayey Sand | Hand Auger | Water Level After 10 Minutes

SAMPLE DEPTH (ft)	SAMPLE TYPE	RECOVERY (ft)	SYMBOL	VISUAL DESCRIPTION	USCS (LL/PL/PI)	PP H	PP V	PID (ppm)	REMARKS
27									
28		4.5		- gray, light gray, very fine grain, saturated - streak of black natural organic stain, dense				21.2	
29									
30								14.3	
31									
32								20.8	
33		4.25		- saturated					
34								20.1	
35									
36				- tan, very fine grain, saturated				9.5	
37									
38		4.25						7.0	
39				- very fine to fine grain, saturated					
40								7.9	
41				- gray, fine grain, saturated					
42								6.3	
43		4.5		- 2 inch silty clay layer					
44				- fine to coarse grain, saturated				5.6	
45									
46								5.9	
47									
48		5.0						6.3	
49									
50				CLAY: Dark gray, sticky, dry, stiff - Total Depth 50 ft bls; Background PID 0.0 ppm.				5.1	

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SAMPLE / CORE LOG

Boring/Well: VAP-3 **Project No.:** Grenada Manufacturing/LA003307.0001.00005

Site Location: Grenada, Mississippi **Drilling Started:** 9/29/2015 **Drilling Completed:** 9/29/2015

Land-Surface Elev.: _____ **Surveyed:** ____ **Estimated:** ____ **Datum:** _____

Drilling Fluid: None **Drilling Method Used:** HA 1-5'/Direct Push

Drilling Contractor: Devonian **Driller:** Lonny **Helper:** Derrick/Tremaine

Prepared By: G. Cook **Hammer Weight:** _____ **Hammer Drop (inches):** _____

Fill | Silty Clay | Silt | Sandy Silt | Silty Sand | Acetate Sleeve | ▽ Water First Encountered

Clay | Sandy Clay | Clayey Silt | Sand | Clayey Sand | Hand Auger | ▼ Water Level After 10 Minutes

SAMPLE DEPTH (ft)	SAMPLE TYPE	RECOVERY (ft)	SYMBOL	VISUAL DESCRIPTION	USCS (LL/PL/PI)	PP H	PP V	PID (ppm)	REMARKS
0				FILL: Asphalt, fill (sand, silt)					
1		2		SILT: Gray, dry, loose				4.8	Sampled.
2				CLAYEY SILT: Gray, black natural organic stain, dry, very soft					
3		2						4.4	
4									
5		1						4.7	
6				- increase in clay, pocket of dull green, rootlets, dry					
7								3.7	
8		4.75		SILTY CLAY: Gray, brown, ferrous nodules and stain					
9								3.3	
10				- damp, very soft					
11				- gray, dark brown, ferrous nodules and stain, dry, stiff				2.7	
12									
13		5.0		- increase in silt, gray, trace of ferrous nodules, dry, firm				3.0	
14				CLAYEY SAND: Very fine grain, gray and dull green, dry, firm					▽
15				- 2 inch very fine grain sand layer				3.8	
16				SAND: Very fine to fine grain, tan, wet					
17				- fine to coarse grain, tan and brown, loose, saturated				3.5	
18		4.0		- some silt					
19				- 4 inch silty sand layer - fine grain, brown, saturated				1.8	
20									
21				- tan, loose, saturated				2.6	
22									
23		4.75						3.1	
24									
25				- brown, loose, saturated				2.3	

ARCADIS Design & Consultancy for natural and built assets

SAMPLE / CORE LOG

Boring/Well: VAP-3 **Project No.:** Grenada Manufacturing/LA003307.0001.00005

Site Location: Grenada, Mississippi **Drilling Started:** 9/29/2015 **Drilling Completed:** 9/29/2015

Land-Surface Elev.: _____ **Surveyed:** ____ **Estimated:** ____ **Datum:** _____

Drilling Fluid: None **Drilling Method Used:** HA 1-5'/Direct Push

Drilling Contractor: Devonian **Driller:** Lonny **Helper:** Derrick/Tremaine

Prepared By: G. Cook **Hammer Weight:** _____ **Hammer Drop (inches):** _____

Fill | Silty Clay | Silt | Sandy Silt | Silty Sand | Acetate Sleeve | Water First Encountered

Clay | Sandy Clay | Clayey Silt | Sand | Clayey Sand | Hand Auger | Water Level After 10 Minutes

SAMPLE DEPTH (ft)	SAMPLE TYPE	RECOVERY (ft)	SYMBOL	VISUAL DESCRIPTION	USCS (LL/PL/PI)	PP H	PP V	PID (ppm)	REMARKS
27		5.0		- very fine to fine grain, brown, saturated				2.2	
28				- fine grain, gray, loose, saturated					
29								3.9	
30				- very fine to fine grain, brown, saturated					
31								4.2	
32				- gray, fine grain, some silt, medium dense, wet					
33		4.25		SILTY CLAY: Gray, damp, sticky, very soft				4.9	
34									
35				SAND: Gray, loose, saturated				3.7	
36									
37				- fine grain, saturated				5.6	
38		5.0							
39								2.4	
40				- light gray					
41								3.7	
42									
43		2.75		- gray, very fine grain, some silt and clay, wet				5.3	
44									
45				- light gray, fine grain, saturated				6.6	
46									
47				- fine to coarse grain, saturated				7.2	
48									
49									
50				SANDY CLAY: Gray, damp, very soft - Total Depth 50 ft bls; Background PID 0.0 ppm.				5.3	

ARCADIS Design & Consultancy for natural and built assets

SAMPLE / CORE LOG

Boring/Well: VAP-4 **Project No.:** Grenada Manufacturing/LA003307.0001.00005

Site Location: Grenada, Mississippi **Drilling Started:** 9/29/2015 **Drilling Completed:** 9/29/2015

Land-Surface Elev.: _____ **Surveyed:** _____ **Estimated:** _____ **Datum:** _____

Drilling Fluid: None **Drilling Method Used:** HA 1-5'/Direct Push

Drilling Contractor: Devonian **Driller:** Lonny **Helper:** Derrick/Tremaine

Prepared By: G. Cook **Hammer Weight:** _____ **Hammer Drop (inches):** _____

Fill | Silty Clay | Silt | Sandy Silt | Silty Sand | Acetate Sleeve | ⊻ Water First Encountered

Clay | Sandy Clay | Clayey Silt | Sand | Clayey Sand | Hand Auger | ⊻ Water Level After 10 Minutes

SAMPLE DEPTH (ft)	SAMPLE TYPE	RECOVERY (ft)	SYMBOL	VISUAL DESCRIPTION	USCS (LL/PL/PI)	PP H	PP V	PID (ppm)	REMARKS
0				FILL: Asphalt, fill (sand, silt)					
1		2		SILT: Brown, dry, loose				4.6	
2				- gray, pockets of brown, dry, loose					
3		2						7.5	
4				- dry, loose					
5		1		SILTY CLAY: Brown with light gray streaks, dry, soft				8.7	
6									
7				- brown, ferrous stain and nodules, dry, soft				78.2	Sampled.
8		5.0							
9								29.2	
10									
11								0	
12									
13				- dry, firm				0	
14				CLAYEY SAND: Gray, dense					⊻
				SAND: Very fine grain, gray, dense, wet					
15								0	
16									
17				- very fine to fine grain, brown, medium dense, wet				0	
18		3.0							
19				- very fine grain, tan, saturated				5	
20									
21				- no recovery				NR	
22				SAND: Fine grain, tan, medium dense, saturated					
23								7.9	
24				- brown, medium dense, saturated					
25								3.6	

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SAMPLE / CORE LOG

Boring/Well: VAP-4 **Project No.:** Grenada Manufacturing/LA003307.0001.00005

Site Location: Grenada, Mississippi **Drilling Started:** 9/29/2015 **Drilling Completed:** 9/29/2015

Land-Surface Elev.: _____ **Surveyed:** ____ **Estimated:** ____ **Datum:** _____

Drilling Fluid: None **Drilling Method Used:** HA 1-5'/Direct Push

Drilling Contractor: Devonian **Driller:** Lonny **Helper:** Derrick/Tremaine

Prepared By: G. Cook **Hammer Weight:** _____ **Hammer Drop (inches):** _____

Fill | Silty Clay | Silt | Sandy Silt | Silty Sand | Acetate Sleeve | Water First Encountered

Clay | Sandy Clay | Clayey Silt | Sand | Clayey Sand | Hand Auger | Water Level After 10 Minutes

SAMPLE DEPTH (ft)	SAMPLE TYPE	RECOVERY (ft)	SYMBOL	VISUAL DESCRIPTION	USCS (LL/PL/PI)	PP H	PP V	PID (ppm)	REMARKS
27		1.0		- no recovery				NR	
28									
29				SAND: Fine to coarse grain, tan, saturated				4.2	
30									
31				- no recovery				NR	
32		3.25		SILTY SAND: Dark brown, medium dense, wet					
33				SILTY CLAY: With very fine grain sand, gray, damp, firm				5.9	
34									
35				CLAYEY SAND: Gray, medium dense, wet				3.4	
36				SAND: Very fine to fine grain, gray, medium dense, saturated					
37								2.2	
38		4.0		- fine grain, gray, saturated					
39				- trace of clay, saturated				1.2	
40									
41				- no recovery				NR	
42				SAND: Fine grain, gray, medium dense, saturated					
43		3.25						0.5	
44									
45								0.4	
46									
47				- coarse grain, gray, saturated				1.9	
48		3.5							
49									
50				- intermixed, coarse sand, sandy layer - Total Depth 50 ft bls; Background PID 0.0 ppm.				1.5	

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SAMPLE / CORE LOG

Boring/Well: VAP-5 **Project No.:** Grenada Manufacturing/LA003307.0001.00005

Site Location: Grenada, Mississippi **Drilling Started:** 9/29/2015 **Drilling Completed:** 9/29/2015

Land-Surface Elev.: _____ **Surveyed:** _____ **Estimated:** _____ **Datum:** _____

Drilling Fluid: None **Drilling Method Used:** HA 1-5'/Direct Push

Drilling Contractor: Devonian **Driller:** Lonny **Helper:** Derrick/Tremaine

Prepared By: G. Cook **Hammer Weight:** _____ **Hammer Drop (inches):** _____

Fill | Silty Clay | Silt | Sandy Silt | Silty Sand | Acetate Sleeve | Water First Encountered

Clay | Sandy Clay | Clayey Silt | Sand | Clayey Sand | Hand Auger | Water Level After 10 Minutes

SAMPLE DEPTH (ft)	SAMPLE TYPE	RECOVERY (ft)	SYMBOL	VISUAL DESCRIPTION	USCS (LL/PL/PI)	PP H	PP V	PID (ppm)	REMARKS
0				FILL: Asphalt, fill (silt)					
1		2		SILT: Brown, white, gray streaks, dry, loose				4.6	
2									
3		2						5.1	
4									
5		1						4.8	Sampled.
6				SILTY CLAY: Dark brown, damp, soft					
7								4.5	
8		3.0		- ferrous stain and nodules, dry, stiff					
9								4.6	
10				- trace of sand					
11				- no recovery				NR	
12				SAND: Brown, very fine grain, some silt, wet					
13		3.0		- tan, very fine to fine grain, saturated				3.1	
14				- gray, very fine grain, saturated					
15				- tan				3.9	
16									
17								14.4	
18		3.0		- saturated					
19								8.2	
20									
21								8.8	
22				- fine grain, brown, saturated					
23		3.0						9.3	
24									
25								10.8	

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SAMPLE / CORE LOG

Boring/Well: VAP-5 **Project No.:** Grenada Manufacturing/LA003307.0001.00005

Site Location: Grenada, Mississippi **Drilling Started:** 9/29/2015 **Drilling Completed:** 9/29/2015

Land-Surface Elev.: _____ **Surveyed:** _____ **Estimated:** _____ **Datum:** _____

Drilling Fluid: None **Drilling Method Used:** HA 1-5'/Direct Push

Drilling Contractor: Devonian **Driller:** Lonny **Helper:** Derrick/Tremaine

Prepared By: G. Cook **Hammer Weight:** _____ **Hammer Drop (Inches):** _____

Fill | Silty Clay | Silt | Sandy Silt | Silty Sand | Acetate Sleeve | Water First Encountered

Clay | Sandy Clay | Clayey Silt | Sand | Clayey Sand | Hand Auger | Water Level After 10 Minutes

SAMPLE DEPTH (ft)	SAMPLE TYPE	RECOVERY (ft)	SYMBOL	VISUAL DESCRIPTION	USCS (LL/PL/PI)	PP H	PP V	PID (ppm)	REMARKS
27				- tan, saturated				8	
28				- brown, fine grain, saturated					
29				- gray, fine grain, saturated				4.2	
30									
31				- poor recovery				NR	
32		3.0		SAND: Light gray, very fine grain, saturated					
33								5.7	
34				- brown					
35				SANDY CLAY: Brown, damp, firm SAND: White with some silt, gray, very fine grain, dense, wet				3.3	
36									
37								3.9	
38		2.5							
39				- no recovery				NR	
40				SAND: Fine grain, gray, saturated					
41								1.6	
42									
43		3.0		SANDY CLAY: Gray, damp, soft				2.2	
44				- no recovery					
45				SAND: Gray, fine grain, saturated				1.7	
46									
47								0.2	
48		4.5		- fine to coarse grain, saturated					
49								0.0	
50				- Total Depth 50 ft bls; Background PID 0.0 ppm.					

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SAMPLE / CORE LOG

Boring/Well: VAP-6 **Project No.:** Grenada Manufacturing/LA003307.0001.00005

Site Location: Grenada, Mississippi **Drilling Started:** 9/30/2015 **Drilling Completed:** 9/30/2015

Land-Surface Elev.: _____ **Surveyed:** ____ **Estimated:** ____ **Datum:** _____

Drilling Fluid: None **Drilling Method Used:** HA 1-5'/Direct Push

Drilling Contractor: Devonian **Driller:** Lonny **Helper:** Derrick/Tremaine

Prepared By: G. Cook **Hammer Weight:** _____ **Hammer Drop (inches):** _____

Fill | Silty Clay | Silt | Sandy Silt | Silty Sand | Acetate Sleeve | ▽ Water First Encountered

Clay | Sandy Clay | Clayey Silt | Sand | Clayey Sand | Hand Auger | ▼ Water Level After 10 Minutes

SAMPLE DEPTH (ft)	SAMPLE TYPE	RECOVERY (ft)	SYMBOL	VISUAL DESCRIPTION	USCS (LL/PL/PI)	PP H	PP V	PID (ppm)	REMARKS
0				FILL: Asphalt, fill (silt)					
1		2		SILT: Brown, dry, loose				11.3	
2									
3		2		CLAYEY SILT: Brown, dark brown, ferrous stain and nodules, dry, loose				15.9	Sampled.
4									
5		1						14.3	
6				- dry, soft					
7				- increase in clay, firm				14.8	
8		5.0							
9								10.0	
10				SANDY CLAY: Brown, dry, saturated					
11				- no recovery				NR	
12				SILTY SAND: Tan, dense, wet					▼
13		3.0						3.6	
14				- increase in very fine grain sand, dense					
15								5.4	
16									
17				- silty sand, fine grain, brown, medium dense, wet				4.6	
18		3.0							
19				- increase in fine grain sand				6.8	
20									
21				- no recovery				NR	
22				SAND: Tan, fine grain, loose, wet					
23		2.5						6.1	
24				- very fine to fine grain, some silt, dark brown, wet					
25								5.2	

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SAMPLE / CORE LOG

Boring/Well: VAP-6 **Project No.:** Grenada Manufacturing/LA003307.0001.00005

Site Location: Grenada, Mississippi **Drilling Started:** 9/30/2015 **Drilling Completed:** 9/30/2015

Land-Surface Elev.: _____ **Surveyed:** ____ **Estimated:** ____ **Datum:** _____

Drilling Fluid: None **Drilling Method Used:** HA 1-5'/Direct Push

Drilling Contractor: Devonian **Driller:** Lonny **Helper:** Derrick/Tremaine

Prepared By: G. Cook **Hammer Weight:** _____ **Hammer Drop (inches):** _____

Fill | Silty Clay | Silt | Sandy Silt | Silty Sand | Acetate Sleeve | Water First Encountered

Clay | Sandy Clay | Clayey Silt | Sand | Clayey Sand | Hand Auger | Water Level After 10 Minutes

SAMPLE DEPTH (ft)	SAMPLE TYPE	RECOVERY (ft)	SYMBOL	VISUAL DESCRIPTION	USCS (LL/PL/PI)	PP H V	PID (ppm)	REMARKS
27		2.5					2.4	
28								
29							5.0	
30								
31				- no recovery			NR	
32		2.5		SAND: Fine grain, some silt, loose, wet				
33							4.3	
34				SILTY CLAY: Tan, damp, soft SAND: Light gray, very fine to fine grain, medium dense, saturated				
35							6.0	
36								
37							5.4	
38		3.0						
39							3.0	
40								
41				- very fine grain, some silt, saturated, medium dense			1.5	
42								
43		3.0		- very fine to fine grain, saturated			0.9	
44				- fine grain saturated				
45							3.6	
46				SILTY CLAY: Gray, damp, soft				
47				SAND: 2 inch silty clay layer, gray, damp, very soft			3.4	
48								
49				- very fine grain, medium dense, wet			3.8	
50				- Total Depth 50 ft bls; Background PID 0.0 ppm.				

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SAMPLE / CORE LOG

Boring/Well: VAP-7 **Project No.:** Grenada Manufacturing/LA003307.0001.00005

Site Location: Grenada, Mississippi **Drilling Started:** 9/30/2015 **Drilling Completed:** 9/30/2015

Land-Surface Elev.: _____ **Surveyed:** ____ **Estimated:** ____ **Datum:** _____

Drilling Fluid: None **Drilling Method Used:** HA 1-5'/Direct Push

Drilling Contractor: Devonian **Driller:** Lonny **Helper:** Derrick/Tremaine

Prepared By: G. Cook **Hammer Weight:** _____ **Hammer Drop (inches):** _____

Fill | Silty Clay | Silt | Sandy Silt | Silty Sand | Acetate Sleeve | ▽ Water First Encountered

Clay | Sandy Clay | Clayey Silt | Sand | Clayey Sand | Hand Auger | ▼ Water Level After 10 Minutes

SAMPLE DEPTH (ft)	SAMPLE TYPE	RECOVERY (ft)	SYMBOL	VISUAL DESCRIPTION	USCS (LL/PL/PI)	PP H	PP V	PID (ppm)	REMARKS
0				FILL: Asphalt, fill (silt)					
1		2		SILT: Brown and light gray, ferrous nodules, dry, loose				15.9	
2				CLAYEY SILT: Brown and light gray, ferrous nodules and stain, dry loose					
3		2						16.1	Sampled.
4									
5		1						12.9	
6				SILTY CLAY: Brown, ferrous nodules and stain, streaks of black natural organic stain, dry, firm					
7								4.8	
8		5.6		CLAYEY SILT: Brown, ferrous nodules, dry, loose					
9				SILTY SAND: Tan, dry, loose				12.4	
10									
11				- no recovery				NR	
12				SILTY SAND: Brown, very fine grain, wet					▼
13		2.5						13.5	
14				- brown, loose					
15								16.5	
16									
17				SAND: Brown and dark reddish brown, very fine to fine grain, saturated				9.3	
18		2.5							
19				- fine grain, dark brown, saturated, medium dense				7.8	
20									
21								NR	
22				- no recovery					
23								NR	
24				SAND: Tan, fine grain, dense, saturated					
25								6.7	

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SAMPLE / CORE LOG

Boring/Well: VAP-7 **Project No.:** Grenada Manufacturing/LA003307.0001.00005

Site Location: Grenada, Mississippi **Drilling Started:** 9/30/2015 **Drilling Completed:** 9/30/2015

Land-Surface Elev.: _____ **Surveyed:** ____ **Estimated:** ____ **Datum:** _____

Drilling Fluid: None **Drilling Method Used:** HA 1-5'/Direct Push

Drilling Contractor: Devonian **Driller:** Lonny **Helper:** Derrick/Tremaine

Prepared By: G. Cook **Hammer Weight:** _____ **Hammer Drop (inches):** _____

Fill | Silty Clay | Silt | Sandy Silt | Silty Sand | Acetate Sleeve | Water First Encountered

Clay | Sandy Clay | Clayey Silt | Sand | Clayey Sand | Hand Auger | Water Level After 10 Minutes

SAMPLE DEPTH (ft)	SAMPLE TYPE	RECOVERY (ft)	SYMBOL	VISUAL DESCRIPTION	USCS (LL/PL/PI)	PP H	PP V	PID (ppm)	REMARKS
27									
28		2.7		- no recovery				4.5	
29								NR	
30				SAND: Light gray, fine grain, loose, saturated					
31								0.9	
32		2.7							
33								1.9	
34									
35				- fine grain, gray, saturated				0.0	
36									
37				- some silt - fine grain sand clay mix				0.4	
38		3.0							
39				- fine to coarse grain					
40				CLAY: Gray, damp, sticky, very soft				5.2	
41				- 4 inch sandy clay layer, soft					
42				- clay				1.0	
43		4.0							
44								2.1	
45				SILTY SAND: Dark gray, trace of clay, very fine grain - fine grain, light gray, saturated, dense					
46								0.5	
47				- fine grain, brown, dense, wet					
48		3.0						5.2	
49									
50				- sandy clay mix SHALEY CLAY: Firm - Total Depth 50 ft bls; Background PID 0.0 ppm.				1.7	

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SAMPLE / CORE LOG

Boring/Well: VAP-8 **Project No.:** Grenada Manufacturing/LA003307.0001.00005

Site Location: Grenada, Mississippi **Drilling Started:** 9/30/2015 **Drilling Completed:** 9/30/2015

Land-Surface Elev.: _____ **Surveyed:** ____ **Estimated:** ____ **Datum:** _____

Drilling Fluid: None **Drilling Method Used:** HA 1-5'/Direct Push

Drilling Contractor: Devonian **Driller:** Lonny **Helper:** Derrick/Tremaine

Prepared By: G. Cook **Hammer Weight:** _____ **Hammer Drop (inches):** _____

Fill | Silty Clay | Silt | Sandy Silt | Silty Sand | Acetate Sleeve | Water First Encountered

Clay | Sandy Clay | Clayey Silt | Sand | Clayey Sand | Hand Auger | Water Level After 10 Minutes

SAMPLE DEPTH (ft)	SAMPLE TYPE	RECOVERY (ft)	SYMBOL	VISUAL DESCRIPTION	USCS (LL/PL/PI)	PP H	PP V	PID (ppm)	REMARKS
0				FILL: Asphalt					
1		2		SILT: Brown, dark brown, ferrous nodules, dry, loose				28.2	Sampled.
2				CLAYEY SILT: Brown, dark brown, ferrous nodules and stain, dry					
3		2						22.6	
4				- increase in clay					
5		1		SILTY CLAY: Brown, dark brown, ferrous nodules, damp, stiff				20.8	
6									
7								11.2	
8		4.75							
9				- 3 inch sandy clay layer, dry				13.3	
10									
11				- no recovery				NR	
12				CLAYEY SAND: With some silt, damp, medium dense					
13		2.5						4.1	
14				SAND: Very fine to fine grain, tan, loose, dry					
15								6.5	
16									
17				- no recovery				NR	▽
18		2.0		SAND: Tan, fine grain, medium dense, wet					
19								3.4	
20									
21								7.1	
22									
23		3.0		- brown, dark brown, very fine to fine grain, some silt, saturated				7.0	
24				- no recovery				NR	
25									

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SAMPLE / CORE LOG

Boring/Well: VAP-8 **Project No.:** Grenada Manufacturing/LA003307.0001.00005

Site Location: Grenada, Mississippi **Drilling Started:** 9/30/2015 **Drilling Completed:** 9/30/2015

Land-Surface Elev.: _____ **Surveyed:** ____ **Estimated:** ____ **Datum:** _____

Drilling Fluid: None **Drilling Method Used:** HA 1-5'/Direct Push

Drilling Contractor: Devonian **Driller:** Lonny **Helper:** Derrick/Tremaine

Prepared By: G. Cook **Hammer Weight:** _____ **Hammer Drop (inches):** _____

Fill | Silty Clay | Silt | Sandy Silt | Silty Sand | Acetate Sleeve | Water First Encountered

Clay | Sandy Clay | Clayey Silt | Sand | Clayey Sand | Hand Auger | Water Level After 10 Minutes

SAMPLE DEPTH (ft)	SAMPLE TYPE	RECOVERY (ft)	SYMBOL	VISUAL DESCRIPTION	USCS (LL/PL/PI)	PP H	PP V	PID (ppm)	REMARKS
27									
28		2.25		- no recovery				NR	
29				SILTY SAND: Gray, fine to coarse grain - 6 inch sandy clay layer, dense, very soft, dark brown				10.5	
30									
31				- no recovery				NR	
32				SAND: Light gray, fine grain, some silt, medium dense, saturated					
33		3.25						9.6	
34									
35								8.3	
36									
37								6.6	
38		4.0		- saturated					
39								6.1	
40				SILTY SAND: Dark gray, very fine grain, saturated					
41								8.0	
42				- silty sand clay mix					
43		3.75		- 3 inch silty sand clay layer, damp, soft				6.9	
44									
45								8.4	
46									
47								8.3	
48									
49				- clay sand mix					
50				- bottom 3 inches shaley clay layer - Total Depth 50 ft bls; Background PID 0.0 ppm.				7.8	

ARCADIS Design & Consultancy for natural and built assets

SAMPLE / CORE LOG

Boring/Well: VAP-9 **Project No.:** Grenada Manufacturing/LA003307.0001.00005

Site Location: Grenada, Mississippi **Drilling Started:** 10/1/2015 **Drilling Completed:** 10/1/2015

Land-Surface Elev.: _____ **Surveyed:** ____ **Estimated:** ____ **Datum:** _____

Drilling Fluid: None **Drilling Method Used:** HA 1-5'/Direct Push

Drilling Contractor: Devonian **Driller:** Lonny **Helper:** Derrick/Tremaine

Prepared By: G. Cook **Hammer Weight:** _____ **Hammer Drop (inches):** _____

Fill | Silty Clay | Silt | Sandy Silt | Silty Sand | Acetate Sleeve | ▽ Water First Encountered

Clay | Sandy Clay | Clayey Silt | Sand | Clayey Sand | Hand Auger | ▼ Water Level After 10 Minutes

SAMPLE DEPTH (ft)	SAMPLE TYPE	RECOVERY (ft)	SYMBOL	VISUAL DESCRIPTION	USCS (LL/PL/PI)	PP H	PP V	PID (ppm)	REMARKS
0				FILL: Asphalt (silt)					
1		2		SILT: Gray and brown, dry, loose				6.0	
2									
3		2		- ferrous stain and nodules, dry, loose				234	Sampled.
4				CLAYEY SILT: Light gray and brown, trace of clay, ferrous nodules and stain, dry					
5		1						2.5	
6				- increase in dark brown clay, dry, soft					
7				SILTY CLAY: Dark brown, ferrous nodules, dry, soft				3.5	
8		5.0							
9								6.9	
10									
11								10.9	
12									
13		3.25		- increase in clay, very stiff, hard				11.4	
14				SILTY SAND: Light gray, dense, dry					
15				- brown				62.1	⊠
16				- wet					
17				SAND: Very fine to fine grain, brown, medium dense, saturated				35.2	
18		3.0							
19								55.5	
20									
21								190.0	
22									
23		3.0		- fine to coarse grain, saturated				7.7	
24									
25				- no recovery				NR	

ARCADIS Design & Consultancy for natural and built assets

SAMPLE / CORE LOG

Boring/Well: VAP-9 **Project No.:** Grenada Manufacturing/LA003307.0001.00005

Site Location: Grenada, Mississippi **Drilling Started:** 10/1/2015 **Drilling Completed:** 10/1/2015

Land-Surface Elev.: _____ **Surveyed:** ____ **Estimated:** ____ **Datum:** _____

Drilling Fluid: None **Drilling Method Used:** HA 1-5'/Direct Push

Drilling Contractor: Devonian **Driller:** Lonny **Helper:** Derrick/Tremaine

Prepared By: G. Cook **Hammer Weight:** _____ **Hammer Drop (inches):** _____

Fill | Silty Clay | Silt | Sandy Silt | Silty Sand | Acetate Sleeve | Water First Encountered

Clay | Sandy Clay | Clayey Silt | Sand | Clayey Sand | Hand Auger | Water Level After 10 Minutes

SAMPLE DEPTH (ft)	SAMPLE TYPE	RECOVERY (ft)	SYMBOL	VISUAL DESCRIPTION	USCS (LL/PL/PI)	PP H V	PID (ppm)	REMARKS
27		3.0		SAND: Gray, fine grain, some silt, loose, saturated			6.7	
28				- 4 inch clay layer, gray, damp, soft				
29				- 3 inch silty clay layer, damp, very soft			22.9	
30				- very fine to fine grain, some silt				
31				- wood fragments			NR	
32				- no recovery				
33		3.0		SAND: Silty, gray, fine grain, wet			17.9	
34				- very fine to fine grain, saturated				
35							22.3	
36				- light gray, saturated				
37							3.0	
38		4.25						
39							19.2	
40								
41							0.0	
42								
43				- very fine to fine grain, saturated			15.8	
44				SANDY CLAY: Dark gray, damp, soft				
45				SAND: Fine to coarse grain, loose, saturated			13.7	
46								
47				- very fine grain, light gray, medium dense, saturated			1.3	
48		4.0		- very fine to fine grain				
49							5.4	
50				- fine grain, saturated - Total Depth 50 ft bls; Background PID 0.0 ppm.				

ARCADIS Design & Consultancy for natural and built assets

SAMPLE / CORE LOG

Boring/Well: VAP-10 **Project No.:** Grenada Manufacturing/LA003307.0001.00005

Site Location: Grenada, Mississippi **Drilling Started:** 10/19/2015 **Drilling Completed:** 10/20/2015

Land-Surface Elev.: _____ **Surveyed:** ____ **Estimated:** ____ **Datum:** _____

Drilling Fluid: None **Drilling Method Used:** HA 1-5'/Direct Push

Drilling Contractor: Devonian **Driller:** Lonny **Helper:** Tremaine

Prepared By: G. Cook **Hammer Weight:** _____ **Hammer Drop (Inches):** _____

Fill | Silty Clay | Silt | Sandy Silt | Silty Sand | Acetate Sleeve | ⧖ Water First Encountered

Clay | Sandy Clay | Clayey Silt | Sand | Clayey Sand | Hand Auger | ⧗ Water Level After 10 Minutes

SAMPLE DEPTH (ft)	SAMPLE TYPE	RECOVERY (ft)	SYMBOL	VISUAL DESCRIPTION	USCS (LL/PL/PI)	PP H	PP V	PID (ppm)	REMARKS
0									
1		1		SILT: Tan, grass cover, dry, loose				1,330	
2		1							
3		1		- tan and brown, ferrous nodules and stain, dry, loose				688	
4		1							
5		1						317	
6									
7								252	
8		5.0		SILTY CLAY: Brown, dark brown, ferrous stain, dry, soft					
				- trace of fine grain sand, dry					
9				SILTY SAND: Very fine grain, brown, dry, loose				177	
10				SAND: Tan, very fine grain, dry, loose					
11								33.2	
12				- some silt, dry - very fine to fine grain, brown and tan, dry, loose - damp					
13		3.0						96.1	
14				- no recovery					
15				SAND: Very fine to fine grain, some silt, tan, damp				73.4	⧖
16									
17				- very fine to fine grain, wet				120	
18		3.0		- dark brown					
19				- no recovery				NR	
20									
21				SAND: Tan, fine to medium grain, wet, slightly compacted, wet				50.3	
22				- brown, medium grain, wet					
23		4.0						147	
24				- fine grain, brown, saturated					
25								148	

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SAMPLE / CORE LOG

Boring/Well: VAP-10 **Project No.:** Grenada Manufacturing/LA003307.0001.00005

Site Location: Grenada, Mississippi **Drilling Started:** 10/19/2015 **Drilling Completed:** 10/20/2015

Land-Surface Elev.: _____ **Surveyed:** ____ **Estimated:** ____ **Datum:** _____

Drilling Fluid: None **Drilling Method Used:** HA 1-5'/Direct Push

Drilling Contractor: Devonian **Driller:** Lonny **Helper:** Tremaine

Prepared By: G. Cook **Hammer Weight:** _____ **Hammer Drop (inches):** _____

Fill | Silty Clay | Silt | Sandy Silt | Silty Sand | Acetate Sleeve | Water First Encountered

Clay | Sandy Clay | Clayey Silt | Sand | Clayey Sand | Hand Auger | Water Level After 10 Minutes

SAMPLE DEPTH (ft)	SAMPLE TYPE	RECOVERY (ft)	SYMBOL	VISUAL DESCRIPTION	USCS (LL/PL/PI)	PP H	PP V	PID (ppm)	REMARKS
27									
28		4.5		- tan, medium grain, wet - brown, medium to coarse grain, slightly compacted				59.8	
29				SILTY SAND: Tan, saturated, compacted				27.9	
30				SAND: Light gray, medium to coarse grain, saturated, loose					
31								27.9	
32		6.0		- 3 inch silty clay layer, wet, very soft - gray, some silt, saturated - 2 inch silty clay layer, wet, very soft					
33								14.8	
34				- very fine grain, gray, wet					
35								11.9	
36				- coarse grain, saturated					
37		5.0						11.0	
38									
39				SANDY CLAY: Gray, damp, soft SAND: Coarse, saturated, loose				12.9	
40				SILTY SAND: Gray, very fine to medium grain, wet, slightly compacted					
41				SANDY CLAY: Gray, soft, wet				10.4	
42				SILTY SAND: Gray, fine to medium grain, compacted, wet					
43		5.0		- wet				10.6	
44				SILTY CLAY: Gray, trace of very fine grain sand, damp, soft					
45				SILTY SAND: Gray, very fine grain, wet				11.9	
46				- wet					
47								14.6	
48				- damp					
49								12.3	
50				- Total Depth 50 ft bls; Background PID 0.0 ppm.					

APPENDIX H

Soil Gas, Indoor Air, and Sub-Slab Vapor Data Validation Reports

ARCADIS Design & Consultancy for natural and built assets

Grenada Manufacturing

Data Review

GRENADA, MISSISSIPPI

Volatile Analysis

SDG #1509512

Analyses Performed By:
Eurofins Air Toxics Ltd.
Folsom, California

Report: #24462R
Review Level: Tier III
Project: LA003307.0001.00007

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #1509512 for samples collected in association with the Grenada Manufacturing site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Included with this assessment are the validation annotated sample result sheets and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	PCB	MET	MISC
1-AA(092215)	1509512-01	Air	9/22/2015		X				
2-AA(092215)	1509512-02	Air	9/22/2015		X				
6-IA(092215)	1509512-03	Air	9/22/2015		X				
1-IA(092215)	1509512-04	Air	9/22/2015		X				
5-IA(092215)	1509512-05	Air	9/22/2015		X				
2-IA(092215)	1509512-06	Air	9/22/2015		X				
3-IA(092215)	1509512-07	Air	9/22/2015		X				
4-IA(092215)	1509512-08	Air	9/22/2015		X				

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Sample receipt condition		X		X	
Requested analyses and sample results		X		X	
Collection Technique (grab, composite, etc.)		X		X	
Methods of analysis		X		X	
Reporting limits		X		X	
Sample collection date		X		X	
Laboratory sample received date		X		X	
Sample preservation verification (as applicable)		X		X	
Sample preparation/extraction/analysis dates		X		X	
Fully executed Chain-of-Custody (COC) form completed		X		X	
Narrative summary of QA or sample problems provided		X		X	
Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) Method TO-15. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation	Return Canister Pressure
EPA TO-15 and EPA TO-15-SIM	Air	30 days from collection to analysis	Ambient Temperature	< -1" Hg

All samples met return canister pressure criteria and were analyzed within the specified holding time.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 24-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (30%) and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (30%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Criteria
1-AA(092215) 2-AA(092215) 6-IA(092215) 1-IA(092215) 5-IA(092215) 2-IA(092215) 3-IA(092215) 4-IA(092215)	ICAL %RSD	1,2,4-Trimethylbenzene	32.9%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01[1]	Non-detect	R
		Detect	J
	RRF >0.05 or RRF >0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 30%	Non-detect	UJ
		Detect	J
Continuing Calibration	%D >30% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D >30% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

1 RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketenes, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the established acceptance limits of 70% to 130%.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than 40% or less than 40% of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS/LCSD analysis must exhibit a percent recovery within the established acceptance limits of 70% to 130%.

All compounds associated with the LCS/LCSD analysis exhibited recoveries within the control limits.

8. Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for air matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for air matrices.

A laboratory duplicate was not performed on a sample location within this SDG.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 100% for air matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for air matrices.

A field duplicate was not performed on a sample location within this SDG.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: TO-15	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Canister return pressure (<-1"Hg)		X		X	
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
C. Trip blanks					X
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate(LCSD)		X		X	
LCS/LCSD Precision (RPD)		X		X	
Field/Lab Duplicate (%D)					X
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X	X		
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X		X	
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present				X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

VOCs: TO-15	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					

%RSD Percent relative difference
%R Percent recovery
RPD Relative percent difference
%D Percent difference

VALIDATION PERFORMED BY: Jennifer Singer

SIGNATURE: Jennifer A Singer

DATE: November 2, 2015

PEER REVIEW BY: Dennis Capria

DATE: November 4, 2015

CORRECTED SAMPLE ANALYSIS DATA SHEETS AND COCs

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Sample Transportation Notice
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(916) 985-1000 FAX (916) 985-1020

Page 1 of 1

Project Manager: Rob Lippencamp
Collected by: (Print and Sign) R. Wiedrice / M. Head
Company: ARCADIS
Email: Roblippencamp@arcadis.com
Address: 132 E. Washington St STE 600
City: Indianapolis
State: IN
Zip: 46204
Phone: 317-231-6500
Fax: 317-231-6514

Project Info:
P.O. #: IN000899.2013
Project #: IN000899.2013
Project Name: Grenada Manufacturing

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	1-AA (092215)	6L1237	9-22-15/9-23-15	1044-1043	TO-15, Project List	30	9		
02A	2-AA (092215)	5L34325	9-22-15/9-23-15	1612 ~~1051~~ 1617	TO-15, Project List	30	7.25		
03A	6-IA (092215)	308400	9-22-15/9-23-15	1105-1058	TO-15, Project List	30	7.5		
04A	1-IA (092215)	mtb 34481 ~~12077~~	9-22-15/9-23-15	1206-1202	TO-15, Project List	30	~~30~~ 7.5 mtb		
mtb 1-23-15	~~1-Dup IA (092215)~~	mtb 12077 ~~34481~~	9-22-15/9-23-15	~~1206-1202~~	~~TO-15, Project List~~	~~30~~	~~30~~		
05A	5-IA (092215)	35166	9-22-15/9-23-15	1303-1305	TO-15, Project List	30	9.5		
06A	2-IA (092215)	34356	9-22-15/9-23-15	1417-1408	TO-15, Project List	30	7.5		
07A	3-IA (092215)	33980	9-22-15/9-23-15	1533-1533	TO-15, Project List	30	7		
08A	4-IA (092215)	33877	9-22-15/9-23-15	1647-1647	TO-15 Project List	30	7		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	9-24-15 1500	Candice H Cortney [signature]	1235 9/30/15
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fedex		N/A	Good	Yes No None	1509512

Form 1293 rev.11

eurofins | Air Toxics

Client Sample ID: 1-AA(092215)

Lab ID#: 1509512-01A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100507**	**Date of Collection:**	**9/23/15 10:43:00 AM**
Dil. Factor:	**1.91**	**Date of Analysis:**	**10/5/15 01:51 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.38	Not Detected	1.3	Not Detected
1,2,4-Trimethylbenzene	0.19	Not Detected UJ	0.94	Not Detected UJ

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	97	70-130

eurofins | Air Toxics

Client Sample ID: 1-AA(092215)

Lab ID#: 1509512-01B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100507sim**	**Date of Collection:**	**9/23/15 10:43:00 AM**
Dil. Factor:	**1.91**	**Date of Analysis:**	**10/5/15 01:51 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.019	0.040	0.049	0.10
1,1-Dichloroethene	0.019	Not Detected	0.076	Not Detected
trans-1,2-Dichloroethene	0.19	Not Detected	0.76	Not Detected
cis-1,2-Dichloroethene	0.038	0.21	0.15	0.85
Chloroform	0.038	Not Detected	0.19	Not Detected
Benzene	0.096	0.095 J	0.30	0.30 J
1,2-Dichloroethane	0.038	Not Detected	0.15	Not Detected
Trichloroethene	0.038	0.22	0.20	1.2
Toluene	0.038	0.18	0.14	0.66
1,1,2-Trichloroethane	0.038	Not Detected	0.21	Not Detected
Tetrachloroethene	0.038	Not Detected	0.26	Not Detected
Ethyl Benzene	0.038	Not Detected	0.16	Not Detected
m,p-Xylene	0.076	0.12	0.33	0.52
o-Xylene	0.038	0.066	0.16	0.29

J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	92	70-130

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Client Sample ID: 2-AA(092215)

Lab ID#: 1509512-02A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100508**	**Date of Collection:**	**9/23/15 4:17:00 PM**
Dil. Factor:	**1.83**	**Date of Analysis:**	**10/5/15 02:46 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.37	Not Detected	1.3	Not Detected
1,2,4-Trimethylbenzene	0.18	Not Detected UJ	0.90	Not Detected UJ

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	93	70-130

eurofins | Air Toxics

Client Sample ID: 2-AA(092215)

Lab ID#: 1509512-02B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100508sim**	**Date of Collection: 9/23/15 4:17:00 PM**	
Dil. Factor:	**1.83**	**Date of Analysis: 10/5/15 02:46 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	0.018 J	0.047	0.046 J
1,1-Dichloroethene	0.018	Not Detected	0.072	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.72	Not Detected
cis-1,2-Dichloroethene	0.037	0.17	0.14	0.67
Chloroform	0.037	Not Detected	0.18	Not Detected
Benzene	0.092	0.099	0.29	0.32
1,2-Dichloroethane	0.037	Not Detected	0.15	Not Detected
Trichloroethene	0.037	0.19	0.20	1.0
Toluene	0.037	0.24	0.14	0.89
1,1,2-Trichloroethane	0.037	Not Detected	0.20	Not Detected
Tetrachloroethene	0.037	Not Detected	0.25	Not Detected
Ethyl Benzene	0.037	0.054	0.16	0.24
m,p-Xylene	0.073	0.19	0.32	0.83
o-Xylene	0.037	0.083	0.16	0.36

J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	94	70-130

eurofins | Air Toxics

Client Sample ID: 6-IA(092215)

Lab ID#: 1509512-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100509**	**Date of Collection:**	**9/23/15 10:58:00 AM**
Dil. Factor:	**4.38**	**Date of Analysis:**	**10/5/15 03:37 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.88	Not Detected	3.0	Not Detected
1,2,4-Trimethylbenzene	0.44	Not Detected UJ	2.2	Not Detected UJ

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: 6-IA(092215)

Lab ID#: 1509512-03B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100509sim**	**Date of Collection:**	**9/23/15 10:58:00 AM**
Dil. Factor:	**4.38**	**Date of Analysis:**	**10/5/15 03:37 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.044	Not Detected	0.11	Not Detected
1,1-Dichloroethene	0.044	Not Detected	0.17	Not Detected
trans-1,2-Dichloroethene	0.44	Not Detected	1.7	Not Detected
cis-1,2-Dichloroethene	0.088	0.097	0.35	0.38
Chloroform	0.088	0.12	0.43	0.56
Benzene	0.22	Not Detected	0.70	Not Detected
1,2-Dichloroethane	0.088	Not Detected	0.35	Not Detected
Trichloroethene	0.088	0.12	0.47	0.65
Toluene	0.088	1.0	0.33	3.9
1,1,2-Trichloroethane	0.088	Not Detected	0.48	Not Detected
Tetrachloroethene	0.088	Not Detected	0.59	Not Detected
Ethyl Benzene	0.088	0.14	0.38	0.63
m,p-Xylene	0.18	0.49	0.76	2.1
o-Xylene	0.088	0.23	0.38	1.0

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	97	70-130

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Client Sample ID: 1-IA(092215)

Lab ID#: 1509512-04A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100510**	**Date of Collection: 9/23/15 12:02:00 PM**	
Dil. Factor:	**4.58**	**Date of Analysis: 10/5/15 04:24 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.92	Not Detected	3.2	Not Detected
1,2,4-Trimethylbenzene	0.46	Not Detected UJ	2.2	Not Detected UJ

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	95	70-130

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Client Sample ID: 1-IA(092215)

Lab ID#: 1509512-04B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100510sim**	**Date of Collection:**	**9/23/15 12:02:00 PM**
Dil. Factor:	**4.58**	**Date of Analysis:**	**10/5/15 04:24 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.046	Not Detected	0.12	Not Detected
1,1-Dichloroethene	0.046	Not Detected	0.18	Not Detected
trans-1,2-Dichloroethene	0.46	Not Detected	1.8	Not Detected
cis-1,2-Dichloroethene	0.092	0.15	0.36	0.61
Chloroform	0.092	0.15	0.45	0.75
Benzene	0.23	1.2	0.73	3.8
1,2-Dichloroethane	0.092	0.21	0.37	0.84
Trichloroethene	0.092	0.20	0.49	1.1
Toluene	0.092	1.4	0.34	5.4
1,1,2-Trichloroethane	0.092	Not Detected	0.50	Not Detected
Tetrachloroethene	0.092	Not Detected	0.62	Not Detected
Ethyl Benzene	0.092	0.23	0.40	1.0
m,p-Xylene	0.18	0.59	0.80	2.6
o-Xylene	0.092	0.22	0.40	0.95

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130

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Client Sample ID: 5-IA(092215)

Lab ID#: 1509512-05A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100511**	**Date of Collection:**	**9/23/15 1:05:00 PM**
Dil. Factor:	**1.91**	**Date of Analysis:**	**10/5/15 05:19 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.38	0.59	1.3	2.0
1,2,4-Trimethylbenzene	0.19	Not Detected UJ	0.94	Not Detected UJ

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	98	70-130

eurofins | Air Toxics

Client Sample ID: 5-IA(092215)

Lab ID#: 1509512-05B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100511sim**	**Date of Collection:**	**9/23/15 1:05:00 PM**
Dil. Factor:	**1.91**	**Date of Analysis:**	**10/5/15 05:19 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.019	0.024	0.049	0.062
1,1-Dichloroethene	0.019	Not Detected	0.076	Not Detected
trans-1,2-Dichloroethene	0.19	Not Detected	0.76	Not Detected
cis-1,2-Dichloroethene	0.038	0.16	0.15	0.65
Chloroform	0.038	0.044	0.19	0.21
Benzene	0.096	0.27	0.30	0.86
1,2-Dichloroethane	0.038	0.044	0.15	0.18
Trichloroethene	0.038	0.16	0.20	0.86
Toluene	0.038	0.70	0.14	2.6
1,1,2-Trichloroethane	0.038	Not Detected	0.21	Not Detected
Tetrachloroethene	0.038	Not Detected	0.26	Not Detected
Ethyl Benzene	0.038	0.12	0.16	0.55
m,p-Xylene	0.076	0.37	0.33	1.6
o-Xylene	0.038	0.13	0.16	0.56

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	94	70-130

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Client Sample ID: 2-IA(092215)

Lab ID#: 1509512-06A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100512**	**Date of Collection:**	**9/23/15 2:08:00 PM**
Dil. Factor:	**4.38**	**Date of Analysis:**	**10/5/15 06:04 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.88	Not Detected	3.0	Not Detected
1,2,4-Trimethylbenzene	0.44	Not Detected UJ	2.2	Not Detected UJ

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	103	70-130

eurofins | Air Toxics

Client Sample ID: 2-IA(092215)

Lab ID#: 1509512-06B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100512sim**	**Date of Collection:**	**9/23/15 2:08:00 PM**
Dil. Factor:	**4.38**	**Date of Analysis:**	**10/5/15 06:04 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.044	Not Detected	0.11	Not Detected
1,1-Dichloroethene	0.044	Not Detected	0.17	Not Detected
trans-1,2-Dichloroethene	0.44	Not Detected	1.7	Not Detected
cis-1,2-Dichloroethene	0.088	0.14	0.35	0.57
Chloroform	0.088	0.19	0.43	0.91
Benzene	0.22	0.25	0.70	0.81
1,2-Dichloroethane	0.088	1.7	0.35	7.0
Trichloroethene	0.088	0.20	0.47	1.1
Toluene	0.088	2.1	0.33	7.9
1,1,2-Trichloroethane	0.088	Not Detected	0.48	Not Detected
Tetrachloroethene	0.088	Not Detected	0.59	Not Detected
Ethyl Benzene	0.088	0.20	0.38	0.85
m,p-Xylene	0.18	0.43	0.76	1.9
o-Xylene	0.088	0.25	0.38	1.1

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	100	70-130

eurofins | Air Toxics

Client Sample ID: 3-IA(092215)

Lab ID#: 1509512-07A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100513**	**Date of Collection:**	**9/23/15 3:33:00 PM**
Dil. Factor:	**17.5**	**Date of Analysis:**	**10/5/15 06:49 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	3.5	Not Detected	12	Not Detected
1,2,4-Trimethylbenzene	1.8	Not Detected UJ	8.6	Not Detected UJ

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	98	70-130

eurofins | Air Toxics

Client Sample ID: 3-IA(092215)

Lab ID#: 1509512-07B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100513sim**	**Date of Collection:**	**9/23/15 3:33:00 PM**
Dil. Factor:	**17.5**	**Date of Analysis:**	**10/5/15 06:49 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.18	Not Detected	0.45	Not Detected
1,1-Dichloroethene	0.18	Not Detected	0.69	Not Detected
trans-1,2-Dichloroethene	1.8	Not Detected	6.9	Not Detected
cis-1,2-Dichloroethene	0.35	Not Detected	1.4	Not Detected
Chloroform	0.35	0.86	1.7	4.2
Benzene	0.88	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.35	Not Detected	1.4	Not Detected
Trichloroethene	0.35	Not Detected	1.9	Not Detected
Toluene	0.35	1.5	1.3	5.6
1,1,2-Trichloroethane	0.35	Not Detected	1.9	Not Detected
Tetrachloroethene	0.35	Not Detected	2.4	Not Detected
Ethyl Benzene	0.35	Not Detected	1.5	Not Detected
m,p-Xylene	0.70	Not Detected	3.0	Not Detected
o-Xylene	0.35	Not Detected	1.5	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: 4-IA(092215)

Lab ID#: 1509512-08A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100514**	**Date of Collection:**	**9/23/15 4:47:00 PM**
Dil. Factor:	**1.79**	**Date of Analysis:**	**10/5/15 07:52 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.36	Not Detected	1.2	Not Detected
1,2,4-Trimethylbenzene	0.18	Not Detected UJ	0.88	Not Detected UJ

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	96	70-130

eurofins | Air Toxics

Client Sample ID: 4-IA(092215)

Lab ID#: 1509512-08B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100514sim**	**Date of Collection:**	**9/23/15 4:47:00 PM**
Dil. Factor:	**1.79**	**Date of Analysis:**	**10/5/15 07:52 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	0.031	0.046	0.079
1,1-Dichloroethene	0.018	Not Detected	0.071	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.71	Not Detected
cis-1,2-Dichloroethene	0.036	0.14	0.14	0.58
Chloroform	0.036	0.19	0.17	0.94
Benzene	0.090	0.58	0.28	1.8
1,2-Dichloroethane	0.036	0.30	0.14	1.2
Trichloroethene	0.036	0.18	0.19	0.99
Toluene	0.036	0.72	0.13	2.7
1,1,2-Trichloroethane	0.036	Not Detected	0.20	Not Detected
Tetrachloroethene	0.036	Not Detected	0.24	Not Detected
Ethyl Benzene	0.036	0.10	0.16	0.43
m,p-Xylene	0.072	0.26	0.31	1.1
o-Xylene	0.036	0.13	0.16	0.56

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	99	70-130

ARCADIS Design & Consultancy for natural and built assets

Grenada Manufacturing

Data Review

GRENADA, MISSISSIPPI

Volatile Analysis

SDG #1509345

Analyses Performed By:
Eurofins Air Toxics Ltd.
Folsom, California

Report: #24463R
Review Level: Tier III
Project: LA003307.0001.00007

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #1509345 for samples collected in association with the Grenada Manufacturing site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Included with this assessment are the validation annotated sample result sheets and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	PCB	MET	MISC
SG-2(091615)	1509345-01	Air	9/16/2015		X				
SG-1(091615)	1509345-02	Air	9/16/2015		X				
SG-3(091615)	1509345-03	Air	9/16/2015		X				
SG-5(091615)	1509345-04	Air	9/16/2015		X				
SG-6(091615)	1509345-05	Air	9/16/2015		X				
DUP-1(091615)	1509345-06	Air	9/16/2015	SG-5(091615)	X				

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Sample receipt condition		X		X	
Requested analyses and sample results		X		X	
Collection Technique (grab, composite, etc.)		X		X	
Methods of analysis		X		X	
Reporting limits		X		X	
Sample collection date		X		X	
Laboratory sample received date		X		X	
Sample preservation verification (as applicable)		X		X	
Sample preparation/extraction/analysis dates		X		X	
Fully executed Chain-of-Custody (COC) form completed		X		X	
Narrative summary of QA or sample problems provided		X		X	
Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) Method TO-15. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation	Return Canister Pressure
EPA TO-15	Air	30 days from collection to analysis	Ambient Temperature	< -1" Hg

All samples met return canister pressure criteria and were analyzed within the specified holding time.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 24-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (30%) and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (30%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits, with the exception of the compounds presented in the following table.

Sample Locations	Initial/Continuing	Compound	Criteria
SG-2(091615) SG-1(091615) SG-3(091615) SG-5(091615) SG-6(091615) DUP-1(091615)	CCV %D	1,2,4-Trimethylbenzene	-36.7%

The criteria used to evaluate the initial and continuing calibration are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Initial/Continuing	Criteria	Sample Result	Qualification
Initial and Continuing Calibration	RRF <0.05	Non-detect	R
		Detect	J
	RRF <0.01[1]	Non-detect	R
		Detect	J
	RRF >0.05 or RRF >0.01[1]	Non-detect	No Action
		Detect	
Initial Calibration	%RSD > 30%	Non-detect	UJ
		Detect	J
Continuing Calibration	%D >30% (increase in sensitivity)	Non-detect	No Action
		Detect	J
	%D >30% (decrease in sensitivity)	Non-detect	UJ
		Detect	J

1 RRF of 0.01 only applies to compounds which are typically poor responding compounds (i.e., ketenes, 1,4-dioxane, etc.)

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the established acceptance limits of 70% to 130%.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than 40% or less than 40% of the area counts of the associated continuing calibration standard.

Sample locations associated with internal standards exhibiting responses outside of the control limits are presented in the following table.

Sample Locations	Internal Standard	Response
SG-5(091615) SG-6(091615) DUP-1(091615)	Bromochloromethane	< LL but > 40%
	1,4-Difluororobenzene	AC
	Chlorobenzene-d5	

AC Acceptable

The criteria used to evaluate the internal standard responses are presented in the following table. In the case of an internal standard deviation, the compounds quantitated under the deviant internal standard are qualified as documented in the table below.

Control limit	Sample Result	Qualification
> the upper control limit (UL)	Non-detect	No action
	Detect	J
< 40% but > 25%	Non-detect	UJ
	Detect	J
< 25%	Non-detect	R
	Detect	J

7. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS/LCSD analysis must exhibit a percent recovery within the established acceptance limits of 70% to 130%.

All compounds associated with the LCS/LCSD analysis exhibited recoveries within the control limits.

8. Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for air matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for air matrices.

A laboratory duplicate was not performed on a sample location within this SDG.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 100% for air matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for air matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result ($\mu g/m^3$)	Duplicate Result ($\mu g/m^3$)	RPD
SG-5(091615)/ DUP-1(091615)	Benzene	8.3	6.8	AC
	Ethyl Benzene	13	13	
	o-Xylene	24	25	
	1,2,4-Trimethylbenzene	21	20	
	Chloroform	88	88	0.0%
	Toluene	30	30	0.0%
	m,p-Xylene	65	68	4.5%

AC = Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: TO-15	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Canister return pressure (<-1"Hg)		X		X	
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
C. Trip blanks					X
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate(LCSD)		X		X	
LCS/LCSD Precision (RPD)		X		X	
Field/Lab Duplicate (%D)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X	X		
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X	X		
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present				X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

VOCs: TO-15	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					

%RSD Percent relative difference
%R Percent recovery
RPD Relative percent difference
%D Percent difference

VALIDATION PERFORMED BY: Jennifer Singer

SIGNATURE: Jennifer Singer

DATE: October 19, 2015

PEER REVIEW BY: Dennis Capria

DATE: November 4, 2015

CORRECTED SAMPLE ANALYSIS DATA SHEETS AND COCs

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180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Page 1 of 1

Project Manager Rob Uppencamp
Collected by: (Print and Sign) Randall Woodrow [signature]
Company ARCADIS Email Rob Uppencamp
Address 132 E. Washington Ste 600 City Indianapolis State IN Zip 46204
Phone 317-231-6500 Fax 317-231-6514

Project Info:
P.O. # IN000899.2013
Project # IN000899.2013
Project Name Grenada Manufacturing

Turn Around Time:
☐ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	SG-2 (091615)	31765	9-16-15	0755-0808	TO-15, Project List	30	4.5		
02A	SG-1 (091615)	35559	9-16-15	0842-0854	TO-15, Project List	30	6.5		
03A	SG-3 (091615)	37382	9-16-15	0933-0947	TO-15, Project List	30	4.5		
04A	SG-5 (091615)	1L2717	9-16-15	1238-1252	TO-15, Project List	30	5.0		
05A	SG-6 (091615)	33388	9-16-15	1410-1430	TO-15, Project List	30	5.0		
06A	Dup-1 (091615)	1006	9-16-15	1238-1251	TO-15, Project List	30	4.5		
07A	SG-4 (091715)	37397	9-17-15	0627-0653	TO-15, Project List	30	5.5		
08A	SG-7 (091715)	1L2720	9-17-15	0709-0723	TO-15, Project List	30	3.5		
09A	SG-8 (091715)	1L1784	9-17-15	0750-0803	TO-15, Project List	30	4.5		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	9-18-15/0800	[signature]	9/21/15 1520
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx		NA	Good	Yes No None	1509345

Form 1293 rev.11

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Client Sample ID: SG-2 (091615)

Lab ID#: 1509345-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092522**	**Date of Collection:**	**9/16/15 8:08:00 AM**
Dil. Factor:	**2.28**	**Date of Analysis:**	**9/25/15 11:49 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)		Rpt. Limit (ug/m3)	Amount (ug/m3)	
Vinyl Chloride	1.1	Not Detected		2.9	Not Detected	
1,1-Dichloroethene	1.1	Not Detected		4.5	Not Detected	
Methylene Chloride	11	Not Detected		40	Not Detected	
trans-1,2-Dichloroethene	1.1	Not Detected		4.5	Not Detected	
cis-1,2-Dichloroethene	1.1	Not Detected		4.5	Not Detected	
Chloroform	1.1	Not Detected		5.6	Not Detected	
Benzene	1.1	1.8		3.6	5.6	
1,2-Dichloroethane	1.1	Not Detected		4.6	Not Detected	
Trichloroethene	1.1	Not Detected		6.1	Not Detected	
Toluene	1.1	Not Detected		4.3	Not Detected	
1,1,2-Trichloroethane	1.1	Not Detected		6.2	Not Detected	
Tetrachloroethene	1.1	Not Detected		7.7	Not Detected	
Ethyl Benzene	1.1	Not Detected		4.9	Not Detected	
m,p-Xylene	1.1	Not Detected		5.0	Not Detected	
o-Xylene	1.1	Not Detected		5.0	Not Detected	
1,2,4-Trimethylbenzene	1.1	Not Detected	UJ	5.6	Not Detected	UJ

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: SG-1 (091615)

Lab ID#: 1509345-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092523**	**Date of Collection:**	**9/16/15 8:54:00 AM**
Dil. Factor:	**2.48**	**Date of Analysis:**	**9/26/15 12:16 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)		Rpt. Limit (ug/m3)	Amount (ug/m3)	
Vinyl Chloride	1.2	Not Detected		3.2	Not Detected	
1,1-Dichloroethene	1.2	Not Detected		4.9	Not Detected	
Methylene Chloride	12	Not Detected		43	Not Detected	
trans-1,2-Dichloroethene	1.2	Not Detected		4.9	Not Detected	
cis-1,2-Dichloroethene	1.2	Not Detected		4.9	Not Detected	
Chloroform	1.2	Not Detected		6.0	Not Detected	
Benzene	1.2	Not Detected		4.0	Not Detected	
1,2-Dichloroethane	1.2	Not Detected		5.0	Not Detected	
Trichloroethene	1.2	Not Detected		6.7	Not Detected	
Toluene	1.2	Not Detected		4.7	Not Detected	
1,1,2-Trichloroethane	1.2	Not Detected		6.8	Not Detected	
Tetrachloroethene	1.2	Not Detected		8.4	Not Detected	
Ethyl Benzene	1.2	1.8		5.4	7.6	
m,p-Xylene	1.2	3.5		5.4	15	
o-Xylene	1.2	Not Detected		5.4	Not Detected	
1,2,4-Trimethylbenzene	1.2	Not Detected	UJ	6.1	Not Detected	UJ

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: SG-3 (091615)
Lab ID#: 1509345-03A
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092524**	**Date of Collection:**	**9/16/15 9:47:00 AM**
Dil. Factor:	**2.34**	**Date of Analysis:**	**9/26/15 12:57 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Methylene Chloride	12	Not Detected	41	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Chloroform	1.2	1.9	5.7	9.1
Benzene	1.2	2.9	3.7	9.4
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
Toluene	1.2	Not Detected	4.4	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
Ethyl Benzene	1.2	Not Detected	5.1	Not Detected
m,p-Xylene	1.2	Not Detected	5.1	Not Detected
o-Xylene	1.2	Not Detected	5.1	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected UJ	5.8	Not Detected UJ

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: SG-5 (091615)

Lab ID#: 1509345-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092525**	**Date of Collection:**	**9/16/15 12:52:00 PM**
Dil. Factor:	**2.59**	**Date of Analysis:**	**9/26/15 01:23 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected UJ	3.3	Not Detected UJ
1,1-Dichloroethene	1.3	Not Detected	5.1	Not Detected
Methylene Chloride	13	Not Detected	45	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.1	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.1	Not Detected
Chloroform	1.3	18 J	6.3	88 J
Benzene	1.3	2.6 J	4.1	8.3 J
1,2-Dichloroethane	1.3	Not Detected UJ	5.2	Not Detected UJ
Trichloroethene	1.3	Not Detected UJ	7.0	Not Detected UJ
Toluene	1.3	7.9 J	4.9	30 J
1,1,2-Trichloroethane	1.3	Not Detected UJ	7.1	Not Detected UJ
Tetrachloroethene	1.3	Not Detected UJ	8.8	Not Detected UJ
Ethyl Benzene	1.3	3.1 J	5.6	13 J
m,p-Xylene	1.3	15	5.6	65
o-Xylene	1.3	5.5	5.6	24
1,2,4-Trimethylbenzene	1.3	4.3 J0	6.4	21 J0

J0 = Estimated value due to bias in the CCV.

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	110	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: SG-6 (091615)
Lab ID#: 1509345-05A
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092526**	**Date of Collection:**	**9/16/15 2:30:00 PM**
Dil. Factor:	**2.63**	**Date of Analysis:**	**9/26/15 02:05 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected UJ	3.4	Not Detected UJ
1,1-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Methylene Chloride	13	Not Detected	46	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Chloroform	1.3	20 J	6.4	97 J
Benzene	1.3	7.1 J	4.2	23 J
1,2-Dichloroethane	1.3	Not Detected UJ	5.3	Not Detected UJ
Trichloroethene	1.3	Not Detected UJ	7.1	Not Detected UJ
Toluene	1.3	5.5 J	5.0	21 J
1,1,2-Trichloroethane	1.3	Not Detected UJ	7.2	Not Detected UJ
Tetrachloroethene	1.3	Not Detected UJ	8.9	Not Detected UJ
Ethyl Benzene	1.3	2.0 J	5.7	8.5 J
m,p-Xylene	1.3	11	5.7	48
o-Xylene	1.3	3.6	5.7	16
1,2,4-Trimethylbenzene	1.3	3.0 ~~J0~~	6.5	15 ~~J0~~

J0 = Estimated value due to bias in the CCV.

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	111	70-130
1,2-Dichloroethane-d4	113	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: DUP-1 (091615)

Lab ID#: 1509345-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092527**	**Date of Collection: 9/16/15 12:51:00 PM**	
Dil. Factor:	**2.48**	**Date of Analysis: 9/26/15 02:31 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected UJ	3.2	Not Detected UJ
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Methylene Chloride	12	Not Detected	43	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Chloroform	1.2	18 J	6.0	88 J
Benzene	1.2	2.1 J	4.0	6.8 J
1,2-Dichloroethane	1.2	Not Detected UJ	5.0	Not Detected UJ
Trichloroethene	1.2	Not Detected UJ	6.7	Not Detected UJ
Toluene	1.2	7.9 J	4.7	30 J
1,1,2-Trichloroethane	1.2	Not Detected UJ	6.8	Not Detected UJ
Tetrachloroethene	1.2	Not Detected UJ	8.4	Not Detected UJ
Ethyl Benzene	1.2	3.1 J	5.4	13 J
m,p-Xylene	1.2	16	5.4	68
o-Xylene	1.2	5.8	5.4	25
1,2,4-Trimethylbenzene	1.2	4.0 ~~J0~~	6.1	20 ~~J0~~

J0 = Estimated value due to bias in the CCV.

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	113	70-130
1,2-Dichloroethane-d4	109	70-130
4-Bromofluorobenzene	103	70-130

ARCADIS Design & Consultancy for natural and built assets

Grenada Manufacturing

Data Review

GRENADA, MISSISSIPPI

Volatile Analysis

SDG #1509511

Analyses Performed By:
Eurofins Air Toxics Ltd.
Folsom, California

Report: #24464R
Review Level: Tier III
Project: LA003307.0001.00007

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #1509511 for samples collected in association with the Grenada Manufacturing site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Included with this assessment are the validation annotated sample result sheets and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	PCB	MET	MISC
6-SS(092315)	1509511-01	Air	9/23/2015		X				
1-SS(092315)	1509511-02	Air	9/23/2015		X				
1-DUP-SS(092315)	1509511-03	Air	9/23/2015	1-SS(092315)	X				
5-SS(092315)	1509511-04	Air	9/23/2015		X				
2-SS(092315)	1509511-05	Air	9/23/2015		X				
3-SS(092315)	1509511-06	Air	9/23/2015		X				
4-SS(092315)	1509511-07	Air	9/23/2015		X				

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Sample receipt condition		X		X	
Requested analyses and sample results		X		X	
Collection Technique (grab, composite, etc.)		X		X	
Methods of analysis		X		X	
Reporting limits		X		X	
Sample collection date		X		X	
Laboratory sample received date		X		X	
Sample preservation verification (as applicable)		X		X	
Sample preparation/extraction/analysis dates		X		X	
Fully executed Chain-of-Custody (COC) form completed		X		X	
Narrative summary of QA or sample problems provided		X		X	
Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) Method TO-15. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation	Return Canister Pressure
EPA TO-15	Air	30 days from collection to analysis	Ambient Temperature	< -1" Hg

All samples met return canister pressure criteria and were analyzed within the specified holding time.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 24-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (30%) and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (30%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the established acceptance limits of 70% to 130%.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than 40% or less than 40% of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS/LCSD analysis must exhibit a percent recovery within the established acceptance limits of 70% to 130%.

All compounds associated with the LCS/LCSD analysis exhibited recoveries within the control limits.

8. Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for air matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for air matrices.

A laboratory duplicate was not performed on a sample location within this SDG.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 100% for air matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for air matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result ($\mu g/m^3$)	Duplicate Result ($\mu g/m^3$)	RPD
1-SS(092315)/ 1-DUP-SS(092315)	Trichloroethene	6.6 U	22	AC
	Tetrachloroethene	8.5	8.0 U	

AC = Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: TO-15	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Canister return pressure (<-1"Hg)		X		X	
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
C. Trip blanks					X
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate(LCSD)		X		X	
LCS/LCSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X		X	
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present				X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

VOCs: TO-15	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					

%RSD Percent relative difference
%R Percent recovery
RPD Relative percent difference
%D Percent difference

VALIDATION PERFORMED BY: Jennifer Singer

SIGNATURE: Jennifer A Singer

DATE: November 2, 2015

PEER REVIEW BY: Dennis Capria

DATE: November 4, 2015

CORRECTED SAMPLE ANALYSIS DATA SHEETS AND COCs

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180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager ROB UPPENCAMP

Collected by: (Print and Sign) R WOODRUFF / M HEAP

Company ARCADIS Email rob.uppencamp@arcadis.com

Address 132 E. WASHINGTON SUITE 600 City INPLS State IN Zip 46204

Phone 317-231-6500 Fax 317-231-6514

Project Info:
P.O. # LA003307.0001
Project # LA003307.0001
Project Name Grenada Manufacturing

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	6-SS (092315)	31782	9-23-15	1117/1130	TO-15, Project List	30	4.5		
02A	1-SS (092315)	IL1624		1216/1227	TO-15 Project List	30	5.75		
03A	1-DUP-SS (092315)	34618		1216/1230	TO-15 Project List	30	5		
04A	5-SS (092315)	1358		1319/1332	TO-15 Project List	30	5		
05A	2-SS (092315)	IL1901		1423/1439	TO-15 Project List	30	4.5		
06A	3-SS (092315)	15794		1547/1601	TO-15 Project List	30	7		
07A	4-SS (092315)	36399		1700/1713	TO-15 Project List	30	5		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	9-24-15 1500	Candace K Cothey BATZ	9/30/15 1235
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fedex		N/A	Good	Yes No (None)	1509511

Form 1293 rev.11

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Client Sample ID: 6-SS(092315)

Lab ID#: 1509511-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100223**	**Date of Collection:**	**9/23/15 11:30:00 AM**
Dil. Factor:	**2.34**	**Date of Analysis:**	**10/2/15 10:45 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Methylene Chloride	12	Not Detected	41	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Chloroform	1.2	28	5.7	140
Benzene	1.2	Not Detected	3.7	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
Toluene	1.2	1.2	4.4	4.7
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
Ethyl Benzene	1.2	Not Detected	5.1	Not Detected
m,p-Xylene	1.2	Not Detected	5.1	Not Detected
o-Xylene	1.2	Not Detected	5.1	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.8	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	91	70-130

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Client Sample ID: 1-SS(092315)

Lab ID#: 1509511-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100224**	**Date of Collection: 9/23/15 12:27:00 PM**	
Dil. Factor:	**2.44**	**Date of Analysis: 10/2/15 11:21 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Methylene Chloride	12	Not Detected	42	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Chloroform	1.2	Not Detected	6.0	Not Detected
Benzene	1.2	Not Detected	3.9	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected
Toluene	1.2	Not Detected	4.6	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.6	Not Detected
Tetrachloroethene	1.2	1.2	8.3	8.5
Ethyl Benzene	1.2	Not Detected	5.3	Not Detected
m,p-Xylene	1.2	Not Detected	5.3	Not Detected
o-Xylene	1.2	Not Detected	5.3	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	6.0	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	92	70-130

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Client Sample ID: 1-DUP-SS(092315)

Lab ID#: 1509511-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100231**	**Date of Collection:**	**9/23/15 12:30:00 PM**
Dil. Factor:	**2.35**	**Date of Analysis:**	**10/3/15 07:37 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Methylene Chloride	12	Not Detected	41	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Chloroform	1.2	Not Detected	5.7	Not Detected
Benzene	1.2	Not Detected	3.8	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	4.1	6.3	22
Toluene	1.2	Not Detected	4.4	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Tetrachloroethene	1.2	Not Detected	8.0	Not Detected
Ethyl Benzene	1.2	Not Detected	5.1	Not Detected
m,p-Xylene	1.2	Not Detected	5.1	Not Detected
o-Xylene	1.2	Not Detected	5.1	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.8	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	92	70-130

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Client Sample ID: 5-SS(092315)

Lab ID#: 1509511-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100226**	**Date of Collection:**	**9/23/15 1:32:00 PM**
Dil. Factor:	**2.38**	**Date of Analysis:**	**10/3/15 12:20 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Methylene Chloride	12	Not Detected	41	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Chloroform	1.2	Not Detected	5.8	Not Detected
Benzene	1.2	Not Detected	3.8	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
Toluene	1.2	Not Detected	4.5	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.5	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
Ethyl Benzene	1.2	Not Detected	5.2	Not Detected
m,p-Xylene	1.2	Not Detected	5.2	Not Detected
o-Xylene	1.2	Not Detected	5.2	Not Detected
1,2,4-Trimethylbenzene	1.2	1.3	5.8	6.6

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	95	70-130

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Client Sample ID: 2-SS(092315)

Lab ID#: 1509511-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100227**	**Date of Collection: 9/23/15 2:39:00 PM**	
Dil. Factor:	**2.34**	**Date of Analysis: 10/3/15 12:44 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Methylene Chloride	12	Not Detected	41	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Chloroform	1.2	Not Detected	5.7	Not Detected
Benzene	1.2	Not Detected	3.7	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
Toluene	1.2	1.8	4.4	6.9
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
Ethyl Benzene	1.2	Not Detected	5.1	Not Detected
m,p-Xylene	1.2	Not Detected	5.1	Not Detected
o-Xylene	1.2	Not Detected	5.1	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.8	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	96	70-130

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Client Sample ID: 3-SS(092315)

Lab ID#: 1509511-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100230**	**Date of Collection:**	**9/23/15 4:01:00 PM**
Dil. Factor:	**2.28**	**Date of Analysis:**	**10/3/15 06:39 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Methylene Chloride	11	Not Detected	40	Not Detected
trans-1,2-Dichloroethene	1.1	3.1	4.5	12
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Chloroform	1.1	Not Detected	5.6	Not Detected
Benzene	1.1	Not Detected	3.6	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.6	Not Detected
Trichloroethene	1.1	Not Detected	6.1	Not Detected
Toluene	1.1	Not Detected	4.3	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Tetrachloroethene	1.1	Not Detected	7.7	Not Detected
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected
m,p-Xylene	1.1	Not Detected	5.0	Not Detected
o-Xylene	1.1	Not Detected	5.0	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	88	70-130

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Client Sample ID: 4-SS(092315)

Lab ID#: 1509511-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100229**	**Date of Collection:**	**9/23/15 5:13:00 PM**
Dil. Factor:	**2.33**	**Date of Analysis:**	**10/3/15 01:43 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Methylene Chloride	12	Not Detected	40	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Chloroform	1.2	Not Detected	5.7	Not Detected
Benzene	1.2	Not Detected	3.7	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
Toluene	1.2	Not Detected	4.4	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Tetrachloroethene	1.2	1.2	7.9	7.9
Ethyl Benzene	1.2	Not Detected	5.0	Not Detected
m,p-Xylene	1.2	Not Detected	5.0	Not Detected
o-Xylene	1.2	Not Detected	5.0	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.7	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	102	70-130

ARCADIS Design & Consultancy for natural and built assets

Grenada Manufacturing

Data Review

GRENADA, MISSISSIPPI

Volatile Analysis

SDG #1510233

Analyses Performed By:
Eurofins Air Toxics Ltd.
Folsom, California

Report: #24469R
Review Level: Tier III
Project: LA003307.0001.00007

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #1510233 for samples collected in association with the Grenada Manufacturing site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Included with this assessment are the validation annotated sample result sheets and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	SVOC	PCB	MET	MISC
SG-4(100715)	1510233-01	Air	10/7/2015		X				
SG-7(100715)	1510233-02	Air	10/7/2015		X				
SG-8(100715)	1510233-03	Air	10/7/2015		X				

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Sample receipt condition		X		X	
Requested analyses and sample results		X		X	
Collection Technique (grab, composite, etc.)		X		X	
Methods of analysis		X		X	
Reporting limits		X		X	
Sample collection date		X		X	
Laboratory sample received date		X		X	
Sample preservation verification (as applicable)		X		X	
Sample preparation/extraction/analysis dates		X		X	
Fully executed Chain-of-Custody (COC) form completed		X		X	
Narrative summary of QA or sample problems provided		X		X	
Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) Method TO-15. Data were reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

  U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.

  B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.

- Quantitation (Q) Qualifiers

  E The compound was quantitated above the calibration range.

  D Concentration is based on a diluted sample analysis.

- Validation Qualifiers

  J The compound was positively identified; however, the associated numerical value is an estimated concentration only.

  UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

  JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.

  UB Compound considered non-detect at the listed value due to associated blank contamination.

  N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.

  R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation	Return Canister Pressure
EPA TO-15	Air	30 days from collection to analysis	Ambient Temperature	< -1" Hg

All samples met return canister pressure criteria and were analyzed within the specified holding time.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 24-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (30%) and an RRF value greater than control limit (0.05).

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (30%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the established acceptance limits of 70% to 130%.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria insure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria requires the internal standard compounds associated with the VOC exhibit area counts that are not greater than 40% or less than 40% of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) Analysis

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS/LCSD analysis must exhibit a percent recovery within the established acceptance limits of 70% to 130%.

All compounds associated with the LCS/LCSD analysis exhibited recoveries within the control limits.

8. Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for air matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for air matrices.

A laboratory duplicate was not performed on a sample location within this SDG.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 100% for air matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of three times the RL is applied for air matrices.

A field duplicate was not performed on a sample location within this SDG.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: TO-15	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Canister return pressure (<-1"Hg)		X		X	
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks					X
C. Trip blanks					X
Laboratory Control Sample (LCS)		X		X	
Laboratory Control Sample Duplicate(LCSD)		X		X	
LCS/LCSD Precision (RPD)		X		X	
Field/Lab Duplicate (%D)					X
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content					X
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X		X	
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present				X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

VOCs: TO-15	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					

%RSD Percent relative difference
%R Percent recovery
RPD Relative percent difference
%D Percent difference

VALIDATION PERFORMED BY: Jennifer Singer

SIGNATURE: Jennifer Singer

DATE: November 2, 2015

PEER REVIEW BY: Dennis Capria

DATE: November 4, 2015

CORRECTED SAMPLE ANALYSIS DATA SHEETS AND COCs

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Sample Transportation Notice

Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager Rob Uppencamp / Marie Heap
Collected by: (Print and Sign) Randall Woodruff [signature]
Company ARCADIS Email Marie Heap
Address 132 E. Washington St Ste 600 City Indianapolis State IN Zip 46204
Phone 317-231-6500 Fax 317-231-6514

Project Info:
P.O. # LA003307.0001.00004
Project # LA003307.0001.00004
Project Name Grenada Manufacturing

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	SG-4 (100715)	n 2140	10-7-15	1506-1520	TO-15, Project List	30	5.0		
02A	SG-7 (100715)	36508	10-7-15	1528-1541	TO-15, Project List	30	5.25		
03A	SG-8 (100715)	37363	10-7-15	1533-1546	TO-15, Project List	30	6.0		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	10-9-15/0820	Candice H Cortney EAL	10/12/15 1020
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes: RESAMPLES DUE TO LAB ERROR.

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fedex		N/A	Good	Yes No None	1510233

Form 1293 rev.11

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Client Sample ID: SG-4 (100715)

Lab ID#: 1510233-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17101413**	**Date of Collection:**	**10/7/15 3:20:00 PM**
Dil. Factor:	**2.64**	**Date of Analysis:**	**10/14/15 08:17 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.4	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Methylene Chloride	13	Not Detected	46	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Chloroform	1.3	Not Detected	6.4	Not Detected
Benzene	1.3	Not Detected	4.2	Not Detected
1,2-Dichloroethane	1.3	Not Detected	5.3	Not Detected
Trichloroethene	1.3	Not Detected	7.1	Not Detected
Toluene	1.3	Not Detected	5.0	Not Detected
1,1,2-Trichloroethane	1.3	Not Detected	7.2	Not Detected
Tetrachloroethene	1.3	Not Detected	9.0	Not Detected
Ethyl Benzene	1.3	Not Detected	5.7	Not Detected
m,p-Xylene	1.3	Not Detected	5.7	Not Detected
o-Xylene	1.3	Not Detected	5.7	Not Detected
1,2,4-Trimethylbenzene	1.3	Not Detected	6.5	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	107	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	91	70-130

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Client Sample ID: SG-7 (100715)
Lab ID#: 1510233-02A
EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17101411**	**Date of Collection:**	**10/7/15 3:41:00 PM**
Dil. Factor:	**2.69**	**Date of Analysis:**	**10/14/15 07:18 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.4	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.3	Not Detected
Methylene Chloride	13	Not Detected	47	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.3	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.3	Not Detected
Chloroform	1.3	3.5	6.6	17
Benzene	1.3	Not Detected	4.3	Not Detected
1,2-Dichloroethane	1.3	Not Detected	5.4	Not Detected
Trichloroethene	1.3	Not Detected	7.2	Not Detected
Toluene	1.3	Not Detected	5.1	Not Detected
1,1,2-Trichloroethane	1.3	Not Detected	7.3	Not Detected
Tetrachloroethene	1.3	Not Detected	9.1	Not Detected
Ethyl Benzene	1.3	Not Detected	5.8	Not Detected
m,p-Xylene	1.3	3.0	5.8	13
o-Xylene	1.3	1.8	5.8	8.1
1,2,4-Trimethylbenzene	1.3	2.8	6.6	14

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	89	70-130

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Client Sample ID: SG-8 (100715)

Lab ID#: 1510233-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17101409**	**Date of Collection:**	**10/7/15 3:46:00 PM**
Dil. Factor:	**2.64**	**Date of Analysis:**	**10/14/15 06:19 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.4	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Methylene Chloride	13	Not Detected	46	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Chloroform	1.3	Not Detected	6.4	Not Detected
Benzene	1.3	Not Detected	4.2	Not Detected
1,2-Dichloroethane	1.3	Not Detected	5.3	Not Detected
Trichloroethene	1.3	1.6	7.1	8.7
Toluene	1.3	Not Detected	5.0	Not Detected
1,1,2-Trichloroethane	1.3	Not Detected	7.2	Not Detected
Tetrachloroethene	1.3	Not Detected	9.0	Not Detected
Ethyl Benzene	1.3	Not Detected	5.7	Not Detected
m,p-Xylene	1.3	Not Detected	5.7	Not Detected
o-Xylene	1.3	Not Detected	5.7	Not Detected
1,2,4-Trimethylbenzene	1.3	Not Detected	6.5	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	107	70-130
1,2-Dichloroethane-d4	107	70-130
4-Bromofluorobenzene	88	70-130

ARCADIS Design & Consultancy for natural and built assets

Arcadis U.S., Inc.

10352 Plaza Americana Drive

Baton Rouge, Louisiana 70816

Tel 225 292 1004

Fax 225 218 9677

www.arcadis.com

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10/2/2015

Ms. Marie Heap
Arcadis U.S., Inc.
132 East Washington St., Suite 600

Indianapolis IN 46204

Project Name: GRENADA MANUFACTURING
Project #: IN000899.2013
Workorder #: 1509345

Dear Ms. Marie Heap

The following report includes the data for the above referenced project for sample(s) received on 9/21/2015 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott

Project Manager

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WORK ORDER #: 1509345

Work Order Summary

CLIENT:	Ms. Marie Heap Arcadis U.S., Inc. 132 East Washington St., Suite 600 Indianapolis, IN 46204	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317-231-6500	**P.O. #**	IN000899.2013
FAX:	317-231-6514	**PROJECT #**	IN000899.2013 GRENADA MANUFACTURING
DATE RECEIVED:	09/21/2015	**CONTACT:**	Ausha Scott
DATE COMPLETED:	10/02/2015		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SG-2 (091615)	TO-15	3.5 "Hg	14.9 psi
02A	SG-1 (091615)	TO-15	5.7 "Hg	14.8 psi
03A	SG-3 (091615)	TO-15	4.3 "Hg	14.8 psi
04A	SG-5 (091615)	TO-15	6.5 "Hg	15.1 psi
05A	SG-6 (091615)	TO-15	7.1 "Hg	14.8 psi
06A	DUP-1 (091615)	TO-15	5.9 "Hg	14.6 psi
07A(cancelled)	SG-4 (091715)	TO-15	4.3 "Hg	14.7 psi
08A(cancelled)	SG-7 (091715)	TO-15	2.6 "Hg	15.3 psi
09A(cancelled)	SG-8 (091715)	TO-15	3.7 "Hg	14.8 psi
10A	Lab Blank	TO-15	NA	NA
11A	CCV	TO-15	NA	NA
12A	LCS	TO-15	NA	NA
12AA	LCSD	TO-15	NA	NA

CERTIFIED BY:  DATE: 10/02/15

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1509345

Nine 1 Liter Summa Canister (100% Certified) samples were received on September 21, 2015. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Due to laboratory error, samples SG-4 (091715), SG-7 (091715) and SG-8 (091715) were released prior to analysis. A corrective action report (CAR) was immediately initiated. Please see attached CAR #F9U9572528 for complete details.

The recovery of internal standard Bromochloromethane in samples SG-5 (091615), SG-6 (091615) and DUP-1 (091615) was outside control limits due to the presence of high level matrix interference which may consist of elevated levels of carbon dioxide or water. A representative number of samples were re-analyzed to confirm the interference. Internal standard recovery for the re-analysis is included with the raw data.

All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page. Target compound non-detects in the samples that are associated with high bias in QC analyses have not been flagged.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-2 (091615)

Lab ID#: 1509345-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.1	1.8	3.6	5.6

Client Sample ID: SG-1 (091615)

Lab ID#: 1509345-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethyl Benzene	1.2	1.8	5.4	7.6
m,p-Xylene	1.2	3.5	5.4	15

Client Sample ID: SG-3 (091615)

Lab ID#: 1509345-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	1.2	1.9	5.7	9.1
Benzene	1.2	2.9	3.7	9.4

Client Sample ID: SG-5 (091615)

Lab ID#: 1509345-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	1.3	18	6.3	88
Benzene	1.3	2.6	4.1	8.3
Toluene	1.3	7.9	4.9	30
Ethyl Benzene	1.3	3.1	5.6	13
m,p-Xylene	1.3	15	5.6	65
o-Xylene	1.3	5.5	5.6	24
1,2,4-Trimethylbenzene	1.3	4.3 J0	6.4	21 J0

Client Sample ID: SG-6 (091615)

Lab ID#: 1509345-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-6 (091615)

Lab ID#: 1509345-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	1.3	20	6.4	97
Benzene	1.3	7.1	4.2	23
Toluene	1.3	5.5	5.0	21
Ethyl Benzene	1.3	2.0	5.7	8.5
m,p-Xylene	1.3	11	5.7	48
o-Xylene	1.3	3.6	5.7	16
1,2,4-Trimethylbenzene	1.3	3.0 J0	6.5	15 J0

Client Sample ID: DUP-1 (091615)

Lab ID#: 1509345-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	1.2	18	6.0	88
Benzene	1.2	2.1	4.0	6.8
Toluene	1.2	7.9	4.7	30
Ethyl Benzene	1.2	3.1	5.4	13
m,p-Xylene	1.2	16	5.4	68
o-Xylene	1.2	5.8	5.4	25
1,2,4-Trimethylbenzene	1.2	4.0 J0	6.1	20 J0

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Client Sample ID: SG-2 (091615)

Lab ID#: 1509345-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092522**	**Date of Collection:**	**9/16/15 8:08:00 AM**
Dil. Factor:	**2.28**	**Date of Analysis:**	**9/25/15 11:49 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Methylene Chloride	11	Not Detected	40	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Chloroform	1.1	Not Detected	5.6	Not Detected
Benzene	1.1	1.8	3.6	5.6
1,2-Dichloroethane	1.1	Not Detected	4.6	Not Detected
Trichloroethene	1.1	Not Detected	6.1	Not Detected
Toluene	1.1	Not Detected	4.3	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Tetrachloroethene	1.1	Not Detected	7.7	Not Detected
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected
m,p-Xylene	1.1	Not Detected	5.0	Not Detected
o-Xylene	1.1	Not Detected	5.0	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: SG-1 (091615)

Lab ID#: 1509345-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092523**	**Date of Collection:**	**9/16/15 8:54:00 AM**
Dil. Factor:	**2.48**	**Date of Analysis:**	**9/26/15 12:16 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Methylene Chloride	12	Not Detected	43	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Chloroform	1.2	Not Detected	6.0	Not Detected
Benzene	1.2	Not Detected	4.0	Not Detected
1,2-Dichloroethane	1.2	Not Detected	5.0	Not Detected
Trichloroethene	1.2	Not Detected	6.7	Not Detected
Toluene	1.2	Not Detected	4.7	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.4	Not Detected
Ethyl Benzene	1.2	1.8	5.4	7.6
m,p-Xylene	1.2	3.5	5.4	15
o-Xylene	1.2	Not Detected	5.4	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	6.1	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: SG-3 (091615)

Lab ID#: 1509345-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092524**	**Date of Collection:**	**9/16/15 9:47:00 AM**
Dil. Factor:	**2.34**	**Date of Analysis:**	**9/26/15 12:57 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Methylene Chloride	12	Not Detected	41	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Chloroform	1.2	1.9	5.7	9.1
Benzene	1.2	2.9	3.7	9.4
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
Toluene	1.2	Not Detected	4.4	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
Ethyl Benzene	1.2	Not Detected	5.1	Not Detected
m,p-Xylene	1.2	Not Detected	5.1	Not Detected
o-Xylene	1.2	Not Detected	5.1	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.8	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: SG-5 (091615)

Lab ID#: 1509345-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092525**	**Date of Collection:**	**9/16/15 12:52:00 PM**
Dil. Factor:	**2.59**	**Date of Analysis:**	**9/26/15 01:23 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.3	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.1	Not Detected
Methylene Chloride	13	Not Detected	45	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.1	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.1	Not Detected
Chloroform	1.3	18	6.3	88
Benzene	1.3	2.6	4.1	8.3
1,2-Dichloroethane	1.3	Not Detected	5.2	Not Detected
Trichloroethene	1.3	Not Detected	7.0	Not Detected
Toluene	1.3	7.9	4.9	30
1,1,2-Trichloroethane	1.3	Not Detected	7.1	Not Detected
Tetrachloroethene	1.3	Not Detected	8.8	Not Detected
Ethyl Benzene	1.3	3.1	5.6	13
m,p-Xylene	1.3	15	5.6	65
o-Xylene	1.3	5.5	5.6	24
1,2,4-Trimethylbenzene	1.3	4.3 J0	6.4	21 J0

J0 = Estimated value due to bias in the CCV.

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	110	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: SG-6 (091615)

Lab ID#: 1509345-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092526**	**Date of Collection:**	**9/16/15 2:30:00 PM**
Dil. Factor:	**2.63**	**Date of Analysis:**	**9/26/15 02:05 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.4	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Methylene Chloride	13	Not Detected	46	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Chloroform	1.3	20	6.4	97
Benzene	1.3	7.1	4.2	23
1,2-Dichloroethane	1.3	Not Detected	5.3	Not Detected
Trichloroethene	1.3	Not Detected	7.1	Not Detected
Toluene	1.3	5.5	5.0	21
1,1,2-Trichloroethane	1.3	Not Detected	7.2	Not Detected
Tetrachloroethene	1.3	Not Detected	8.9	Not Detected
Ethyl Benzene	1.3	2.0	5.7	8.5
m,p-Xylene	1.3	11	5.7	48
o-Xylene	1.3	3.6	5.7	16
1,2,4-Trimethylbenzene	1.3	3.0 J0	6.5	15 J0

J0 = Estimated value due to bias in the CCV.

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	111	70-130
1,2-Dichloroethane-d4	113	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: DUP-1 (091615)

Lab ID#: 1509345-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092527**	**Date of Collection:**	**9/16/15 12:51:00 PM**
Dil. Factor:	**2.48**	**Date of Analysis:**	**9/26/15 02:31 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Methylene Chloride	12	Not Detected	43	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Chloroform	1.2	18	6.0	88
Benzene	1.2	2.1	4.0	6.8
1,2-Dichloroethane	1.2	Not Detected	5.0	Not Detected
Trichloroethene	1.2	Not Detected	6.7	Not Detected
Toluene	1.2	7.9	4.7	30
1,1,2-Trichloroethane	1.2	Not Detected	6.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.4	Not Detected
Ethyl Benzene	1.2	3.1	5.4	13
m,p-Xylene	1.2	16	5.4	68
o-Xylene	1.2	5.8	5.4	25
1,2,4-Trimethylbenzene	1.2	4.0 J0	6.1	20 J0

J0 = Estimated value due to bias in the CCV.

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	113	70-130
1,2-Dichloroethane-d4	109	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1509345-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092517**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/15 07:52 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	79	70-130

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Client Sample ID: CCV

Lab ID#: 1509345-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092513**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/15 05:53 PM**	

Compound	%Recovery
Vinyl Chloride	94
1,1-Dichloroethene	98
Methylene Chloride	98
trans-1,2-Dichloroethene	100
cis-1,2-Dichloroethene	103
Chloroform	100
Benzene	97
1,2-Dichloroethane	100
Trichloroethene	105
Toluene	102
1,1,2-Trichloroethane	121
Tetrachloroethene	114
Ethyl Benzene	101
m,p-Xylene	104
o-Xylene	102
1,2,4-Trimethylbenzene	137 Q

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	122	70-130

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Client Sample ID: LCS

Lab ID#: 1509345-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092514**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/15 06:18 PM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	97	70-130
1,1-Dichloroethene	96	70-130
Methylene Chloride	98	70-130
trans-1,2-Dichloroethene	91	70-130
cis-1,2-Dichloroethene	114	70-130
Chloroform	100	70-130
Benzene	101	70-130
1,2-Dichloroethane	104	70-130
Trichloroethene	103	70-130
Toluene	102	70-130
1,1,2-Trichloroethane	104	70-130
Tetrachloroethene	98	70-130
Ethyl Benzene	103	70-130
m,p-Xylene	108	70-130
o-Xylene	113	70-130
1,2,4-Trimethylbenzene	114	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: LCSD

Lab ID#: 1509345-12AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092515**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/15 06:47 PM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	102	70-130
1,1-Dichloroethene	99	70-130
Methylene Chloride	100	70-130
trans-1,2-Dichloroethene	89	70-130
cis-1,2-Dichloroethene	112	70-130
Chloroform	100	70-130
Benzene	98	70-130
1,2-Dichloroethane	101	70-130
Trichloroethene	102	70-130
Toluene	82	70-130
1,1,2-Trichloroethane	94	70-130
Tetrachloroethene	84	70-130
Ethyl Benzene	104	70-130
m,p-Xylene	106	70-130
o-Xylene	108	70-130
1,2,4-Trimethylbenzene	100	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	80	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	101	70-130



Electronic Comprehensive Validation Package (eCVP)

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COMPREHENSIVE VALIDATION PACKAGE

TO-15

INVENTORY SHEET

Work Order #: 1509345

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Comments:

Completed by:

Vera Belitsky	Vera Belitsky / Document Control	10/14/15
(Signature)	(Print Name & Title)	(Date)

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WORK ORDER #: 1509345

Work Order Summary

CLIENT:	Ms. Marie Heap Arcadis U.S., Inc. 132 East Washington St., Suite 600 Indianapolis, IN 46204	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317-231-6500	**P.O. #**	IN000899.2013
FAX:	317-231-6514	**PROJECT #**	IN000899.2013 GRENADA MANUFACTURING
DATE RECEIVED:	09/21/2015	**CONTACT:**	Ausha Scott
DATE COMPLETED:	10/02/2015		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SG-2 (091615)	TO-15	3.5 "Hg	14.9 psi
02A	SG-1 (091615)	TO-15	5.7 "Hg	14.8 psi
03A	SG-3 (091615)	TO-15	4.3 "Hg	14.8 psi
04A	SG-5 (091615)	TO-15	6.5 "Hg	15.1 psi
05A	SG-6 (091615)	TO-15	7.1 "Hg	14.8 psi
06A	DUP-1 (091615)	TO-15	5.9 "Hg	14.6 psi
07A(cancelled)	SG-4 (091715)	TO-15	4.3 "Hg	14.7 psi
08A(cancelled)	SG-7 (091715)	TO-15	2.6 "Hg	15.3 psi
09A(cancelled)	SG-8 (091715)	TO-15	3.7 "Hg	14.8 psi
10A	Lab Blank	TO-15	NA	NA
11A	CCV	TO-15	NA	NA
12A	LCS	TO-15	NA	NA
12AA	LCSD	TO-15	NA	NA

CERTIFIED BY:  DATE: 10/02/15

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1509345

Nine 1 Liter Summa Canister (100% Certified) samples were received on September 21, 2015. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Due to laboratory error, samples SG-4 (091715), SG-7 (091715) and SG-8 (091715) were released prior to analysis. A corrective action report (CAR) was immediately initiated. Please see attached CAR #F9U9572528 for complete details.

The recovery of internal standard Bromochloromethane in samples SG-5 (091615), SG-6 (091615) and DUP-1 (091615) was outside control limits due to the presence of high level matrix interference which may consist of elevated levels of carbon dioxide or water. A representative number of samples were re-analyzed to confirm the interference. Internal standard recovery for the re-analysis is included with the raw data.

All Quality Control Limit exceedances and affected sample results are noted by flags. Each flag is defined at the bottom of this Case Narrative and on each Sample Result Summary page. Target compound non-detects in the samples that are associated with high bias in QC analyses have not been flagged.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Sample Extract Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
SG-2 (091615)	1509345-01A	9/16/2015	9/21/2015	NA	9	9/25/2015	NA	Good
SG-1 (091615)	1509345-02A	9/16/2015	9/21/2015	NA	10	9/26/2015	NA	Good
SG-3 (091615)	1509345-03A	9/16/2015	9/21/2015	NA	10	9/26/2015	NA	Good
SG-5 (091615)	1509345-04A	9/16/2015	9/21/2015	NA	10	9/26/2015	NA	Good
SG-6 (091615)	1509345-05A	9/16/2015	9/21/2015	NA	10	9/26/2015	NA	Good
DUP-1 (091615)	1509345-06A	9/16/2015	9/21/2015	NA	10	9/26/2015	NA	Good
Lab Blank	1509345-10A	NA	NA	NA	NA	9/25/2015	NA	Good
CCV	1509345-11A	NA	NA	NA	NA	9/25/2015	NA	Good
LCS	1509345-12A	NA	NA	NA	NA	9/25/2015	NA	Good
LCSD	1509345-12AA	NA	NA	NA	NA	9/25/2015	NA	Good

Sample Results and Raw Data

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-2 (091615)

Lab ID#: 1509345-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Benzene	1.1	1.8	3.6	5.6

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Client Sample ID: SG-2 (091615)

Lab ID#: 1509345-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092522**	**Date of Collection:**	**9/16/15 8:08:00 AM**
Dil. Factor:	**2.28**	**Date of Analysis:**	**9/25/15 11:49 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Methylene Chloride	11	Not Detected	40	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Chloroform	1.1	Not Detected	5.6	Not Detected
Benzene	1.1	1.8	3.6	5.6
1,2-Dichloroethane	1.1	Not Detected	4.6	Not Detected
Trichloroethene	1.1	Not Detected	6.1	Not Detected
Toluene	1.1	Not Detected	4.3	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Tetrachloroethene	1.1	Not Detected	7.7	Not Detected
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected
m,p-Xylene	1.1	Not Detected	5.0	Not Detected
o-Xylene	1.1	Not Detected	5.0	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	99	70-130

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EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/25sep15.b/a092522.d
Lab Smp Id: 1509345-01A
Inj Date : 25-SEP-2015 23:49
Operator : ea Inst ID: msda.i
Smp Info : 200ml 31765
Misc Info : 3.5 Hg->14.9 psi
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/25sep15.b/a15q0921a.m
Meth Date : 25-Sep-2015 20:42 ealcan Quant Type: ISTD
Cal Date : 22-SEP-2015 07:19 Cal File: a092114.d
Als bottle: 5
Dil Factor: 2.28000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.28000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.535	5.535 (1.000)	130	129794	25.0000		80.00- 120.00	100.00
5.535	5.535 (1.000)	128	103077			46.57- 106.57	79.42
5.535	5.535 (1.000)	49	145325			75.38- 135.38	111.97
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.424	6.424 (1.000)	114	543066	25.0000		80.00- 120.00	100.00
6.424	6.424 (1.000)	88	80170			0.00- 44.55	14.76
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.881	8.880 (1.000)	117	527296	25.0000		80.00- 120.00	100.00
8.881	8.880 (1.000)	82	264042			19.23- 79.23	50.07
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.073	6.073 (1.097)	65	160954	25.1725	25.172	80.00- 120.00	100.00
6.073	6.073 (1.097)	67	82905			27.41- 87.41	51.51

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.641	7.641 (1.190)	98	552083	25.8444	25.844	80.00- 120.00	100.00
7.641	7.641 (1.190)	70	53975			0.00- 39.72	9.78
7.641	7.641 (1.190)	100	362958			36.51- 96.51	65.74
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.869	9.869 (1.111)	174	324047	24.7659	24.766	80.00- 120.00	100.00
9.869	9.869 (1.111)	95	367895			82.23- 142.23	113.53
9.869	9.869 (1.111)	176	317375			67.41- 127.41	97.94
116 Benzene					CAS #: 71-43-2		
6.051	6.051 (0.942)	78	8088	0.76909	1.754	80.00- 120.00	100.00
6.051	6.051 (0.942)	77	1910			0.00- 53.40	23.62

Report Date: 02-Oct-2015 09:20

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a092522.d
Lab Smp Id: 1509345-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msda.i/25sep15.b/a15q0921a.m
Misc Info: 3.5 Hg->14.9 psi

Calibration Date: 25-SEP-2015
Calibration Time: 17:53
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	129526	77716	181336	129794	0.21
123 1,4-Difluorobenze	544288	326573	762003	543066	-0.22
163 Chlorobenzene-d5	415368	249221	581515	527296	26.95

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.54	5.21	5.87	5.54	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.88	8.55	9.21	8.88	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 25sep15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509345-01A
Level: LOW Operator: ea
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msda.i/25sep15.b/a15q0921a.m
Misc Info: 3.5 Hg->14.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.172	100.69	70-130
$ 146 Toluene-d8	25.000	25.844	103.38	70-130
$ 177 4-Bromofluorobenze	25.000	24.766	99.06	70-130

Data File: /chem/msda.i/25sep15.b/a092522.d

Page 1

Date : 25-SEP-2015 23:49

Client ID:

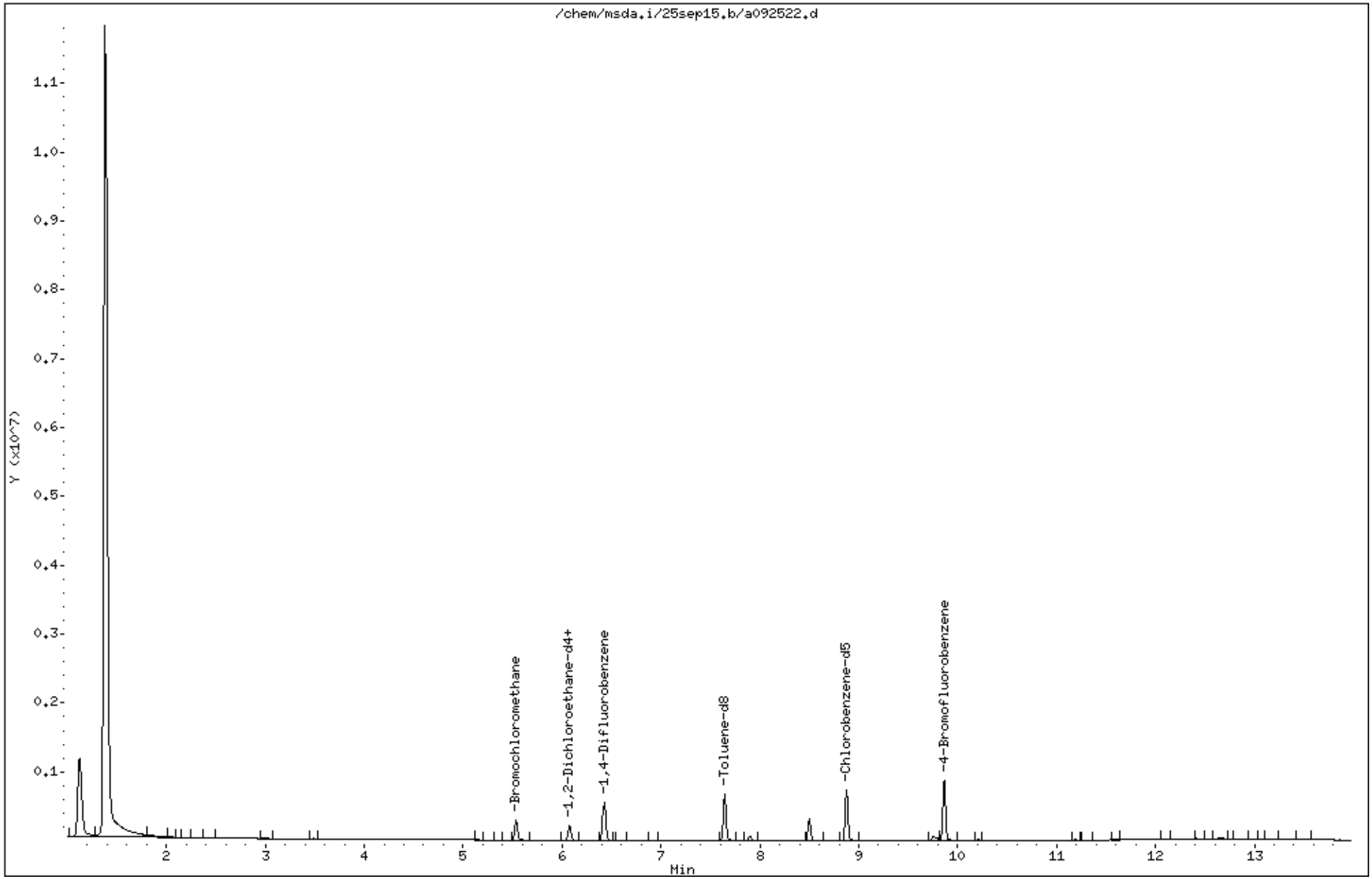
Instrument: msda.i

Sample Info: 200ml 31765

Operator: ea

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msda.i/25sep15.b/a092522.d

Date : 25-SEP-2015 23:49

Client ID:

Instrument: msda.i

Sample Info: 200ml 31765

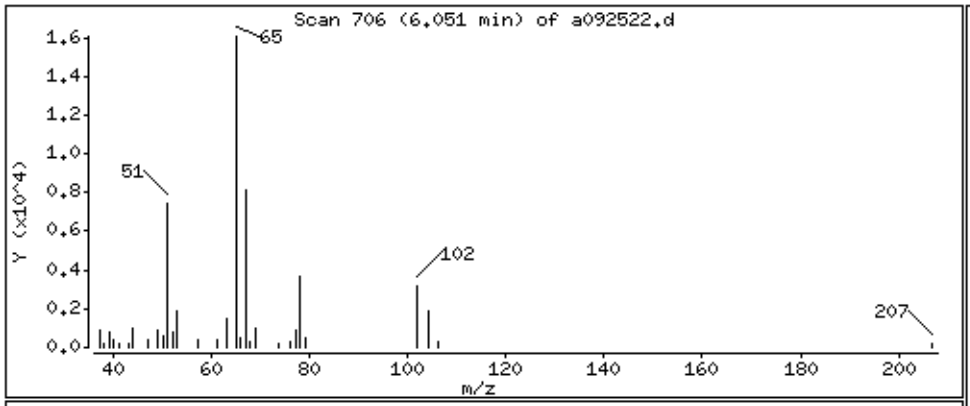
Operator: ea

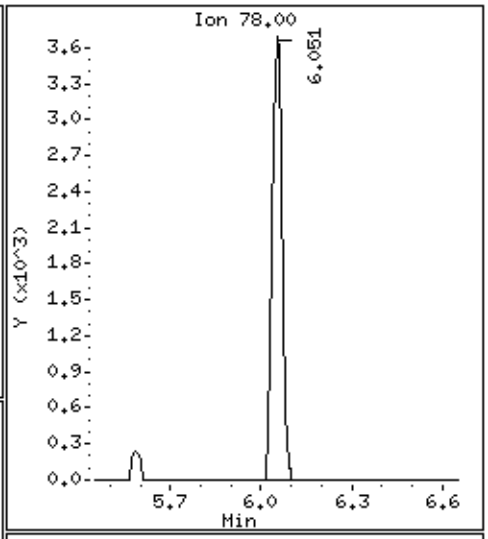
Column phase: RTX-624

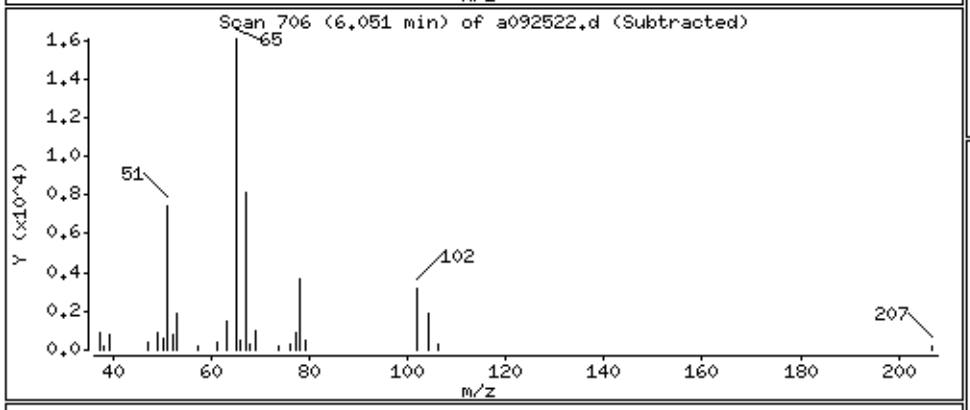
Column diameter: 0.25

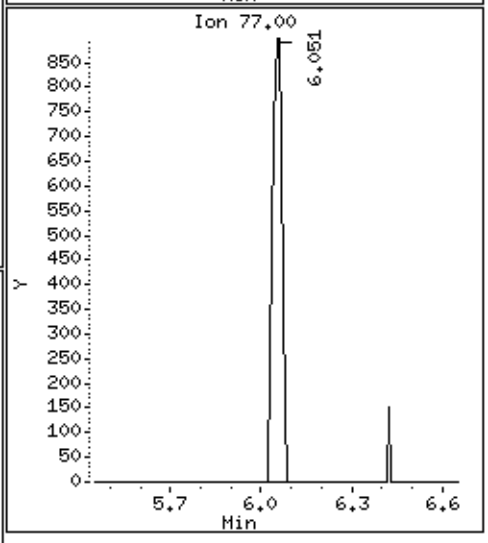
116 Benzene

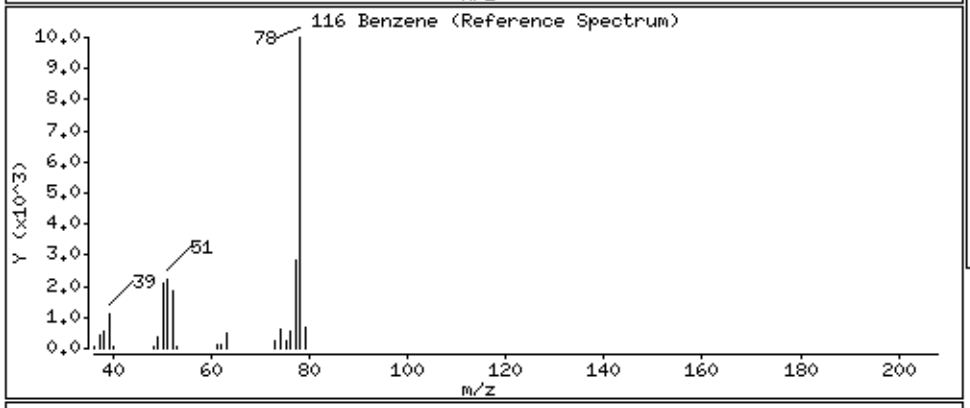
Concentration: 1.754 PPBV

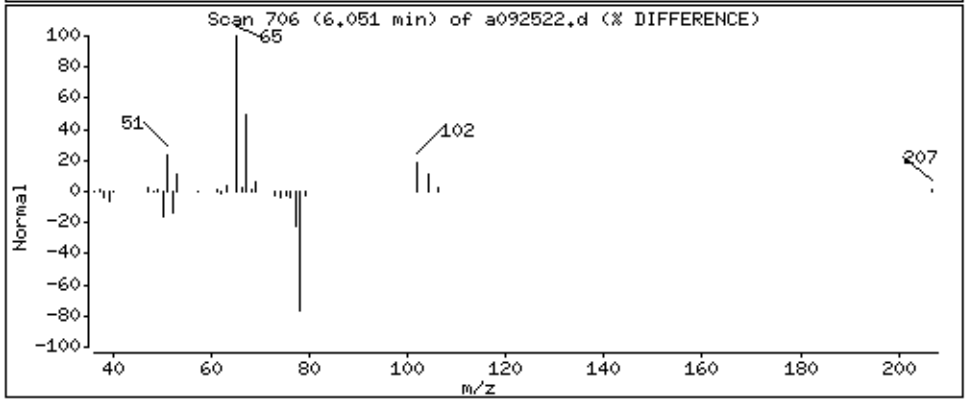












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-1 (091615)

Lab ID#: 1509345-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Ethyl Benzene	1.2	1.8	5.4	7.6
m,p-Xylene	1.2	3.5	5.4	15

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Client Sample ID: SG-1 (091615)

Lab ID#: 1509345-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092523**	**Date of Collection:**	**9/16/15 8:54:00 AM**
Dil. Factor:	**2.48**	**Date of Analysis:**	**9/26/15 12:16 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Methylene Chloride	12	Not Detected	43	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Chloroform	1.2	Not Detected	6.0	Not Detected
Benzene	1.2	Not Detected	4.0	Not Detected
1,2-Dichloroethane	1.2	Not Detected	5.0	Not Detected
Trichloroethene	1.2	Not Detected	6.7	Not Detected
Toluene	1.2	Not Detected	4.7	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.4	Not Detected
Ethyl Benzene	1.2	1.8	5.4	7.6
m,p-Xylene	1.2	3.5	5.4	15
o-Xylene	1.2	Not Detected	5.4	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	6.1	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	99	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/25sep15.b/a092523.d
Lab Smp Id: 1509345-02A
Inj Date : 26-SEP-2015 00:16
Operator : ea Inst ID: msda.i
Smp Info : 200ml 35559
Misc Info : 5.7 Hg->14.8 psi
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/25sep15.b/a15q0921a.m
Meth Date : 25-Sep-2015 20:42 ealcan Quant Type: ISTD
Cal Date : 22-SEP-2015 07:19 Cal File: a092114.d
Als bottle: 6
Dil Factor: 2.48000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.48000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.535	5.535 (1.000)	130	133596	25.0000		80.00- 120.00	100.00
5.535	5.535 (1.000)	128	103004			46.57- 106.57	77.10
5.535	5.535 (1.000)	49	148168			75.38- 135.38	110.91
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.424	6.424 (1.000)	114	559864	25.0000		80.00- 120.00	100.00
6.424	6.424 (1.000)	88	78377			0.00- 44.55	14.00
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.881	8.880 (1.000)	117	534636	25.0000		80.00- 120.00	100.00
8.881	8.880 (1.000)	82	262821			19.23- 79.23	49.16
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.073	6.073 (1.097)	65	163565	24.8529	24.853	80.00- 120.00	100.00
6.073	6.073 (1.097)	67	86428			27.41- 87.41	52.84

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.641	7.641 (1.190)	98	550187	24.9828	24.983	80.00- 120.00	100.00
7.641	7.641 (1.190)	70	53259			0.00- 39.72	9.68
7.641	7.641 (1.190)	100	355927			36.51- 96.51	64.69
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.869	9.869 (1.111)	174	329479	24.8353	24.835	80.00- 120.00	100.00
9.869	9.869 (1.111)	95	372613			82.23- 142.23	113.09
9.869	9.869 (1.111)	176	319218			67.41- 127.41	96.89
167 Ethyl Benzene					CAS #: 100-41-4		
8.952	8.952 (1.008)	106	4641	0.70840	1.757	80.00- 120.00	100.00
8.952	8.952 (1.008)	91	13588			268.22- 328.22	292.78
169 m,p-Xylene					CAS #: 108-38-3		
9.053	9.052 (1.019)	106	11166	1.39535	3.460	80.00- 120.00	100.00
9.053	9.052 (1.019)	91	23896			164.61- 224.61	214.00

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a092523.d
Lab Smp Id: 1509345-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msda.i/25sep15.b/a15q0921a.m
Misc Info: 5.7 Hg->14.8 psi

Calibration Date: 25-SEP-2015
Calibration Time: 17:53
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	129526	77716	181336	133596	3.14
123 1,4-Difluorobenze	544288	326573	762003	559864	2.86
163 Chlorobenzene-d5	415368	249221	581515	534636	28.71

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.54	5.21	5.87	5.54	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.88	8.55	9.21	8.88	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 25sep15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509345-02A
Level: LOW Operator: ea
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msda.i/25sep15.b/a15q0921a.m
Misc Info: 5.7 Hg->14.8 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	24.853	99.41	70-130
$ 146 Toluene-d8	25.000	24.983	99.93	70-130
$ 177 4-Bromofluorobenze	25.000	24.835	99.34	70-130

Data File: /chem/msda.i/25sep15.b/a092523.d

Page 1

Date : 26-SEP-2015 00:16

Client ID:

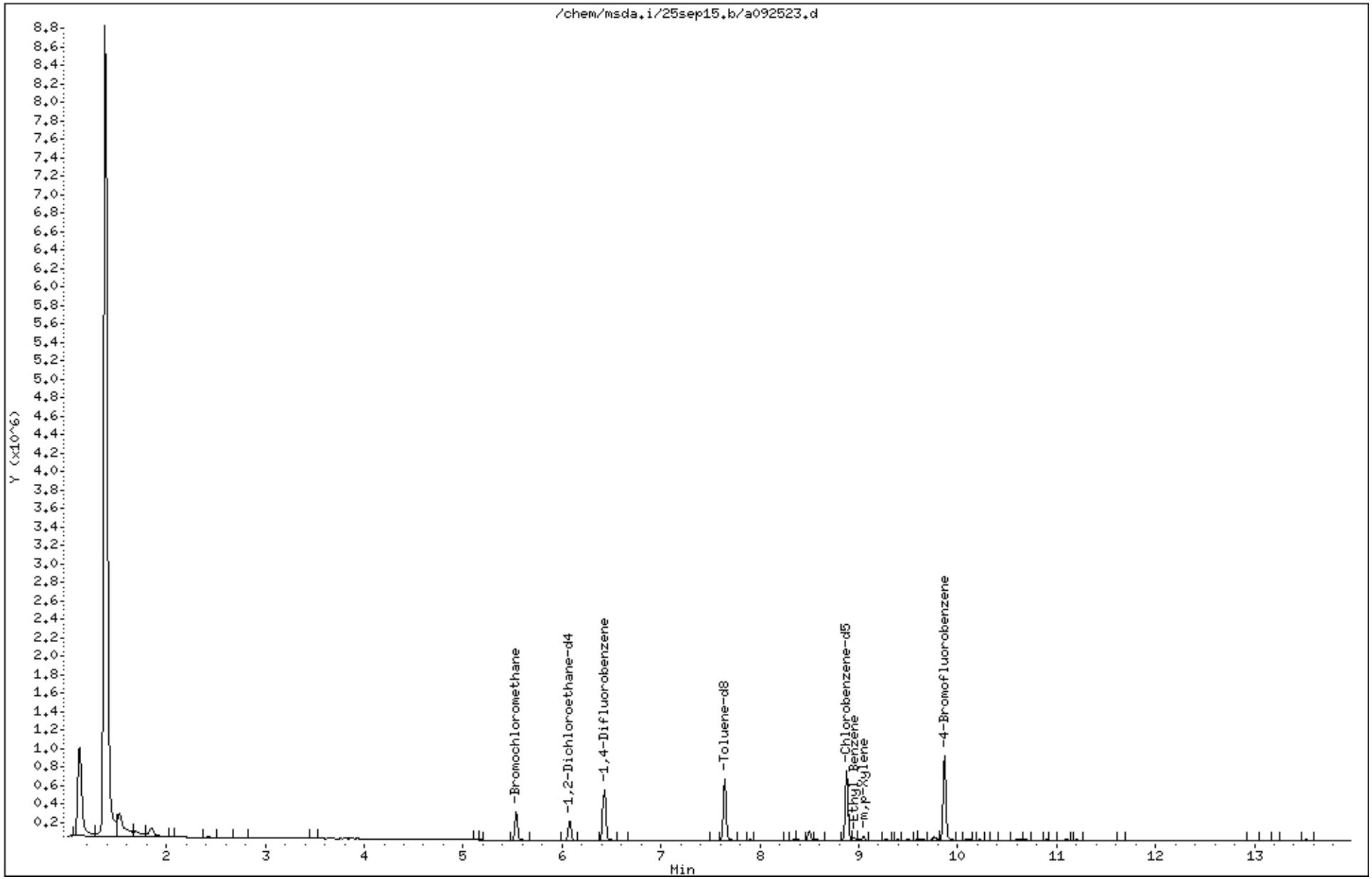
Instrument: msda.i

Sample Info: 200ml 35559

Operator: ea

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msda.i/25sep15.b/a092523.d

Date : 26-SEP-2015 00:16

Client ID:

Instrument: msda.i

Sample Info: 200ml 35559

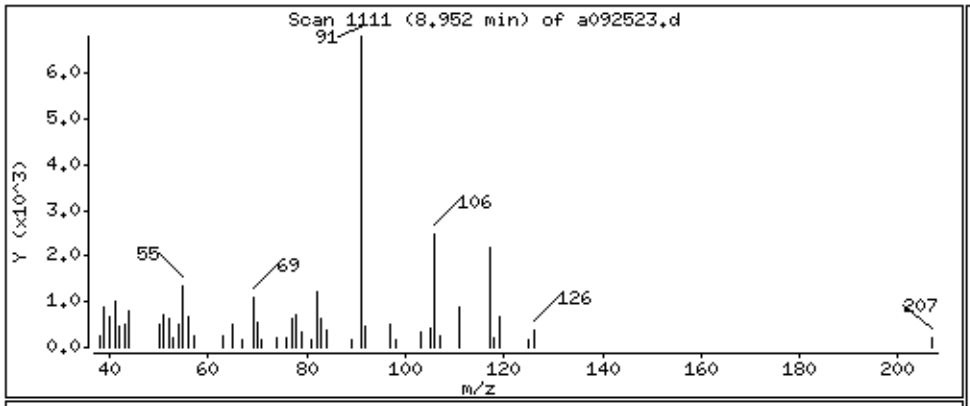
Operator: ea

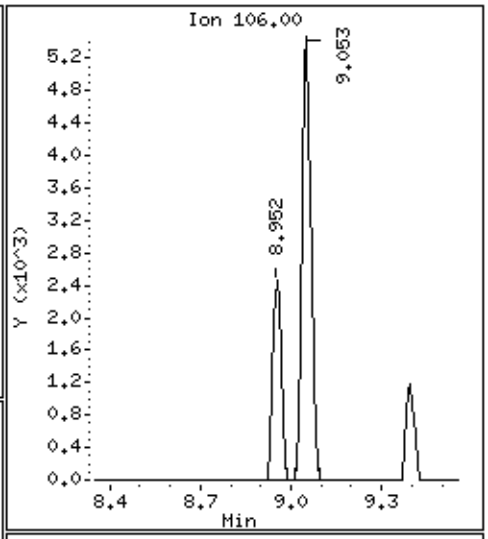
Column phase: RTX-624

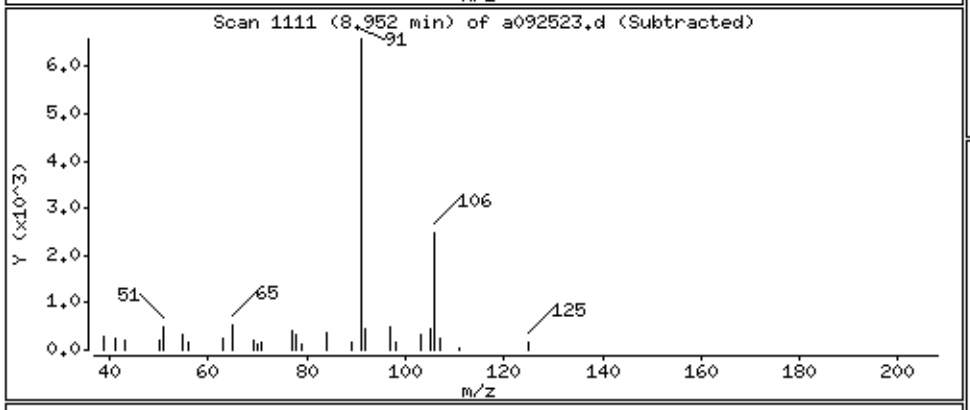
Column diameter: 0.25

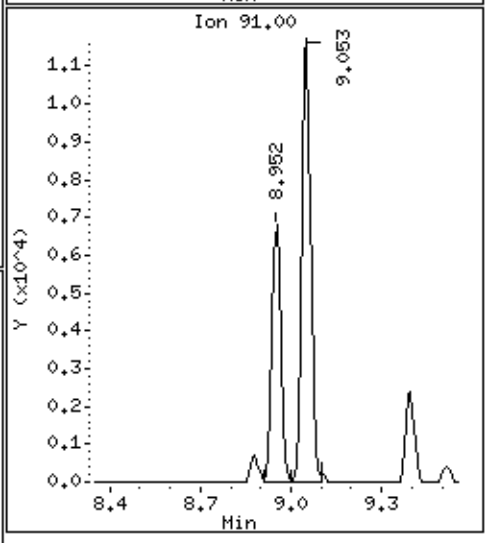
167 Ethyl Benzene

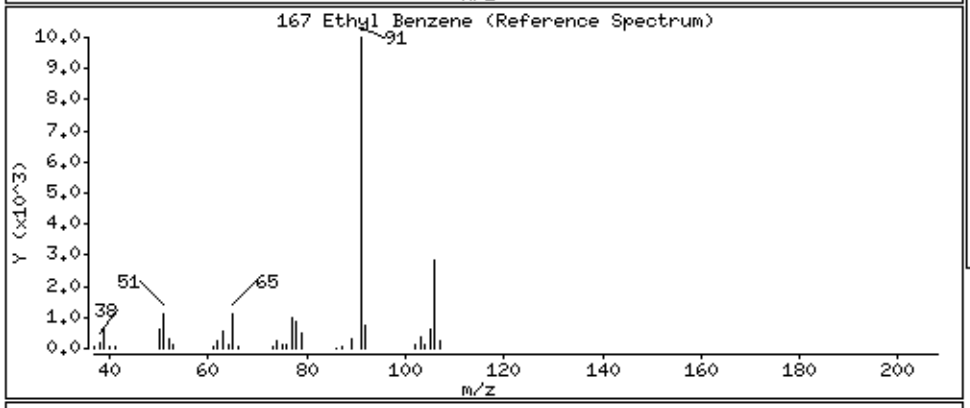
Concentration: 1.757 PPBV

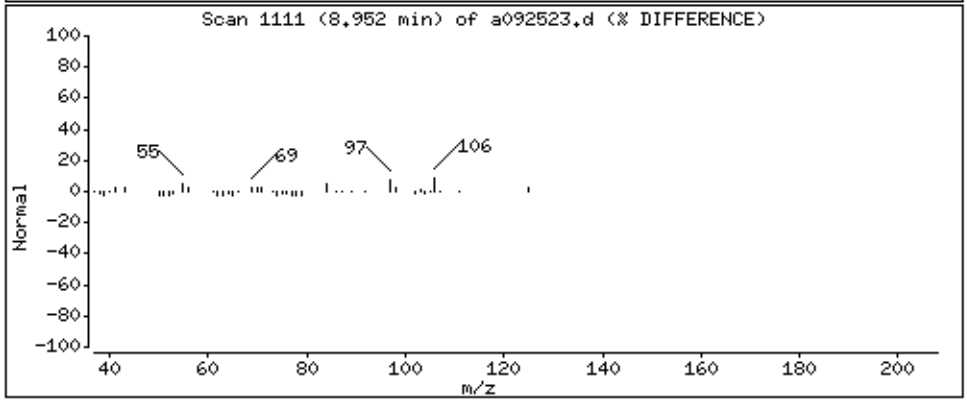












Data File: /chem/msda.i/25sep15.b/a092523.d

Date : 26-SEP-2015 00:16

Client ID:

Instrument: msda.i

Sample Info: 200ml 35559

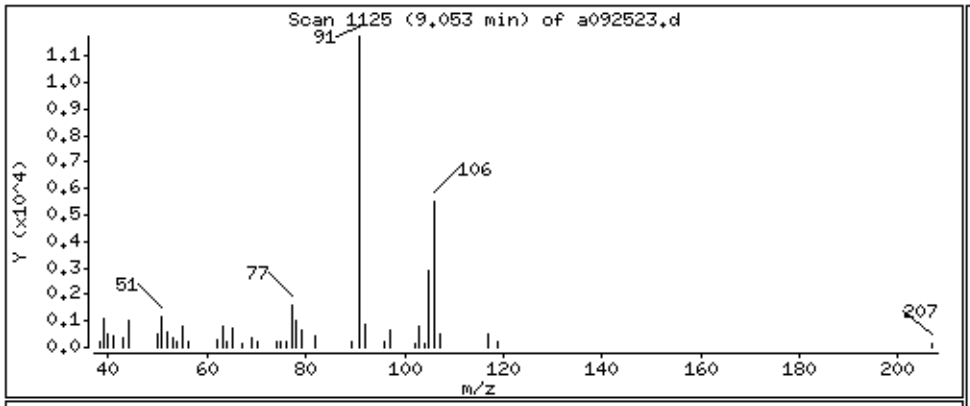
Operator: ea

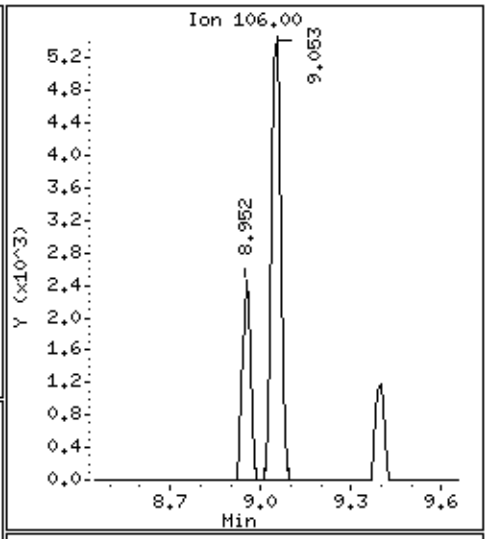
Column phase: RTX-624

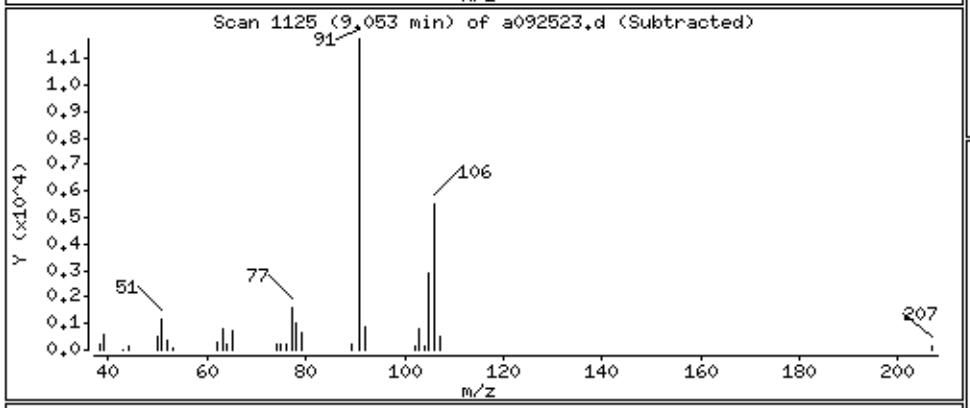
Column diameter: 0.25

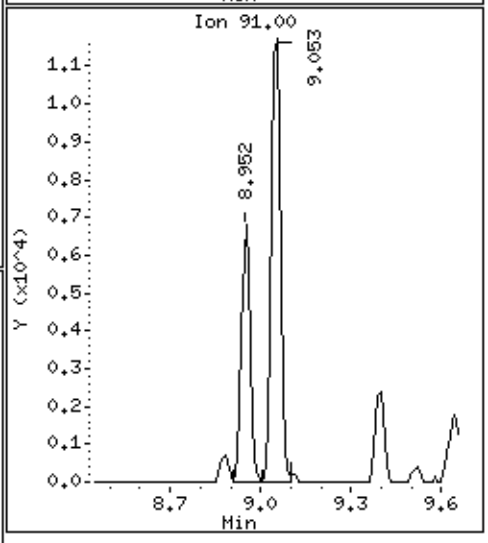
169 m,p-Xylene

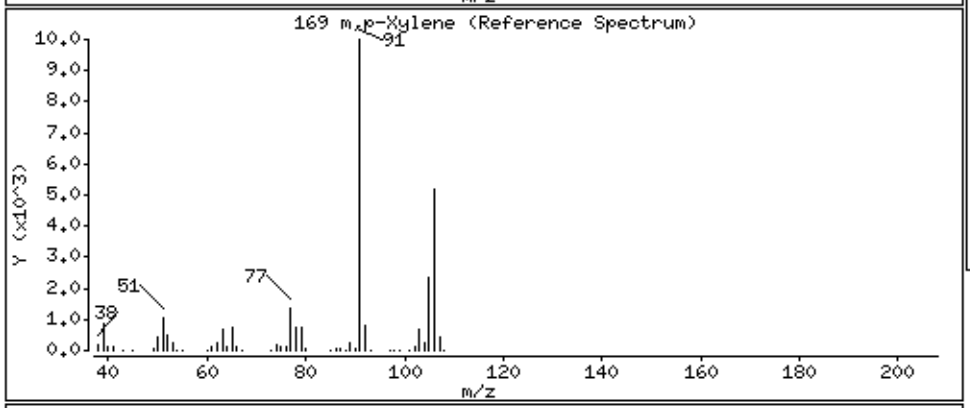
Concentration: 3.460 PPBV

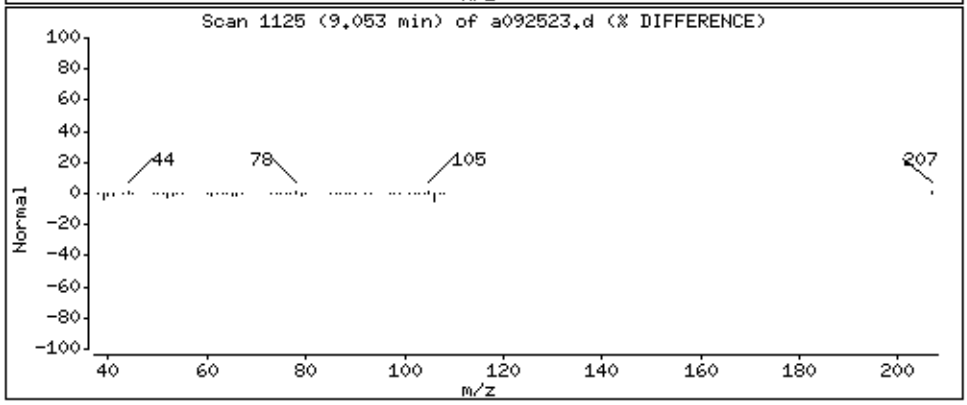












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-3 (091615)

Lab ID#: 1509345-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	1.2	1.9	5.7	9.1
Benzene	1.2	2.9	3.7	9.4

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Client Sample ID: SG-3 (091615)

Lab ID#: 1509345-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092524**	**Date of Collection:**	**9/16/15 9:47:00 AM**
Dil. Factor:	**2.34**	**Date of Analysis:**	**9/26/15 12:57 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Methylene Chloride	12	Not Detected	41	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Chloroform	1.2	1.9	5.7	9.1
Benzene	1.2	2.9	3.7	9.4
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
Toluene	1.2	Not Detected	4.4	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
Ethyl Benzene	1.2	Not Detected	5.1	Not Detected
m,p-Xylene	1.2	Not Detected	5.1	Not Detected
o-Xylene	1.2	Not Detected	5.1	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.8	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	104	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/25sep15.b/a092524.d
Lab Smp Id: 1509345-03A
Inj Date : 26-SEP-2015 00:57
Operator : ea Inst ID: msda.i
Smp Info : 200ml 37382
Misc Info : 4.3 Hg->14.8 psi
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/25sep15.b/a15q0921a.m
Meth Date : 25-Sep-2015 20:42 ealcan Quant Type: ISTD
Cal Date : 22-SEP-2015 07:19 Cal File: a092114.d
Als bottle: 7
Dil Factor: 2.34000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.34000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.535	5.535 (1.000)	130	109793	25.0000		80.00- 120.00	100.00
5.535	5.535 (1.000)	128	86413			46.57- 106.57	78.71
5.535	5.535 (1.000)	49	124397			75.38- 135.38	113.30
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.424	6.424 (1.000)	114	443585	25.0000		80.00- 120.00	100.00
6.424	6.424 (1.000)	88	62845			0.00- 44.55	14.17
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.880	8.880 (1.000)	117	414246	25.0000		80.00- 120.00	100.00
8.880	8.880 (1.000)	82	198442			19.23- 79.23	47.90
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.073	6.073 (1.097)	65	138974	25.6944	25.694	80.00- 120.00	100.00
6.073	6.073 (1.097)	67	69393			27.41- 87.41	49.93

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.641	7.641 (1.190)	98	426809	24.4608	24.461	80.00- 120.00	100.00
7.641	7.641 (1.190)	70	42296			0.00- 39.72	9.91
7.641	7.641 (1.190)	100	277202			36.51- 96.51	64.95
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.869	9.869 (1.111)	174	268044	26.0764	26.076	80.00- 120.00	100.00
9.869	9.869 (1.111)	95	287653			82.23- 142.23	107.32
9.869	9.869 (1.111)	176	263374			67.41- 127.41	98.26
100 Chloroform					CAS #: 67-66-3		
5.600	5.593 (1.012)	83	5045	0.80005	1.872	80.00- 120.00	100.00
5.600	5.593 (1.012)	85	3002			33.64- 93.64	59.52
116 Benzene					CAS #: 71-43-2		
6.051	6.051 (0.942)	78	10749	1.25136	2.928	80.00- 120.00	100.00
6.051	6.051 (0.942)	77	3018			0.00- 53.40	28.08

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a092524.d
Lab Smp Id: 1509345-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msda.i/25sep15.b/a15q0921a.m
Misc Info: 4.3 Hg->14.8 psi

Calibration Date: 25-SEP-2015
Calibration Time: 17:53
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	129526	77716	181336	109793	-15.23
123 1,4-Difluorobenze	544288	326573	762003	443585	-18.50
163 Chlorobenzene-d5	415368	249221	581515	414246	-0.27

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.54	5.21	5.87	5.54	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.88	8.55	9.21	8.88	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 25sep15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509345-03A
Level: LOW Operator: ea
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msda.i/25sep15.b/a15q0921a.m
Misc Info: 4.3 Hg->14.8 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.694	102.78	70-130
$ 146 Toluene-d8	25.000	24.461	97.84	70-130
$ 177 4-Bromofluorobenze	25.000	26.076	104.31	70-130

Data File: /chem/msda.i/25sep15.b/a092524.d

Page 1

Date : 26-SEP-2015 00:57

Client ID:

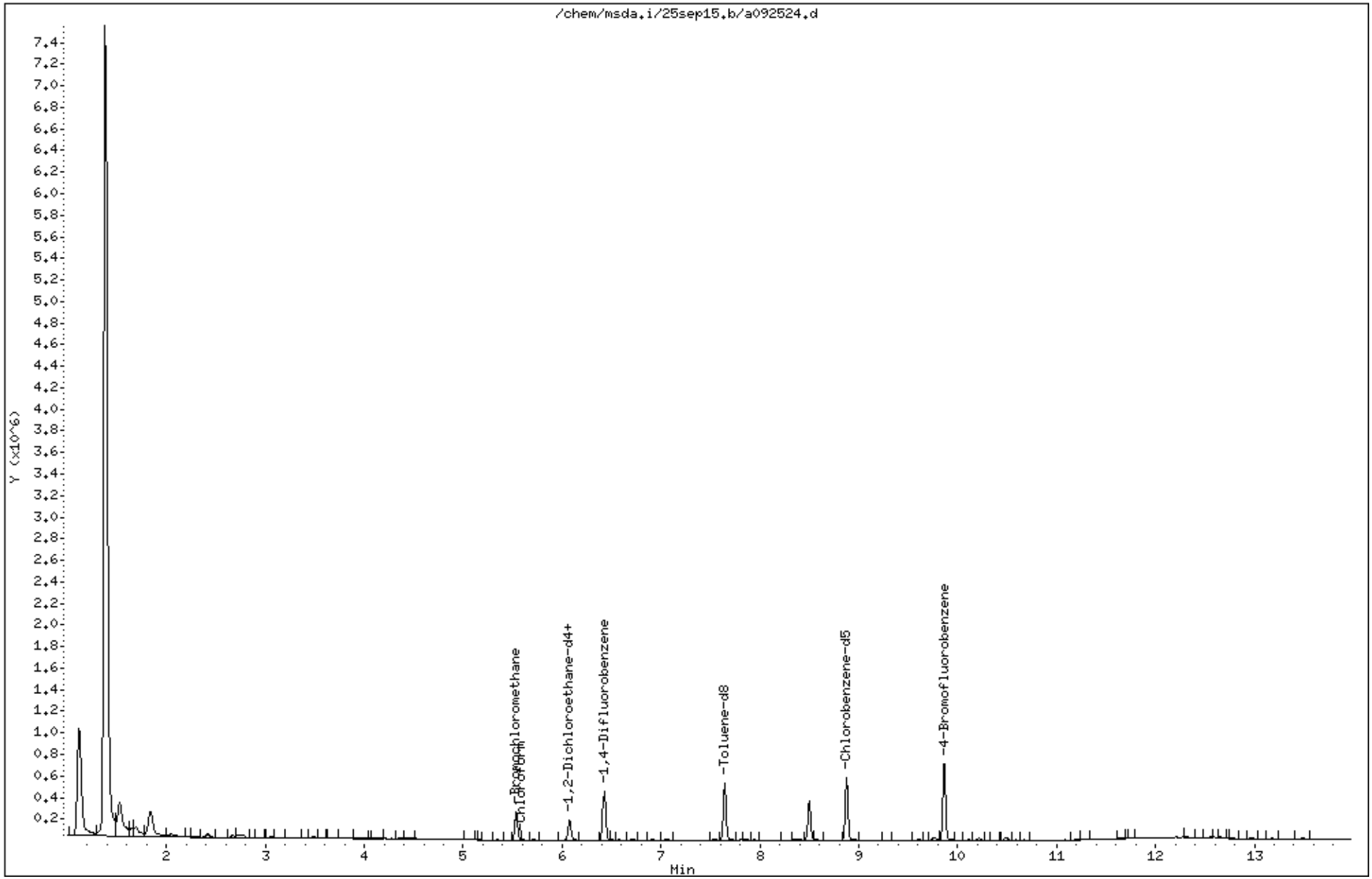
Instrument: msda.i

Sample Info: 200ml 37382

Operator: ea

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msda.i/25sep15.b/a092524.d

Date : 26-SEP-2015 00:57

Client ID:

Instrument: msda.i

Sample Info: 200ml 37382

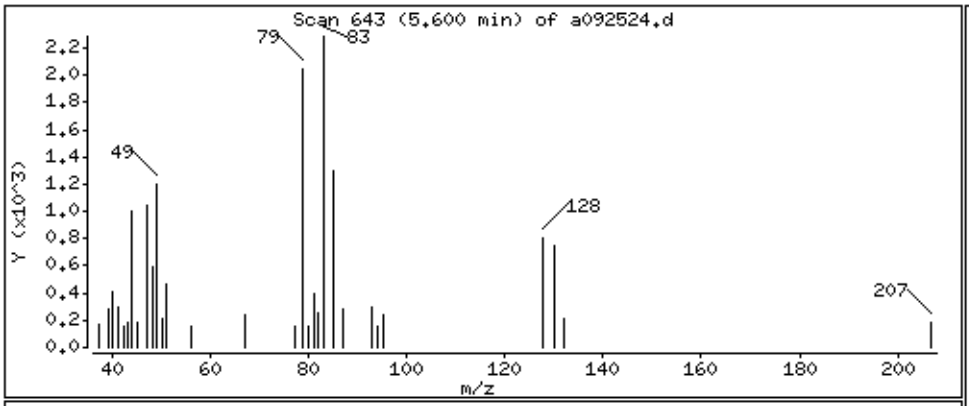
Operator: ea

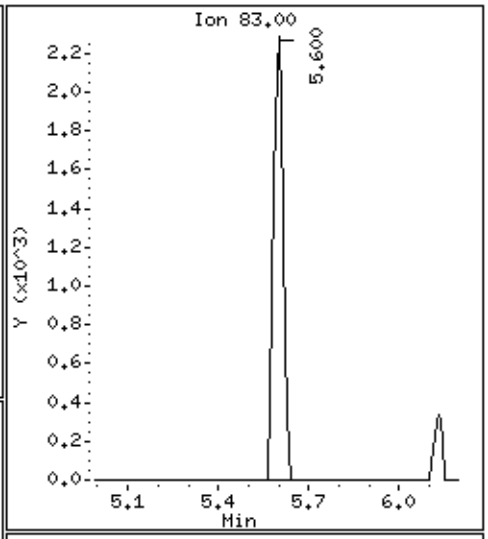
Column phase: RTX-624

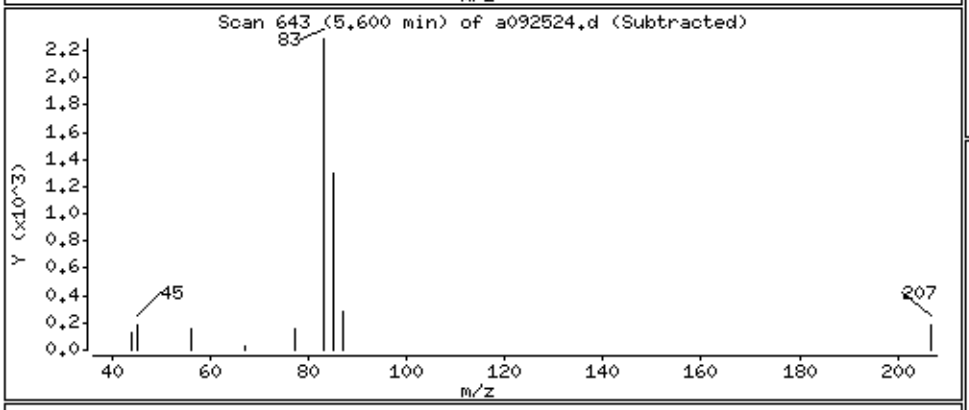
Column diameter: 0.25

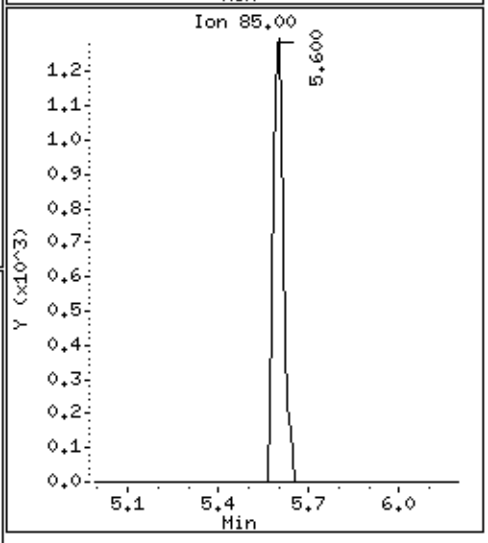
100 Chloroform

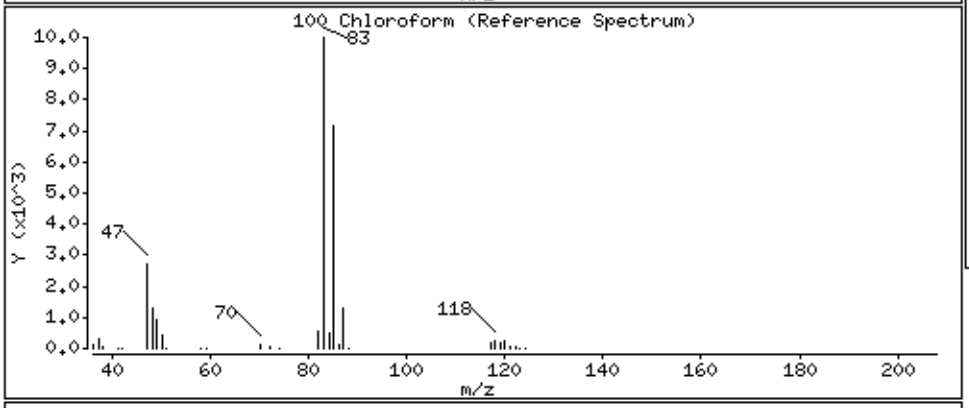
Concentration: 1.872 PPBV

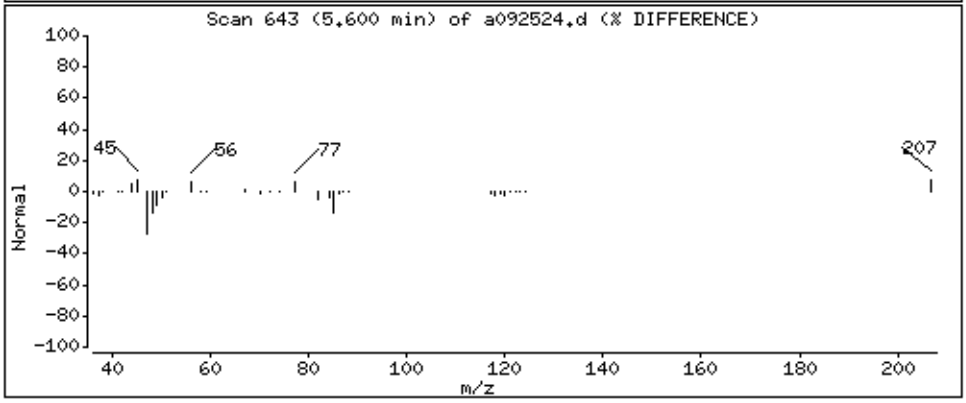












Data File: /chem/msda.i/25sep15.b/a092524.d

Date : 26-SEP-2015 00:57

Client ID:

Instrument: msda.i

Sample Info: 200ml 37382

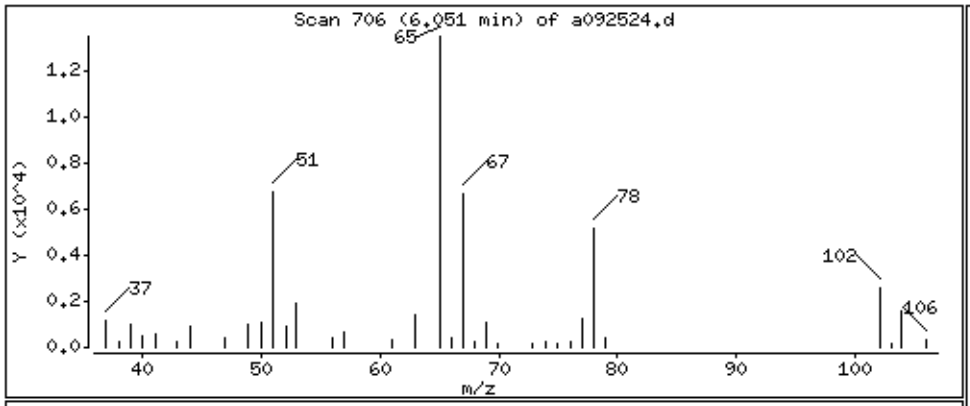
Operator: ea

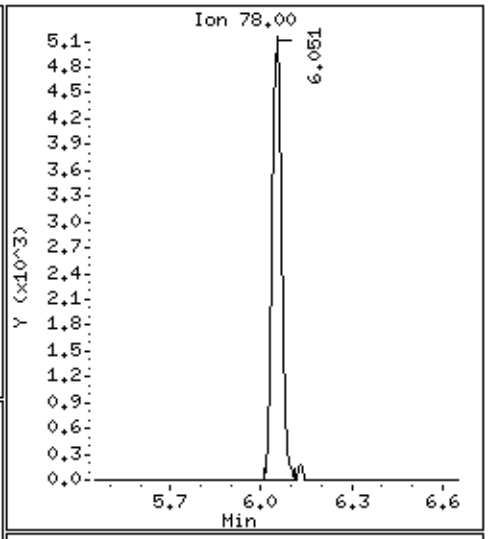
Column phase: RTX-624

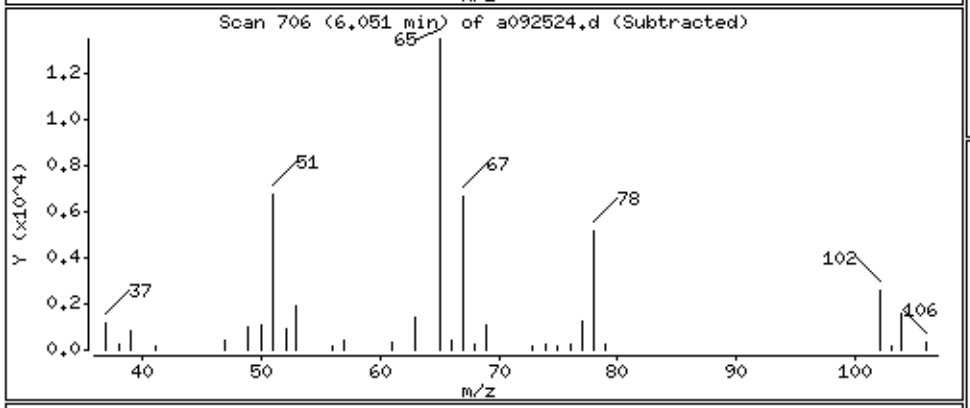
Column diameter: 0.25

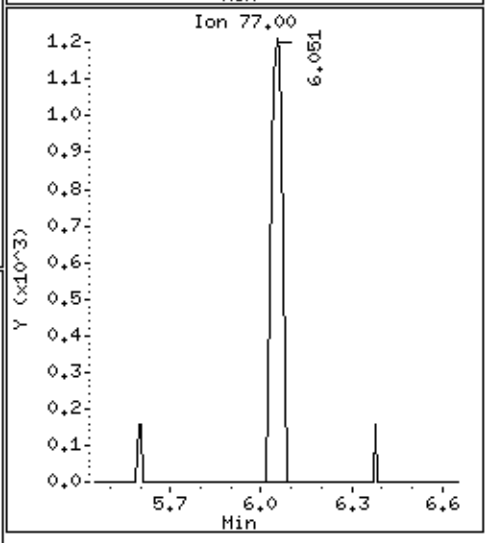
116 Benzene

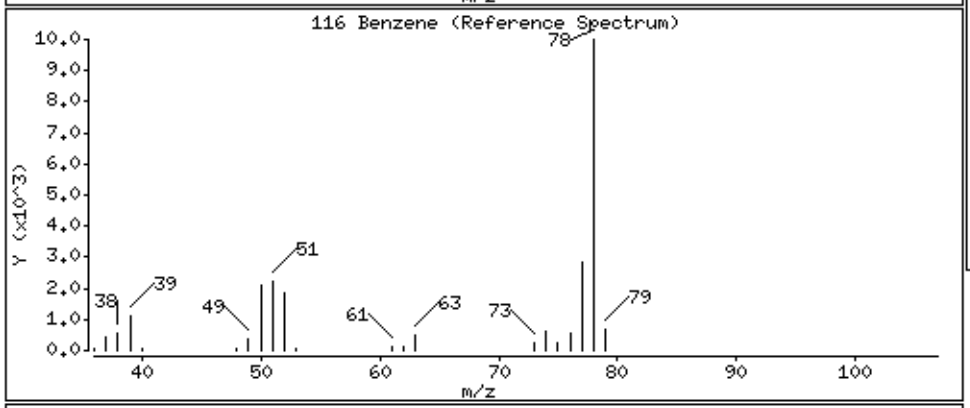
Concentration: 2.928 PPBV

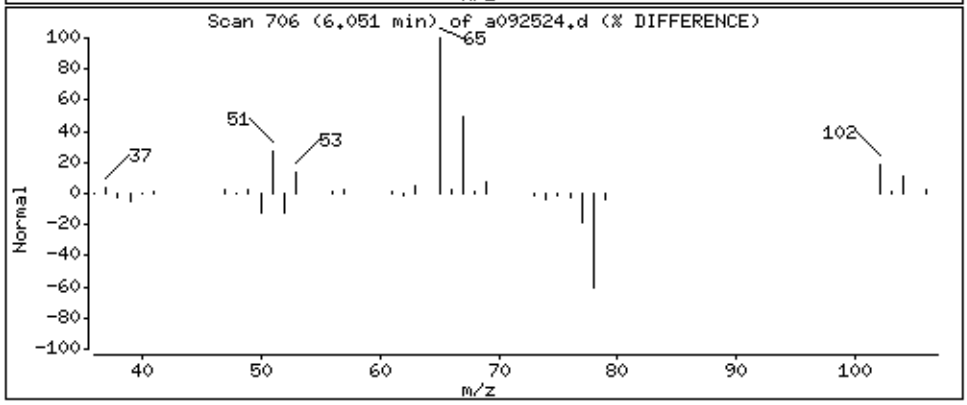












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-5 (091615)

Lab ID#: 1509345-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	1.3	18	6.3	88
Benzene	1.3	2.6	4.1	8.3
Toluene	1.3	7.9	4.9	30
Ethyl Benzene	1.3	3.1	5.6	13
m,p-Xylene	1.3	15	5.6	65
o-Xylene	1.3	5.5	5.6	24
1,2,4-Trimethylbenzene	1.3	4.3 J0	6.4	21 J0

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Client Sample ID: SG-5 (091615)

Lab ID#: 1509345-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092525**	**Date of Collection:**	**9/16/15 12:52:00 PM**
Dil. Factor:	**2.59**	**Date of Analysis:**	**9/26/15 01:23 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.3	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.1	Not Detected
Methylene Chloride	13	Not Detected	45	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.1	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.1	Not Detected
Chloroform	1.3	18	6.3	88
Benzene	1.3	2.6	4.1	8.3
1,2-Dichloroethane	1.3	Not Detected	5.2	Not Detected
Trichloroethene	1.3	Not Detected	7.0	Not Detected
Toluene	1.3	7.9	4.9	30
1,1,2-Trichloroethane	1.3	Not Detected	7.1	Not Detected
Tetrachloroethene	1.3	Not Detected	8.8	Not Detected
Ethyl Benzene	1.3	3.1	5.6	13
m,p-Xylene	1.3	15	5.6	65
o-Xylene	1.3	5.5	5.6	24
1,2,4-Trimethylbenzene	1.3	4.3 J0	6.4	21 J0

J0 = Estimated value due to bias in the CCV.

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	110	70-130
1,2-Dichloroethane-d4	106	70-130
4-Bromofluorobenzene	103	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/25sep15.b/a092525.d
Lab Smp Id: 1509345-04A
Inj Date : 26-SEP-2015 01:23
Operator : ea Inst ID: msda.i
Smp Info : 200ml 1L2717
Misc Info : 6.5 Hg->15.1 psi
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/25sep15.b/a15q0921a.m
Meth Date : 25-Sep-2015 20:42 ealcan Quant Type: ISTD
Cal Date : 22-SEP-2015 07:19 Cal File: a092114.d
Als bottle: 8
Dil Factor: 2.59000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.59000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.535	5.535 (1.000)	130	72620	25.0000		80.00- 120.00	100.00
5.535	5.535 (1.000)	128	56740			46.57- 106.57	78.13
5.535	5.535 (1.000)	49	76331			75.38- 135.38	105.11
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.423	6.424 (1.000)	114	358031	25.0000		80.00- 120.00	100.00
6.423	6.424 (1.000)	88	51541			0.00- 44.55	14.40
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.880	8.880 (1.000)	117	366006	25.0000		80.00- 120.00	100.00
8.880	8.880 (1.000)	82	181162			19.23- 79.23	49.50
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.072	6.073 (1.097)	65	95158	26.5992	26.599	80.00- 120.00	100.00
6.072	6.073 (1.097)	67	46826			27.41- 87.41	49.21

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.641	7.641 (1.190)	98	386176	27.4207	27.421	80.00- 120.00	100.00
7.641	7.641 (1.190)	70	38610			0.00- 39.72	10.00
7.641	7.641 (1.190)	100	255789			36.51- 96.51	66.24
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.869	9.869 (1.111)	174	233796	25.7424	25.742	80.00- 120.00	100.00
9.869	9.869 (1.111)	95	267768			82.23- 142.23	114.53
9.869	9.869 (1.111)	176	231398			67.41- 127.41	98.97
100 Chloroform					CAS #: 67-66-3		
5.600	5.593 (1.012)	83	29179	6.99593	18.119	80.00- 120.00	100.00
5.600	5.593 (1.012)	85	18682			33.64- 93.64	64.03
116 Benzene					CAS #: 71-43-2		
6.051	6.051 (0.942)	78	6949	1.00229	2.596	80.00- 120.00	100.00
6.051	6.051 (0.942)	77	1811			0.00- 53.40	26.07
147 Toluene					CAS #: 108-88-3		
7.699	7.699 (1.198)	91	28595	3.04012	7.874	80.00- 120.00	100.00
7.699	7.699 (1.198)	92	17154			28.59- 88.59	59.99
167 Ethyl Benzene					CAS #: 100-41-4		
8.952	8.952 (1.008)	106	5354	1.19376	3.092	80.00- 120.00	100.00
8.952	8.952 (1.008)	91	15943			268.22- 328.22	297.73
169 m,p-Xylene					CAS #: 108-38-3		
9.052	9.052 (1.019)	106	31717	5.78960	14.995	80.00- 120.00	100.00
9.052	9.052 (1.019)	91	62190			164.61- 224.61	196.08
171 o-Xylene					CAS #: 95-47-6		
9.396	9.389 (1.058)	106	10892	2.11417	5.476	80.00- 120.00	100.00
9.396	9.389 (1.058)	91	23097			171.64- 231.64	212.05
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.499	10.499 (1.182)	120	10175	1.66414	4.310	80.00- 120.00	100.00
10.506	10.499 (1.183)	105	20932			180.85- 240.85	205.71

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a092525.d
Lab Smp Id: 1509345-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msda.i/25sep15.b/a15q0921a.m
Misc Info: 6.5 Hg->15.1 psi

Calibration Date: 25-SEP-2015
Calibration Time: 17:53
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	129526	77716	181336	72620	-43.93 <-
123 1,4-Difluorobenze	544288	326573	762003	358031	-34.22
163 Chlorobenzene-d5	415368	249221	581515	366006	-11.88

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.54	5.21	5.87	5.54	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.88	8.55	9.21	8.88	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 25sep15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509345-04A
Level: LOW Operator: ea
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msda.i/25sep15.b/a15q0921a.m
Misc Info: 6.5 Hg->15.1 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	26.599	106.40	70-130
$ 146 Toluene-d8	25.000	27.421	109.68	70-130
$ 177 4-Bromofluorobenze	25.000	25.742	102.97	70-130

Data File: /chem/msda.i/25sep15.b/a092525.d

Page 1

Date : 26-SEP-2015 01:23

Client ID:

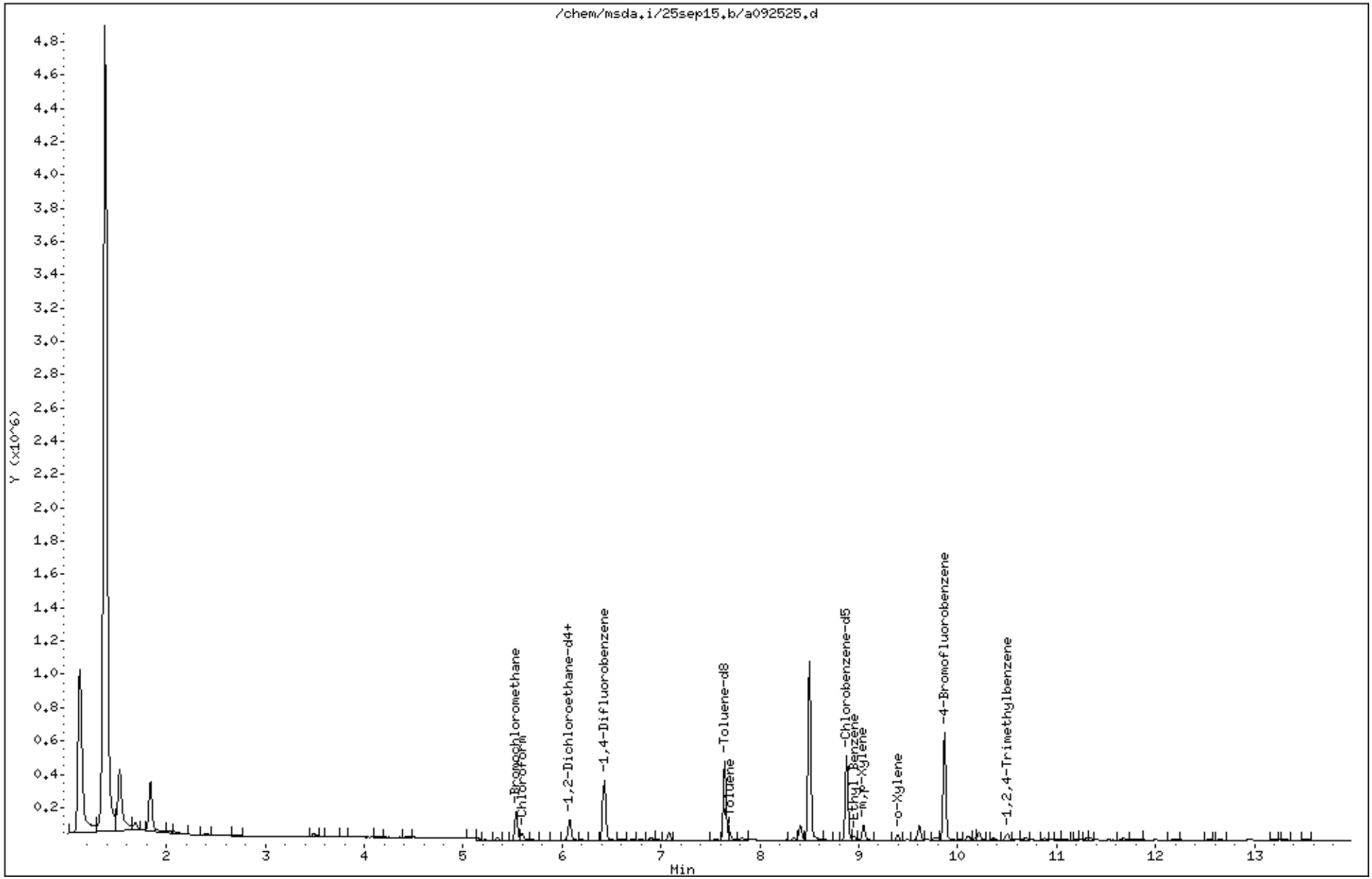
Instrument: msda.i

Sample Info: 200ml 1L2717

Operator: ea

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msda.i/25sep15.b/a092525.d

Date : 26-SEP-2015 01:23

Client ID:

Instrument: msda.i

Sample Info: 200ml 1L2717

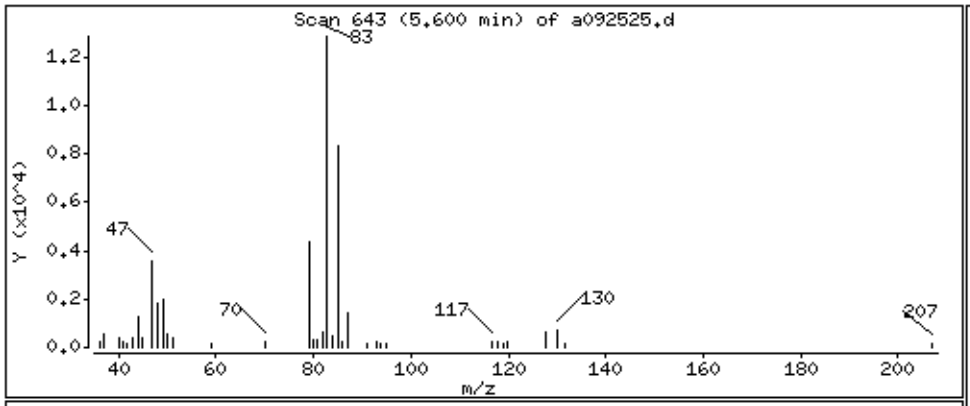
Operator: ea

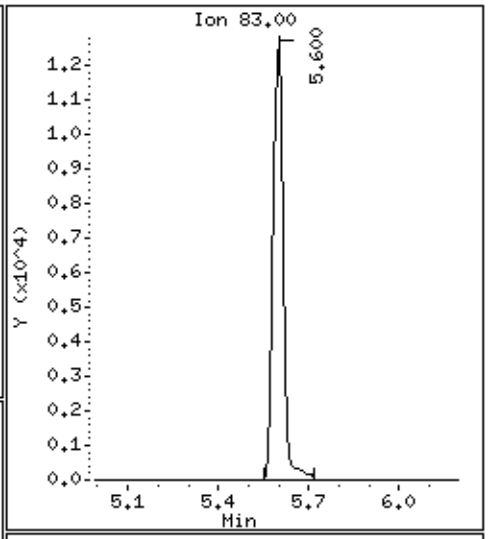
Column phase: RTX-624

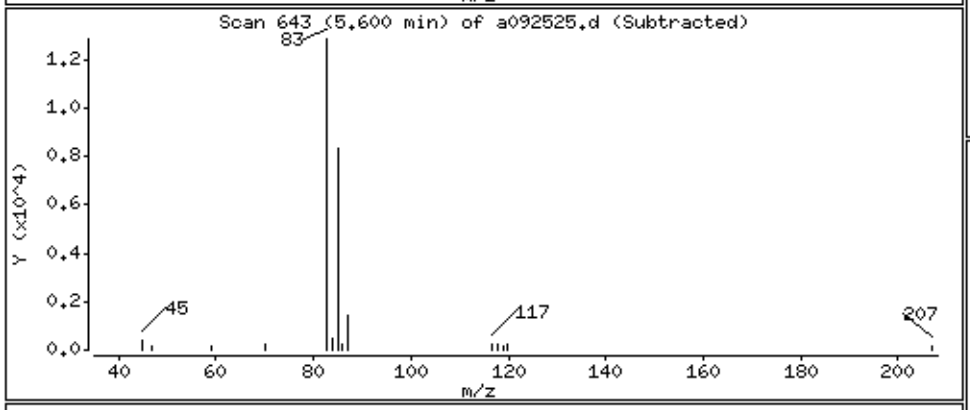
Column diameter: 0.25

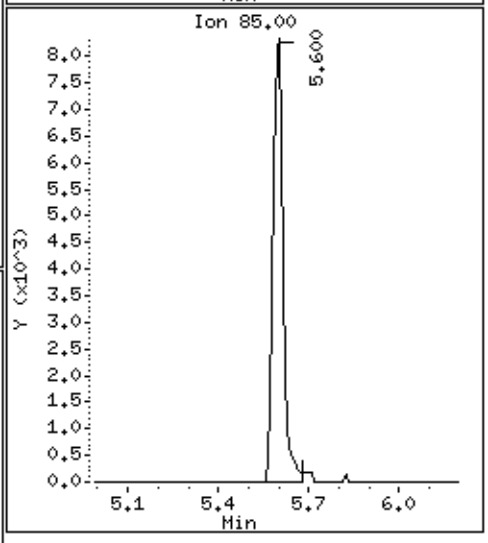
100 Chloroform

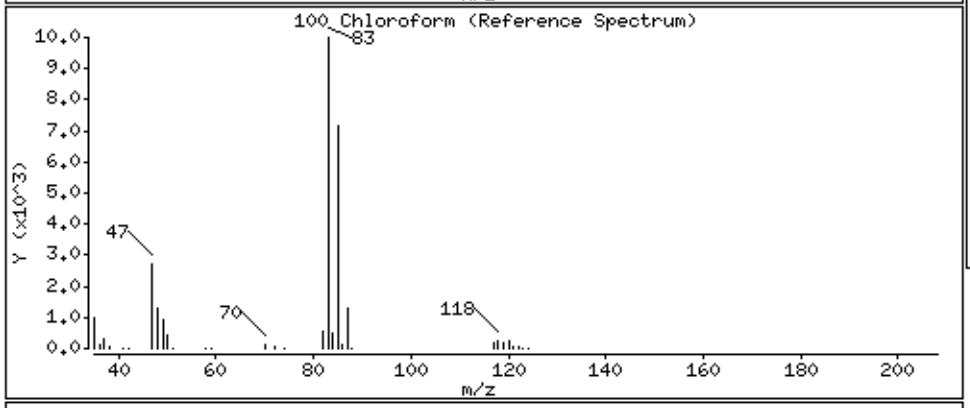
Concentration: 18.119 PPBV

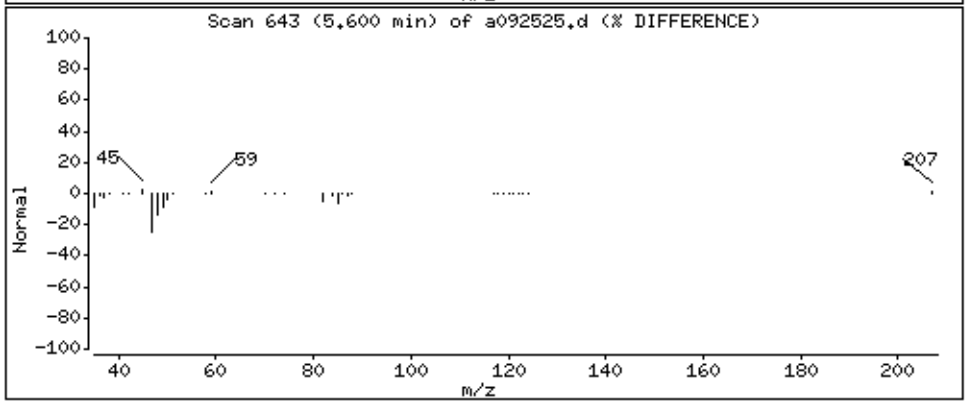












Data File: /chem/msda.i/25sep15.b/a092525.d

Date : 26-SEP-2015 01:23

Client ID:

Instrument: msda.i

Sample Info: 200ml 1L2717

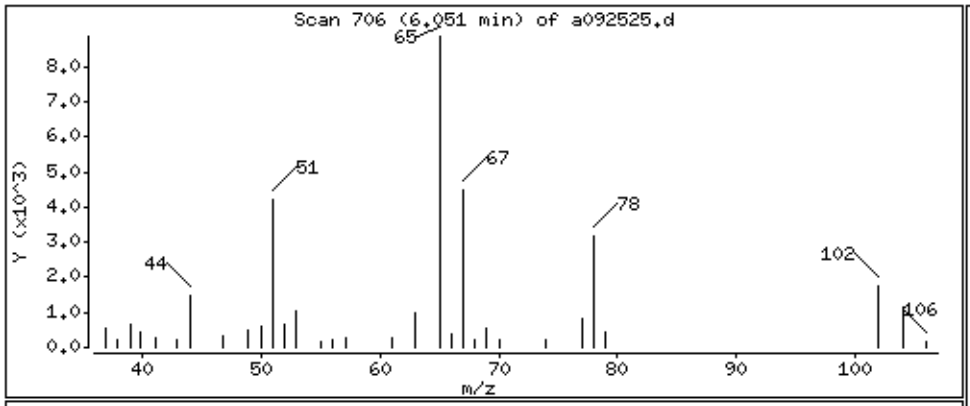
Operator: ea

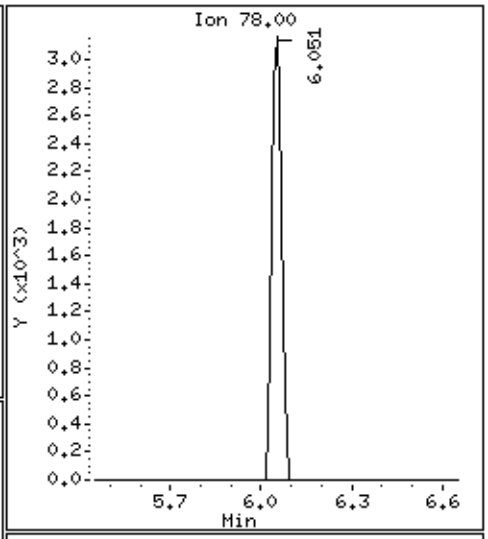
Column phase: RTX-624

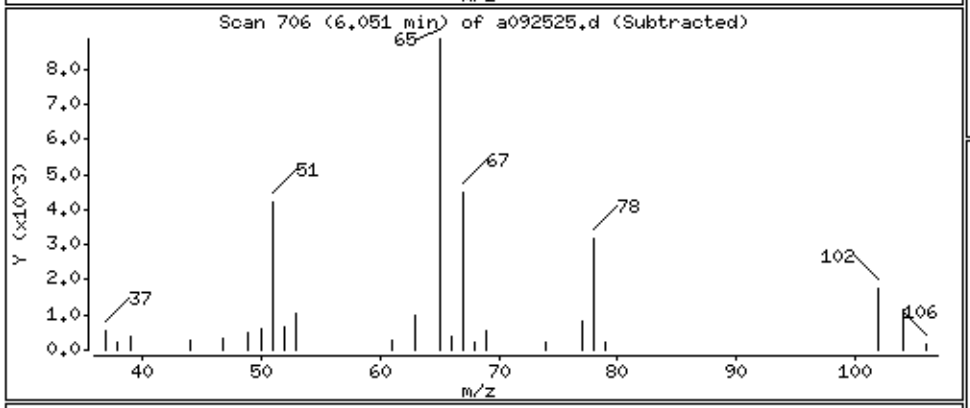
Column diameter: 0.25

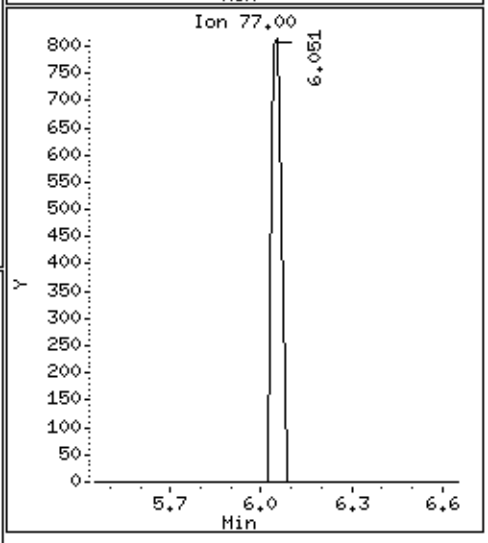
116 Benzene

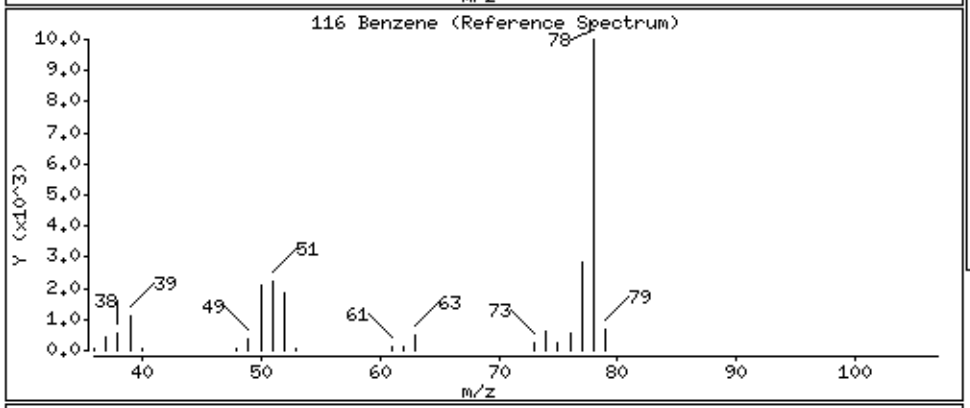
Concentration: 2.596 PPBV

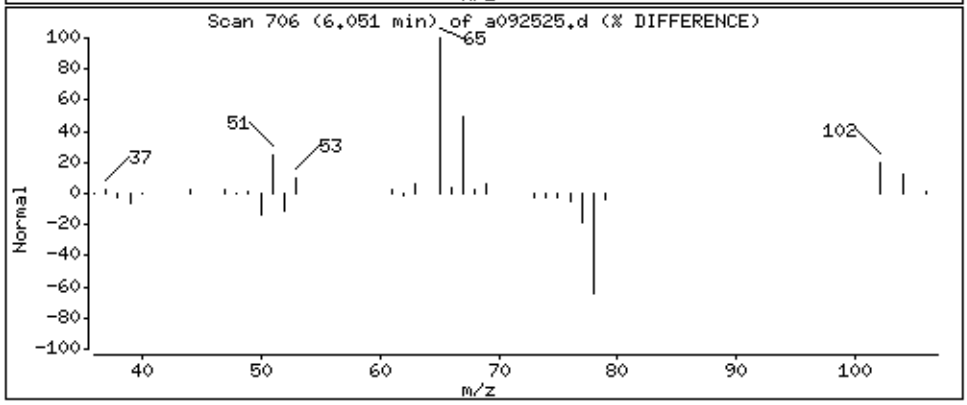












Data File: /chem/msda.i/25sep15.b/a092525.d

Date : 26-SEP-2015 01:23

Client ID:

Instrument: msda.i

Sample Info: 200ml 1L2717

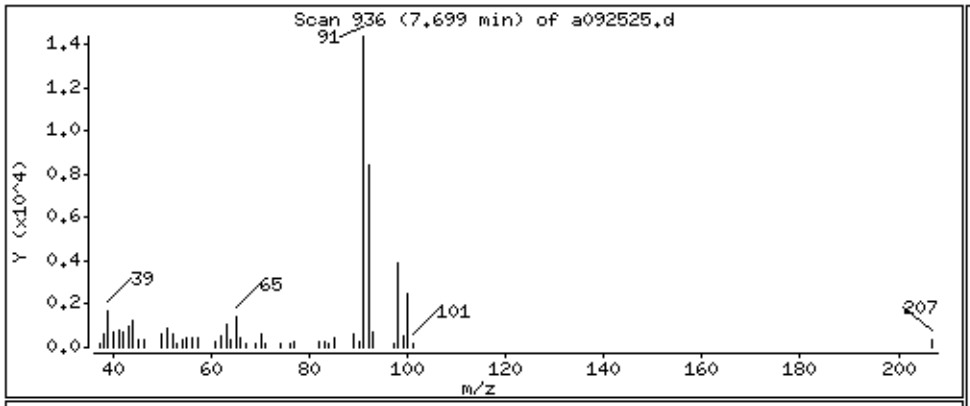
Operator: ea

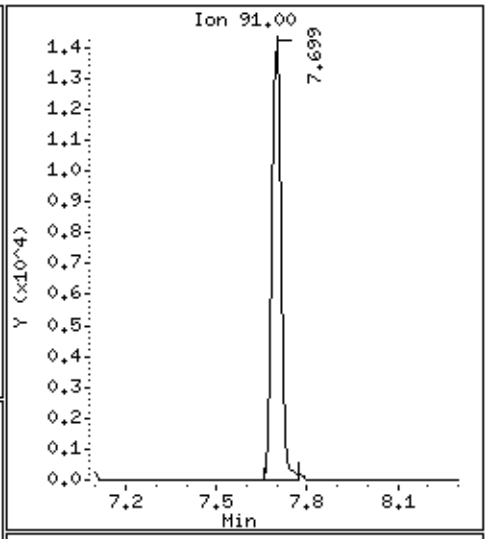
Column phase: RTX-624

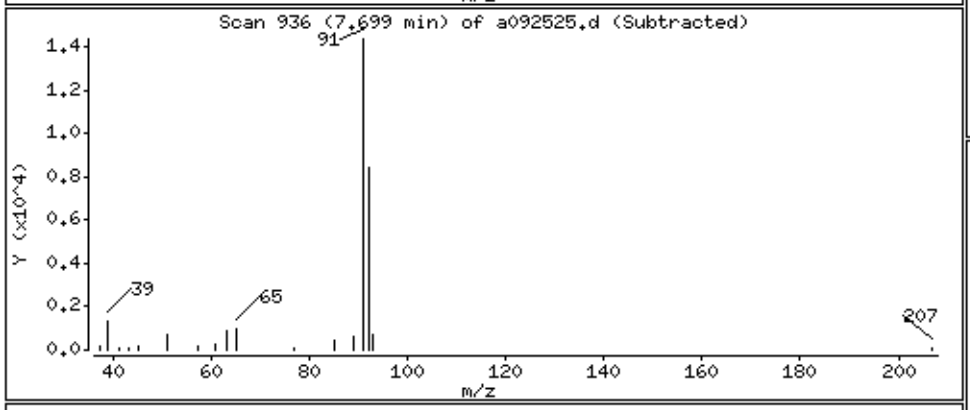
Column diameter: 0.25

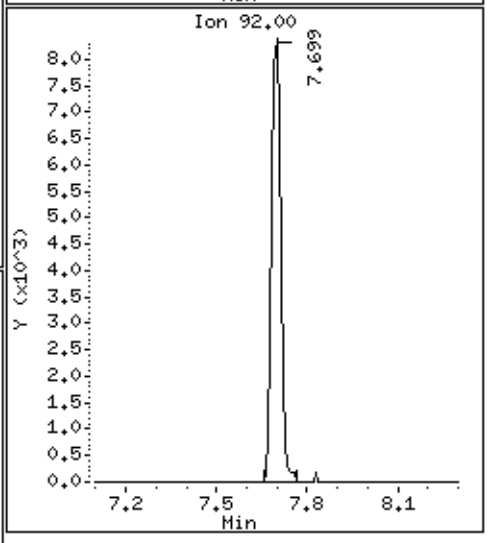
147 Toluene

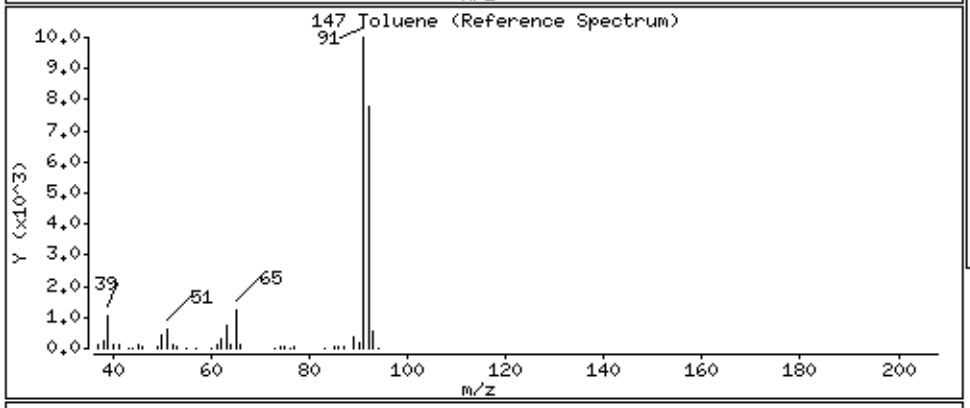
Concentration: 7.874 PPBV

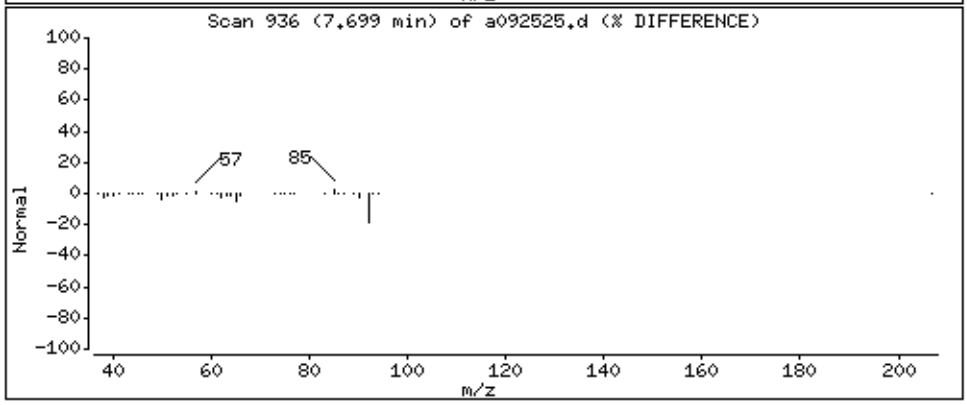












Data File: /chem/msda.i/25sep15.b/a092525.d

Date : 26-SEP-2015 01:23

Client ID:

Instrument: msda.i

Sample Info: 200ml 1L2717

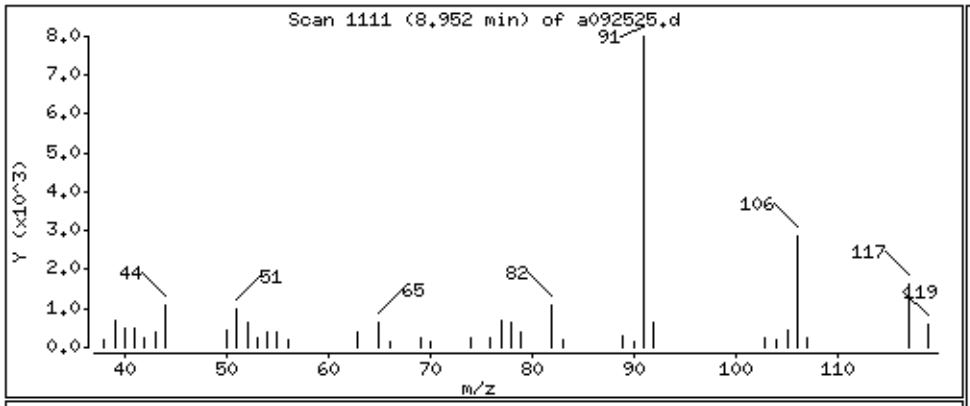
Operator: ea

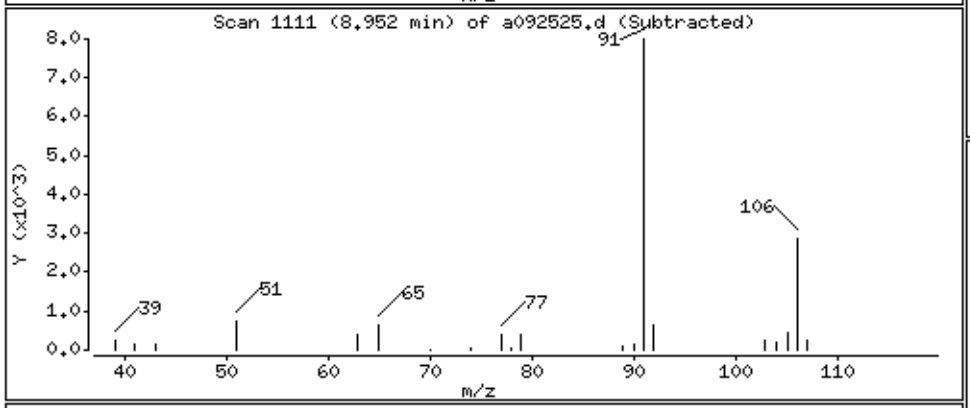
Column phase: RTX-624

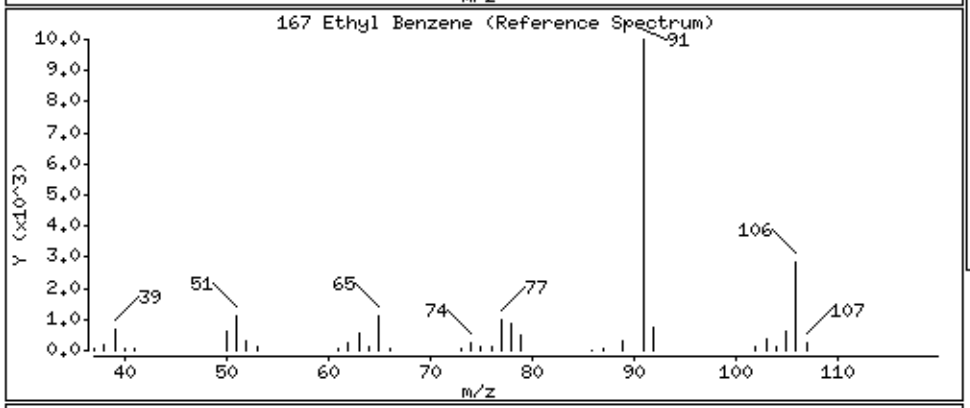
Column diameter: 0.25

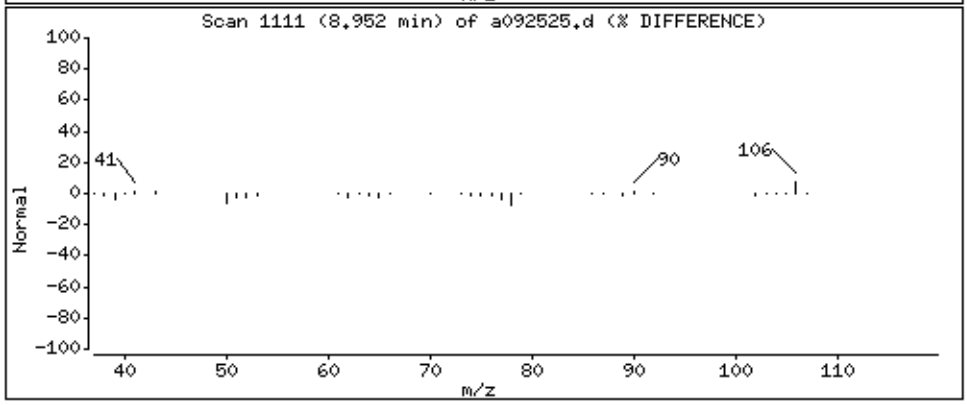
167 Ethyl Benzene

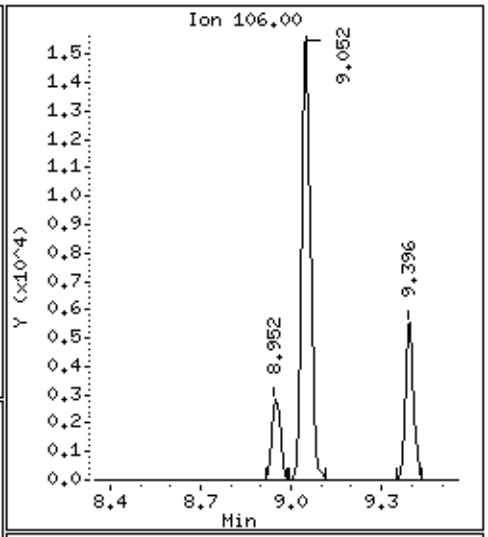
Concentration: 3.092 PPBV

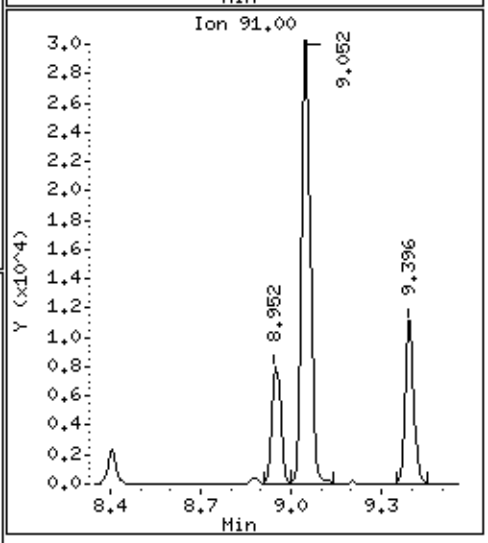












Data File: /chem/msda.i/25sep15.b/a092525.d

Date : 26-SEP-2015 01:23

Client ID:

Instrument: msda.i

Sample Info: 200ml 1L2717

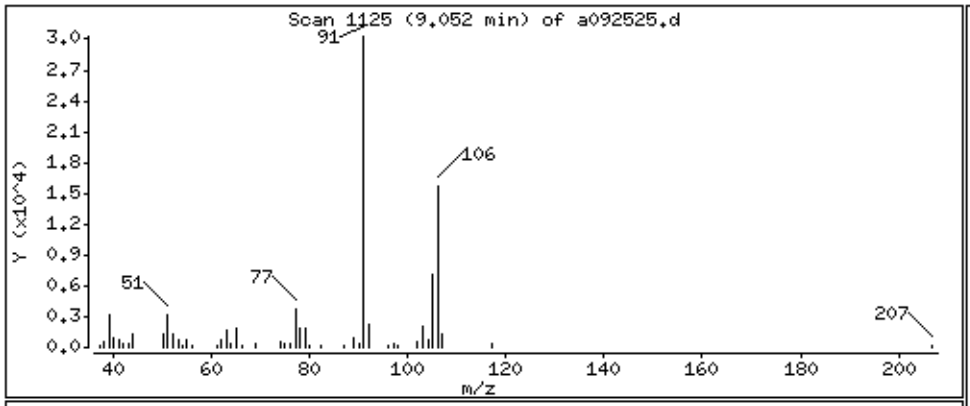
Operator: ea

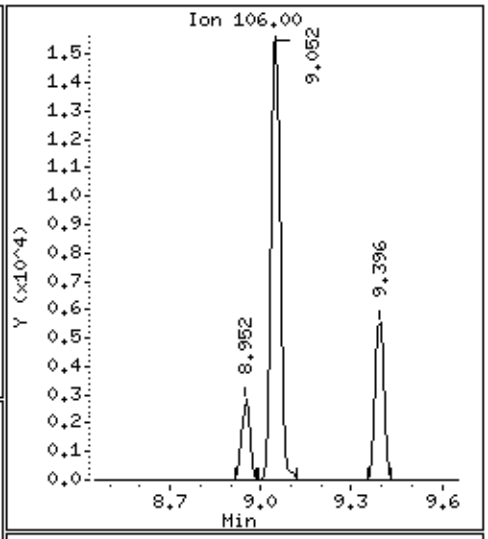
Column phase: RTX-624

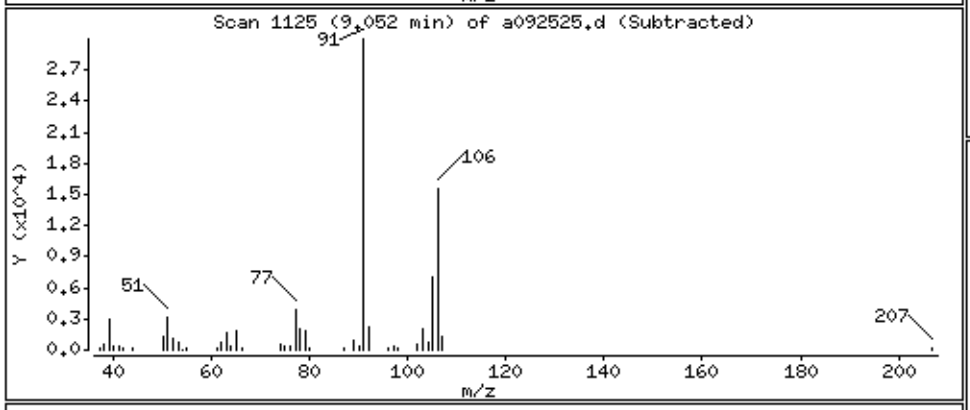
Column diameter: 0.25

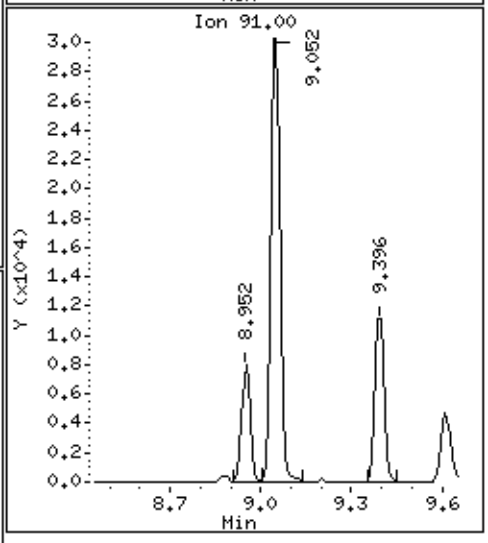
169 m,p-Xylene

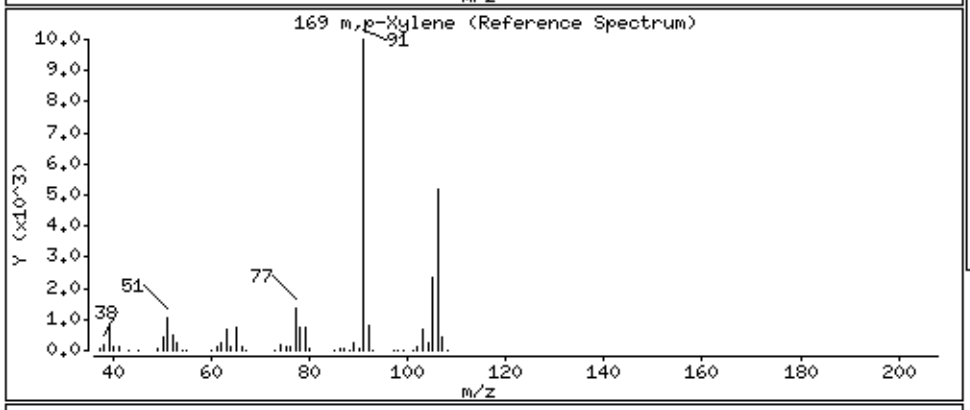
Concentration: 14.995 PPBV

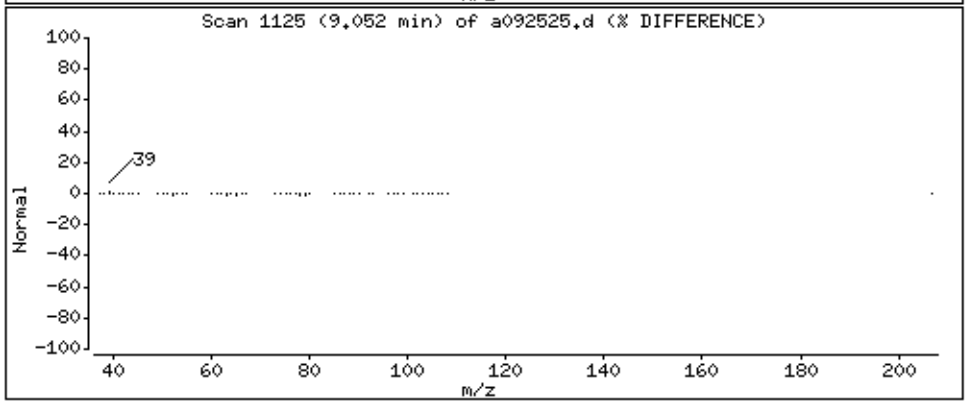












Data File: /chem/msda.i/25sep15.b/a092525.d

Date : 26-SEP-2015 01:23

Client ID:

Instrument: msda.i

Sample Info: 200ml 1L2717

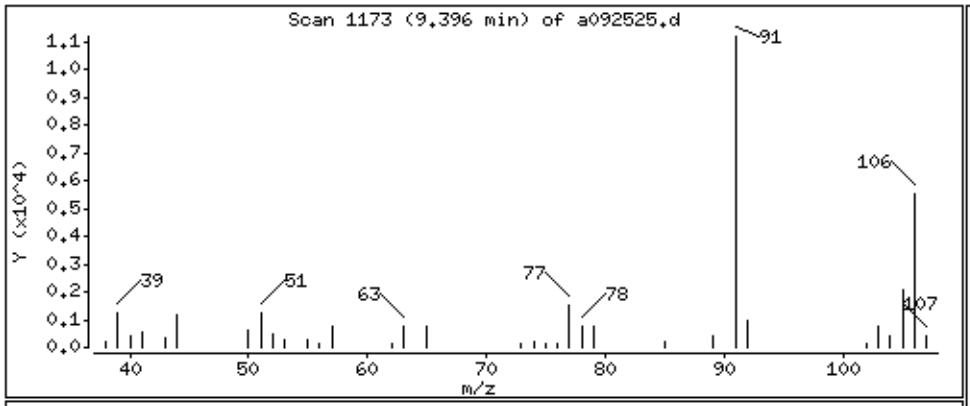
Operator: ea

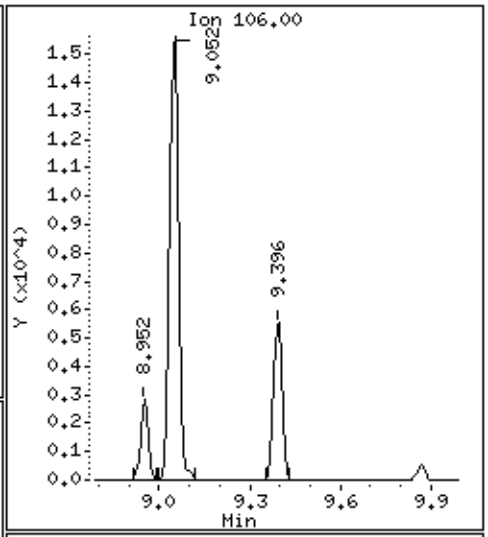
Column phase: RTX-624

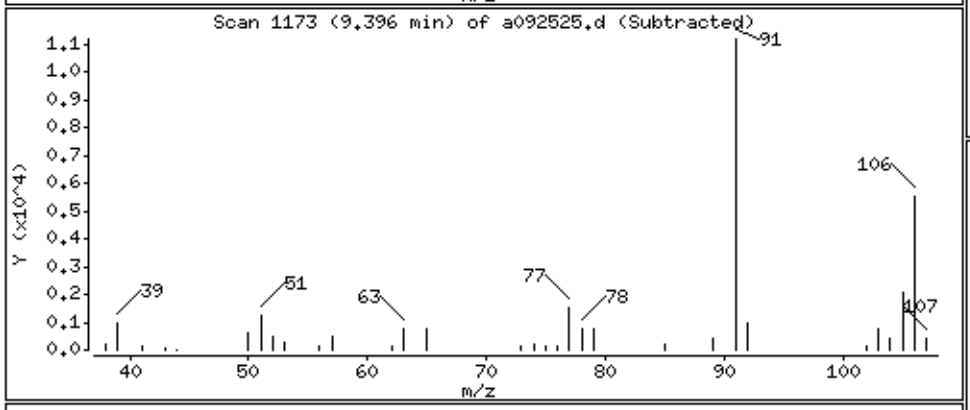
Column diameter: 0.25

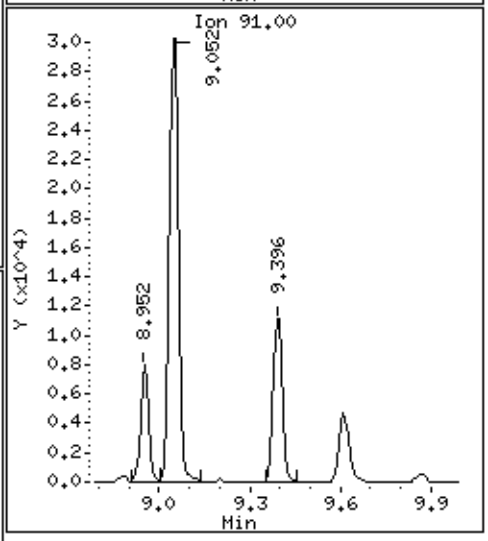
171 o-Xylene

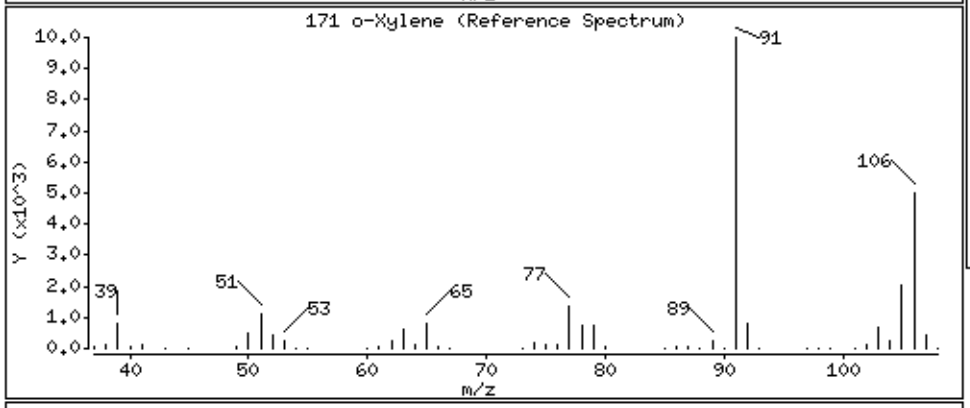
Concentration: 5.476 PPBV

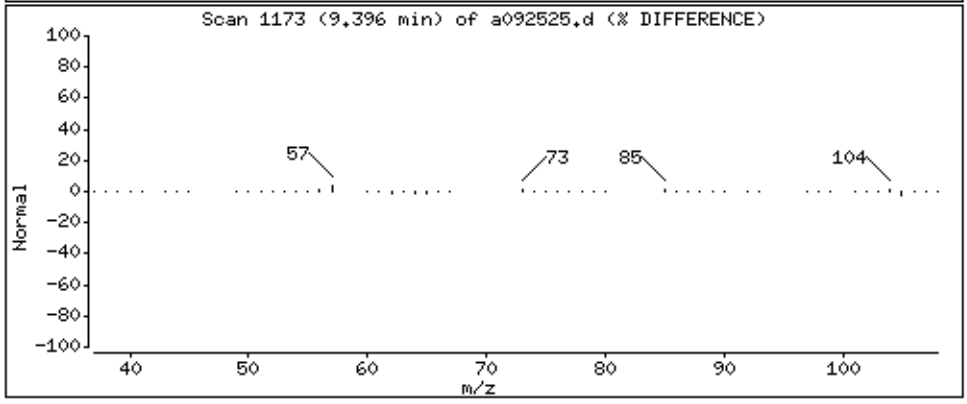












Data File: /chem/msda.i/25sep15.b/a092525.d

Date : 26-SEP-2015 01:23

Client ID:

Instrument: msda.i

Sample Info: 200ml 1L2717

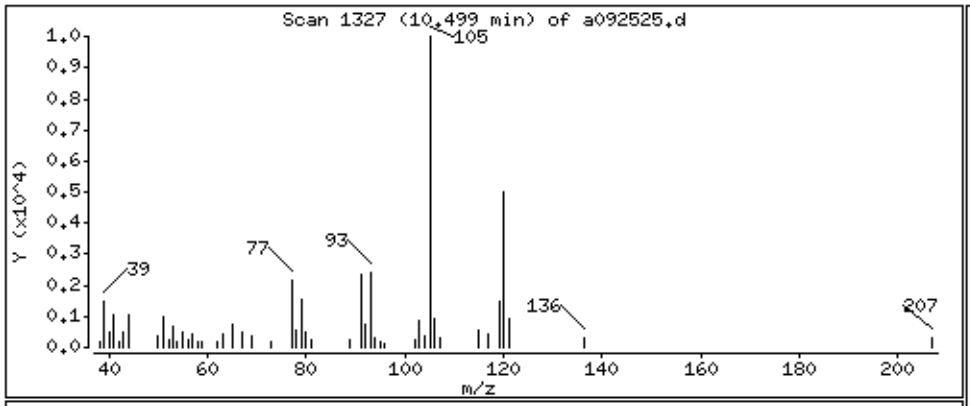
Operator: ea

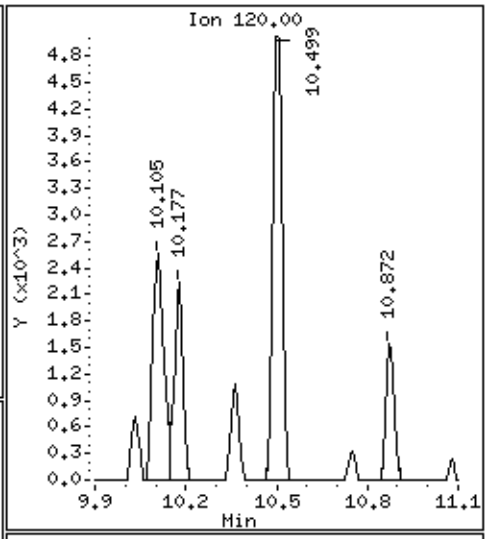
Column phase: RTX-624

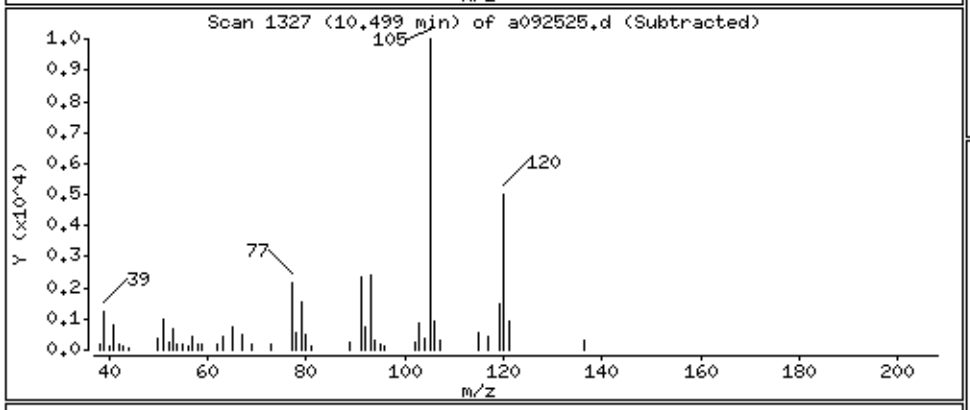
Column diameter: 0.25

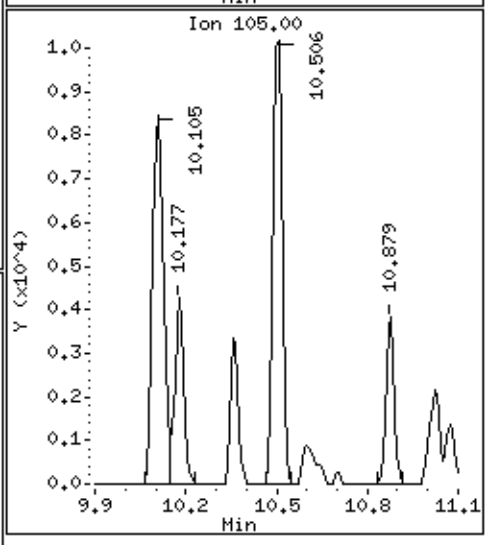
196 1,2,4-Trimethylbenzene

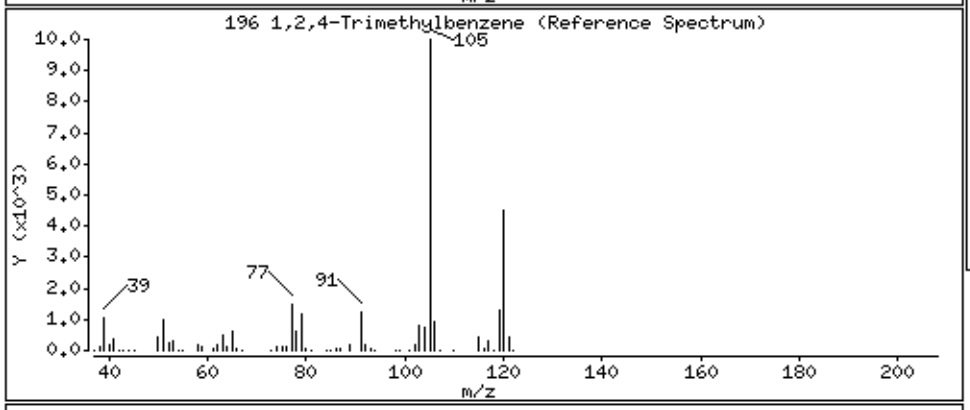
Concentration: 4.310 PPBV

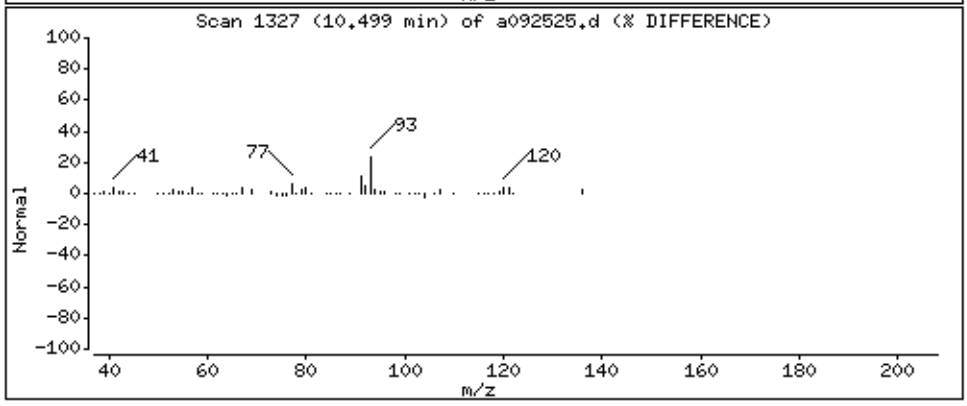












eurofins | Air Toxics

Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-6 (091615)

Lab ID#: 1509345-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	1.3	20	6.4	97
Benzene	1.3	7.1	4.2	23
Toluene	1.3	5.5	5.0	21
Ethyl Benzene	1.3	2.0	5.7	8.5
m,p-Xylene	1.3	11	5.7	48
o-Xylene	1.3	3.6	5.7	16
1,2,4-Trimethylbenzene	1.3	3.0 J0	6.5	15 J0

eurofins | Air Toxics

Client Sample ID: SG-6 (091615)

Lab ID#: 1509345-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092526**	**Date of Collection:**	**9/16/15 2:30:00 PM**
Dil. Factor:	**2.63**	**Date of Analysis:**	**9/26/15 02:05 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.4	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Methylene Chloride	13	Not Detected	46	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Chloroform	1.3	20	6.4	97
Benzene	1.3	7.1	4.2	23
1,2-Dichloroethane	1.3	Not Detected	5.3	Not Detected
Trichloroethene	1.3	Not Detected	7.1	Not Detected
Toluene	1.3	5.5	5.0	21
1,1,2-Trichloroethane	1.3	Not Detected	7.2	Not Detected
Tetrachloroethene	1.3	Not Detected	8.9	Not Detected
Ethyl Benzene	1.3	2.0	5.7	8.5
m,p-Xylene	1.3	11	5.7	48
o-Xylene	1.3	3.6	5.7	16
1,2,4-Trimethylbenzene	1.3	3.0 J0	6.5	15 J0

J0 = Estimated value due to bias in the CCV.

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	111	70-130
1,2-Dichloroethane-d4	113	70-130
4-Bromofluorobenzene	103	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/25sep15.b/a092526.d
Lab Smp Id: 1509345-05A
Inj Date : 26-SEP-2015 02:05
Operator : ea Inst ID: msda.i
Smp Info : 200ml 33388
Misc Info : 7.1 Hg->14.8 psi
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/25sep15.b/a15q0921a.m
Meth Date : 25-Sep-2015 20:42 ealcan Quant Type: ISTD
Cal Date : 22-SEP-2015 07:19 Cal File: a092114.d
Als bottle: 9
Dil Factor: 2.63000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.63000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.535	5.535 (1.000)	130	61476	25.0000		80.00- 120.00	100.00
5.535	5.535 (1.000)	128	48624			46.57- 106.57	79.09
5.535	5.535 (1.000)	49	66838			75.38- 135.38	108.72
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.424	6.424 (1.000)	114	328308	25.0000		80.00- 120.00	100.00
6.424	6.424 (1.000)	88	47330			0.00- 44.55	14.42
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.880	8.880 (1.000)	117	338558	25.0000		80.00- 120.00	100.00
8.880	8.880 (1.000)	82	170583			19.23- 79.23	50.39
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.073	6.073 (1.097)	65	85532	28.2425	28.242	80.00- 120.00	100.00
6.073	6.073 (1.097)	67	46259			27.41- 87.41	54.08

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.641	7.641 (1.190)	98	359808	27.8614	27.861	80.00- 120.00	100.00
7.641	7.641 (1.190)	70	35941			0.00- 39.72	9.99
7.641	7.641 (1.190)	100	237746			36.51- 96.51	66.08
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.869	9.869 (1.111)	174	215770	25.6838	25.684	80.00- 120.00	100.00
9.862	9.869 (1.111)	95	252827			82.23- 142.23	117.17
9.869	9.869 (1.111)	176	213892			67.41- 127.41	99.13
100 Chloroform					CAS #: 67-66-3		
5.593	5.593 (1.010)	83	26572	7.52576	19.793	80.00- 120.00	100.00
5.593	5.593 (1.010)	85	18071			33.64- 93.64	68.01
116 Benzene					CAS #: 71-43-2		
6.051	6.051 (0.942)	78	17237	2.71126	7.131	80.00- 120.00	100.00
6.051	6.051 (0.942)	77	4505			0.00- 53.40	26.13
147 Toluene					CAS #: 108-88-3		
7.699	7.699 (1.198)	91	18130	2.10202	5.528	80.00- 120.00	100.00
7.699	7.699 (1.198)	92	10898			28.59- 88.59	60.11
167 Ethyl Benzene					CAS #: 100-41-4		
8.952	8.952 (1.008)	106	3103	0.74796	1.967	80.00- 120.00	100.00
8.952	8.952 (1.008)	91	9464			268.22- 328.22	304.99
169 m,p-Xylene					CAS #: 108-38-3		
9.045	9.052 (1.019)	106	21222	4.18791	11.014	80.00- 120.00	100.00
9.045	9.052 (1.019)	91	43056			164.61- 224.61	202.88
171 o-Xylene					CAS #: 95-47-6		
9.389	9.389 (1.057)	106	6473	1.35829	3.572	80.00- 120.00	100.00
9.389	9.389 (1.057)	91	13845			171.64- 231.64	213.86
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.499	10.499 (1.182)	120	6527	1.15405	3.035	80.00- 120.00	100.00
10.499	10.499 (1.182)	105	15209			180.85- 240.85	233.00

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a092526.d
Lab Smp Id: 1509345-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msda.i/25sep15.b/a15q0921a.m
Misc Info: 7.1 Hg->14.8 psi

Calibration Date: 25-SEP-2015
Calibration Time: 17:53
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	129526	77716	181336	61476	-52.54 <-
123 1,4-Difluorobenze	544288	326573	762003	328308	-39.68
163 Chlorobenzene-d5	415368	249221	581515	338558	-18.49

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.54	5.21	5.87	5.54	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.88	8.55	9.21	8.88	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 25sep15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509345-05A
Level: LOW Operator: ea
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msda.i/25sep15.b/a15q0921a.m
Misc Info: 7.1 Hg->14.8 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	28.242	112.97	70-130
$ 146 Toluene-d8	25.000	27.861	111.45	70-130
$ 177 4-Bromofluorobenze	25.000	25.684	102.74	70-130

Data File: /chem/msda.i/25sep15.b/a092526.d

Page 1

Date : 26-SEP-2015 02:05

Client ID:

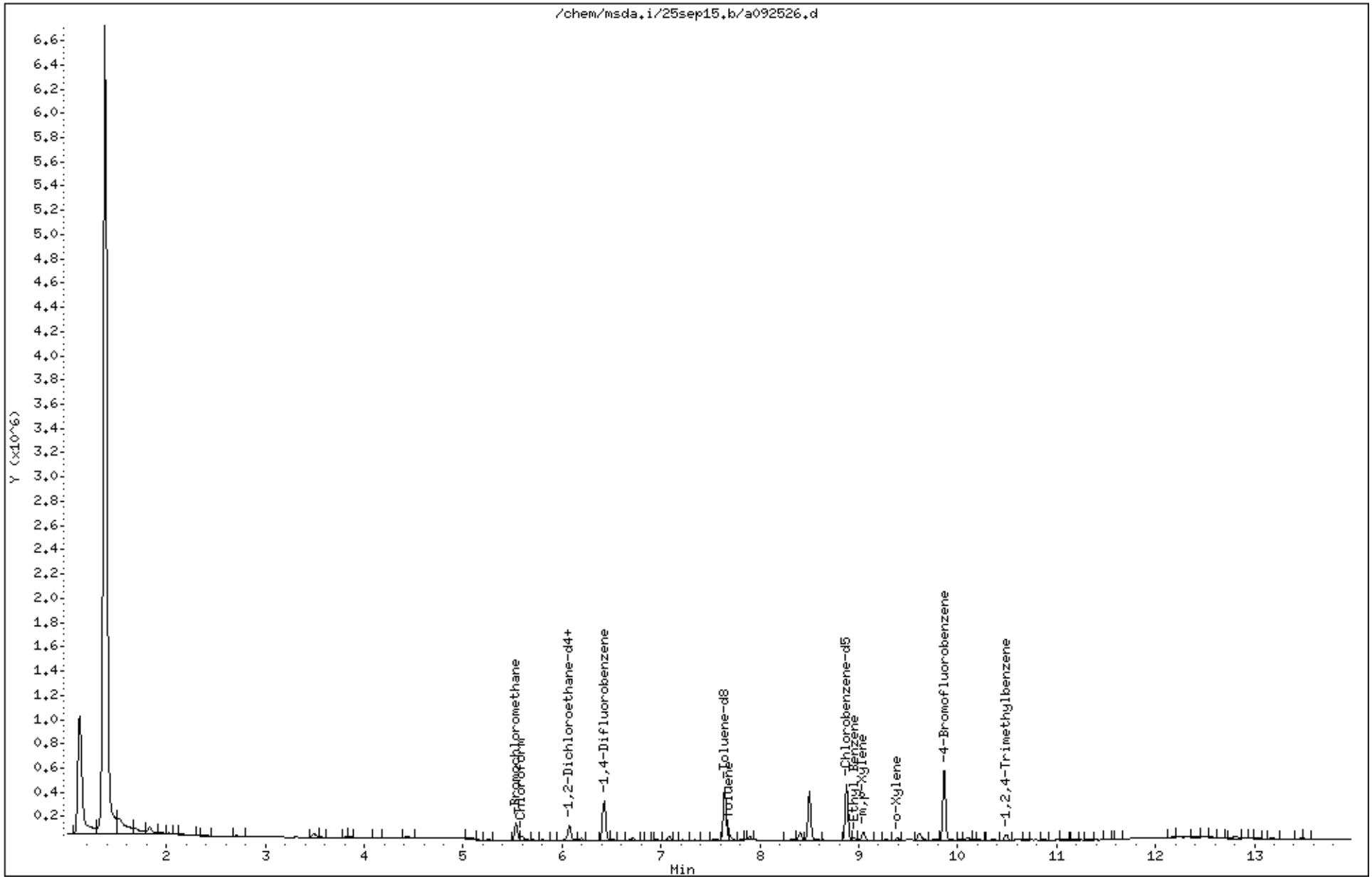
Instrument: msda.i

Sample Info: 200ml 33388

Operator: ea

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msda.i/25sep15.b/a092526.d

Date : 26-SEP-2015 02:05

Client ID:

Instrument: msda.i

Sample Info: 200ml 33388

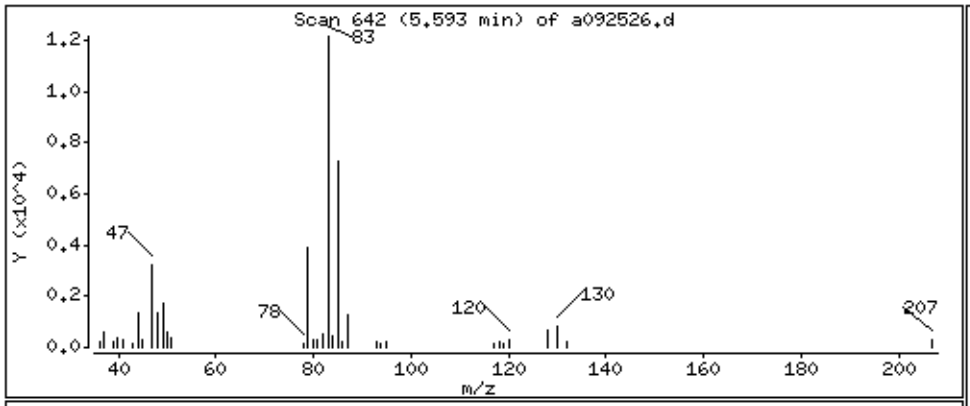
Operator: ea

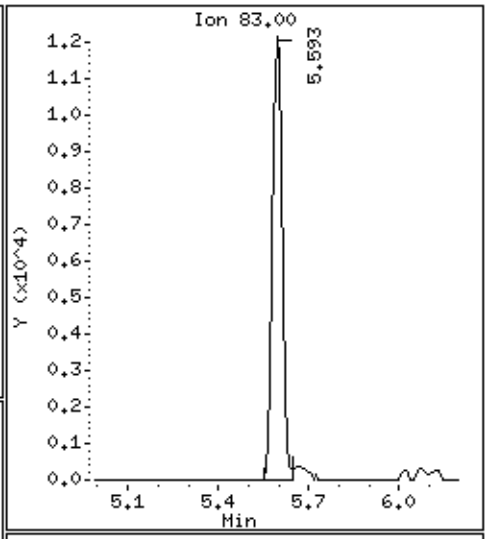
Column phase: RTX-624

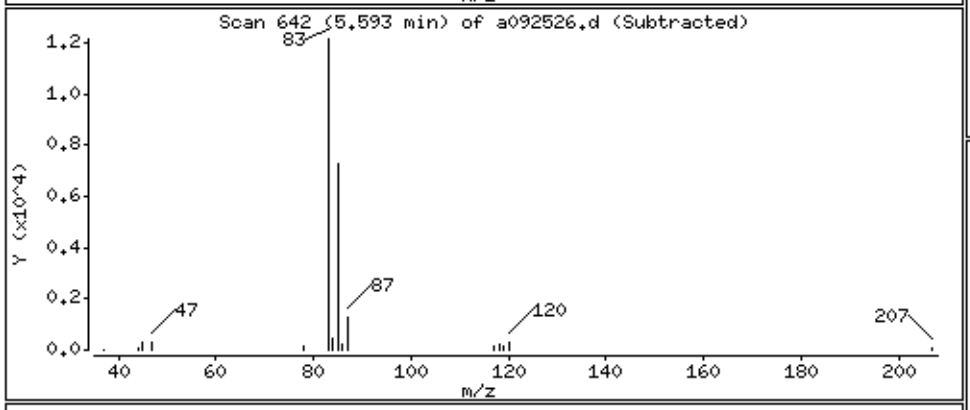
Column diameter: 0.25

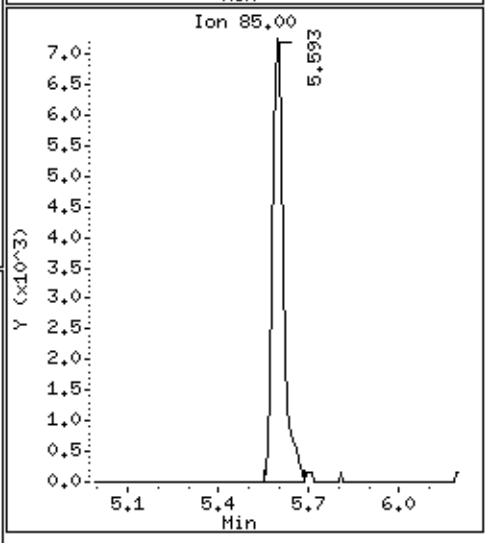
100 Chloroform

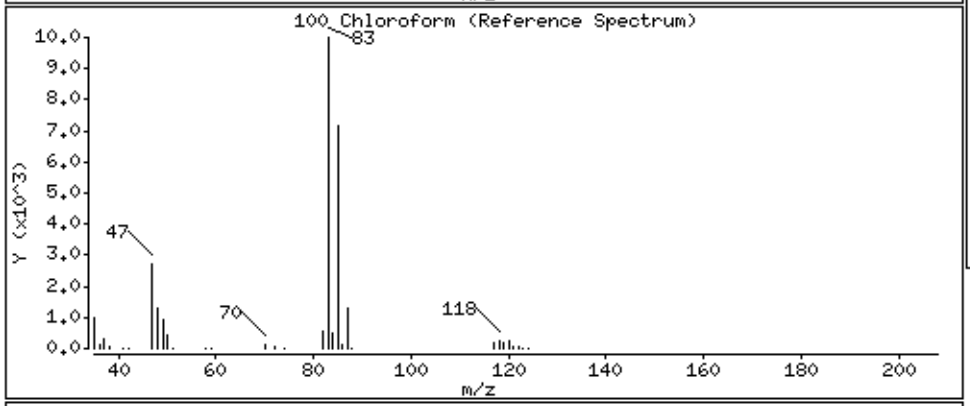
Concentration: 19.793 PPBV

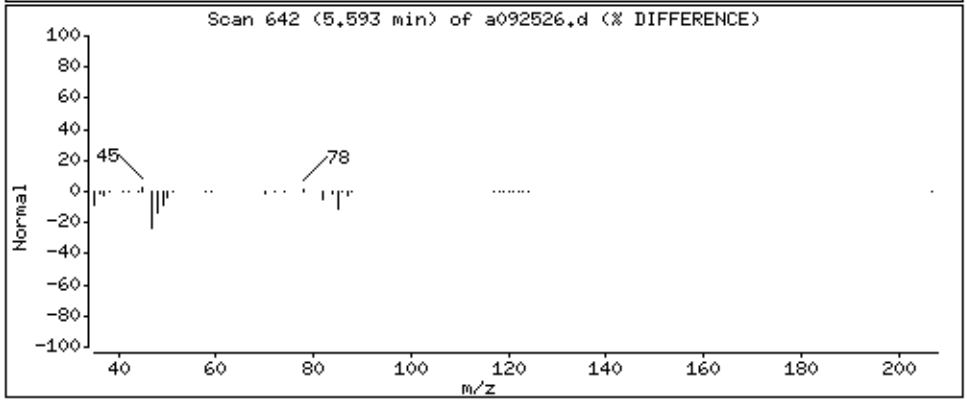












Data File: /chem/msda.i/25sep15.b/a092526.d

Date : 26-SEP-2015 02:05

Client ID:

Instrument: msda.i

Sample Info: 200ml 33388

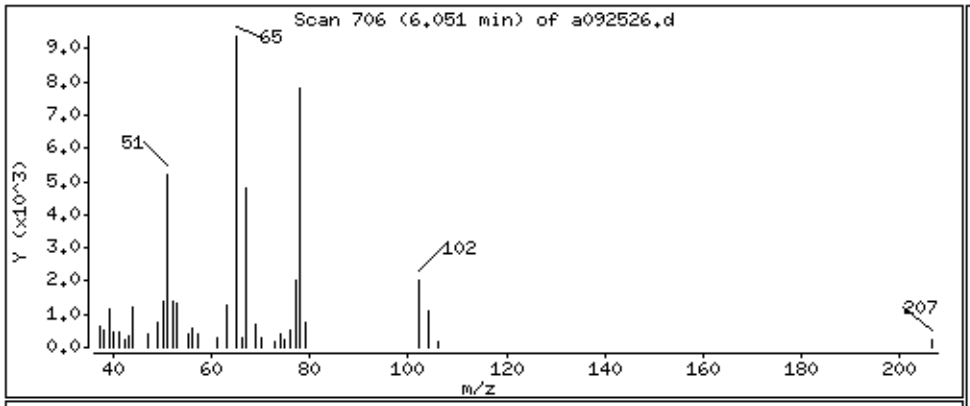
Operator: ea

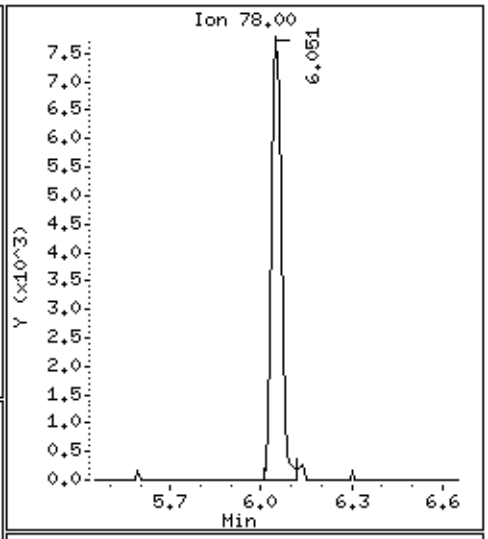
Column phase: RTX-624

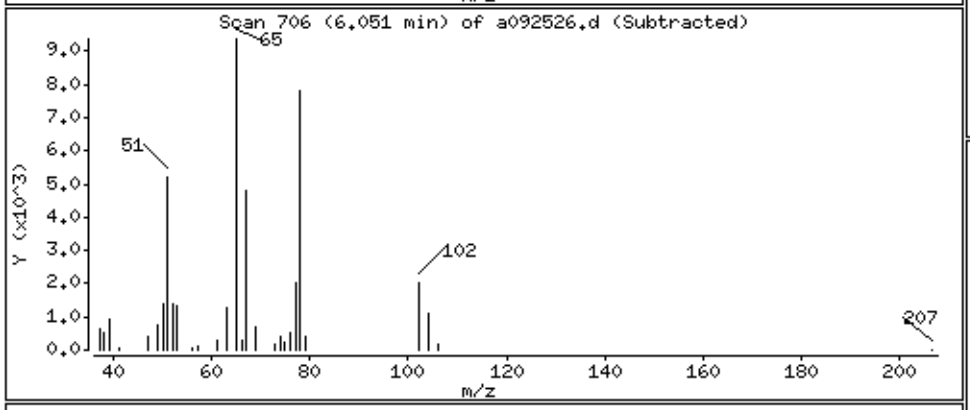
Column diameter: 0.25

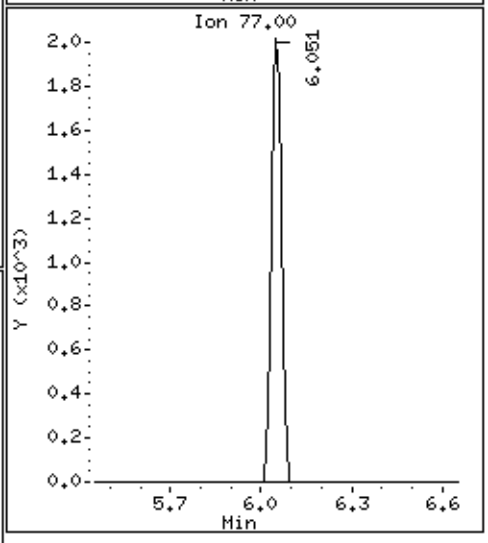
116 Benzene

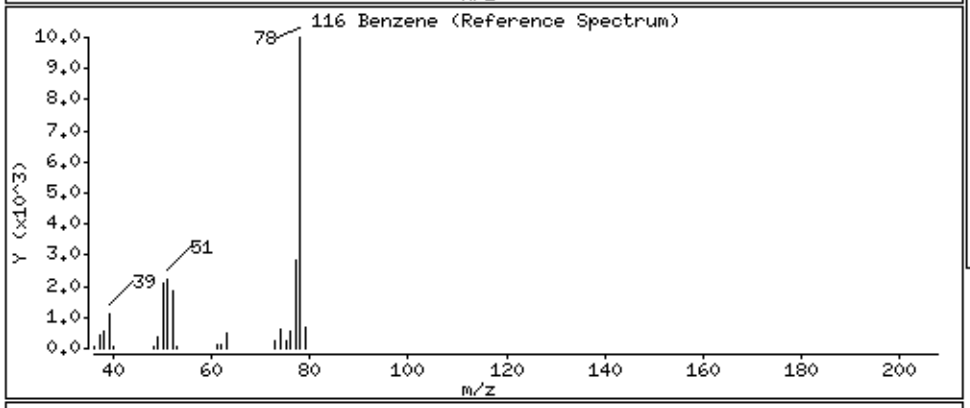
Concentration: 7.131 PPBV

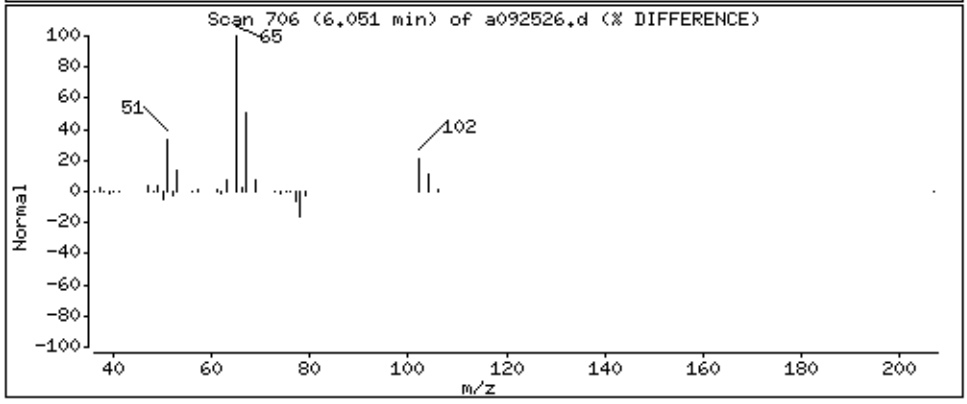












Data File: /chem/msda.i/25sep15.b/a092526.d

Date : 26-SEP-2015 02:05

Client ID:

Instrument: msda.i

Sample Info: 200ml 33388

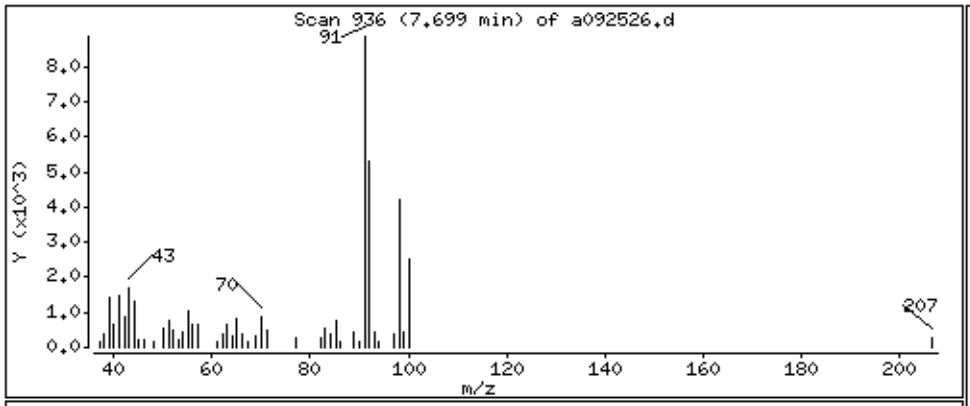
Operator: ea

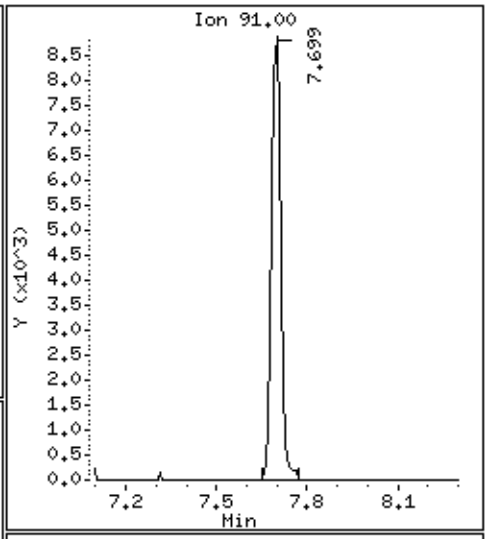
Column phase: RTX-624

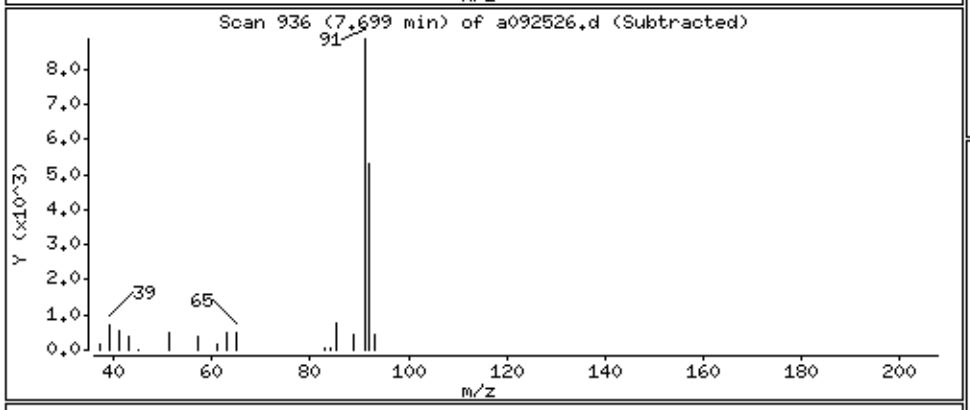
Column diameter: 0.25

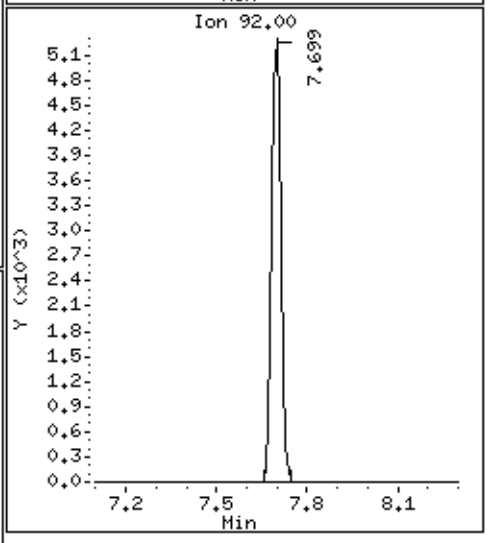
147 Toluene

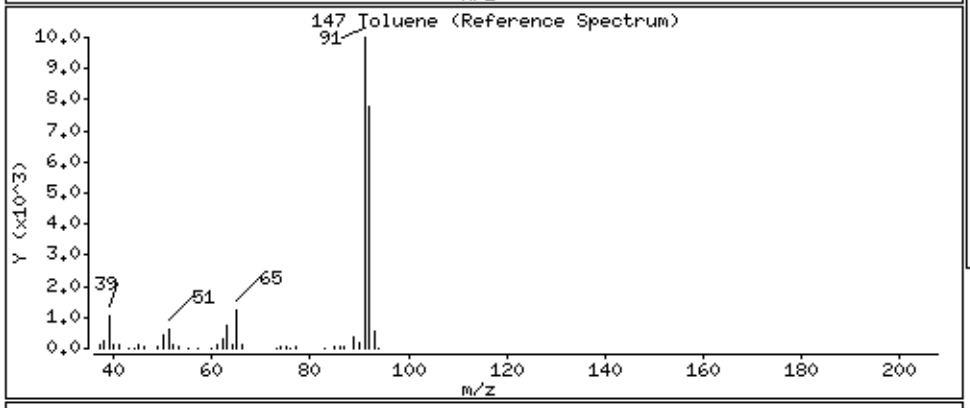
Concentration: 5.528 PPBV

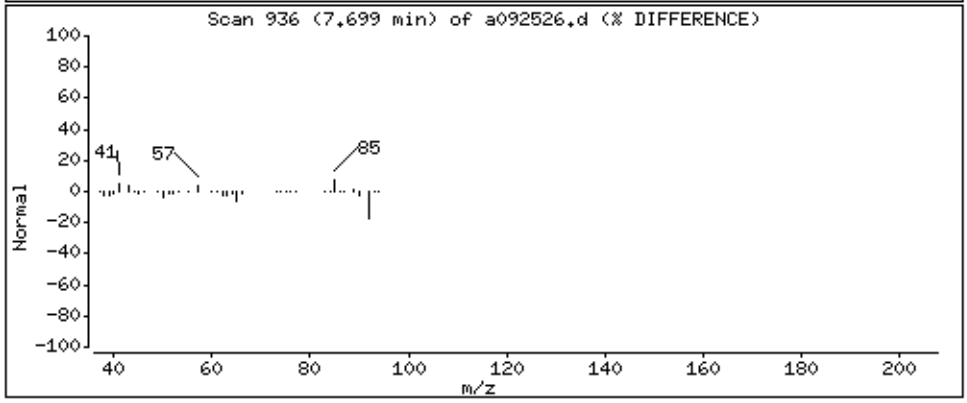












Data File: /chem/msda.i/25sep15.b/a092526.d

Date : 26-SEP-2015 02:05

Client ID:

Instrument: msda.i

Sample Info: 200ml 33388

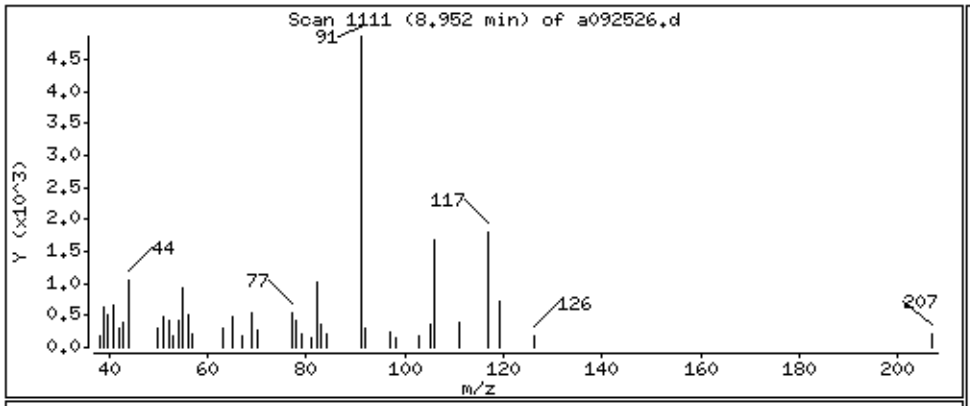
Operator: ea

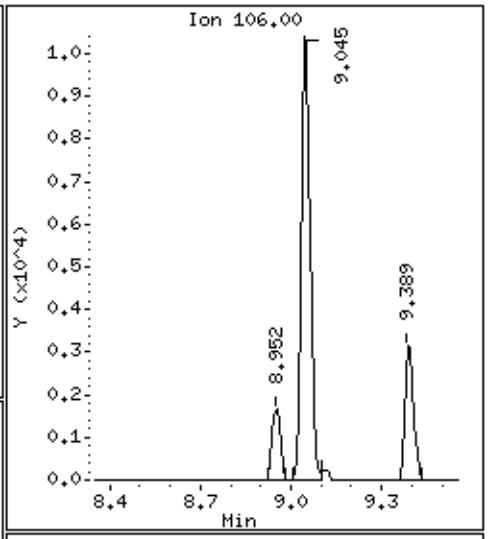
Column phase: RTX-624

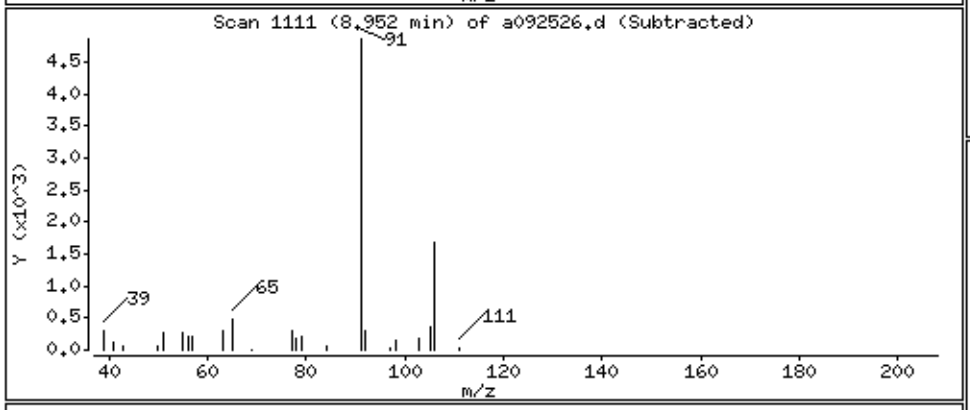
Column diameter: 0.25

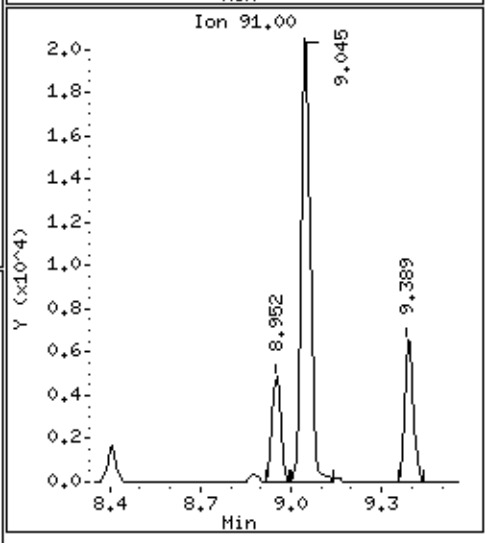
167 Ethyl Benzene

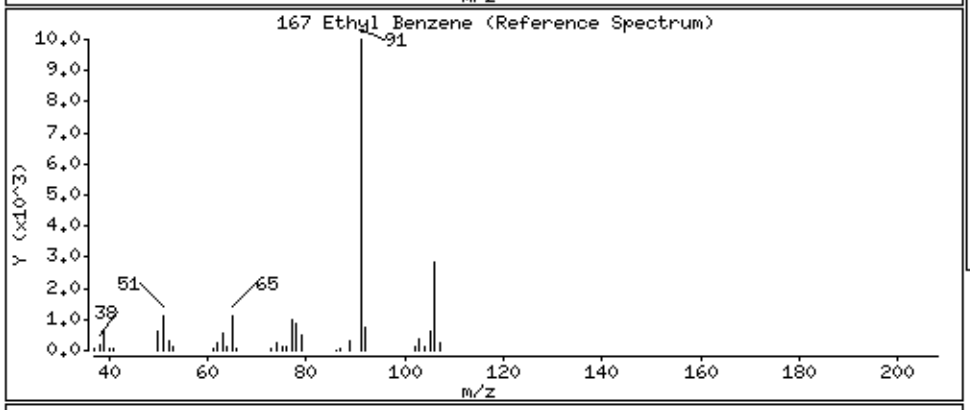
Concentration: 1.967 PPBV

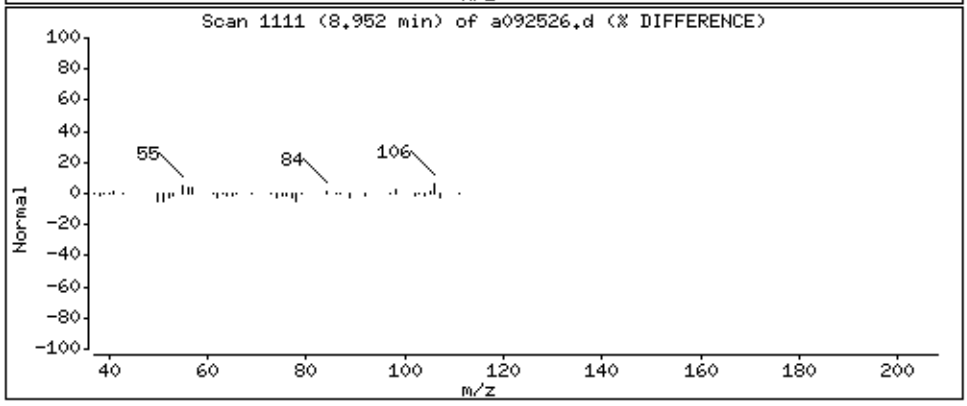












Data File: /chem/msda.i/25sep15.b/a092526.d

Date : 26-SEP-2015 02:05

Client ID:

Instrument: msda.i

Sample Info: 200ml 33388

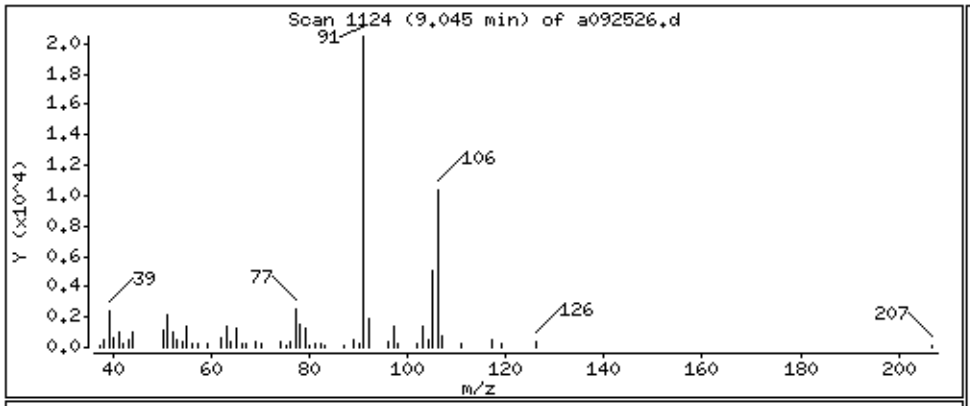
Operator: ea

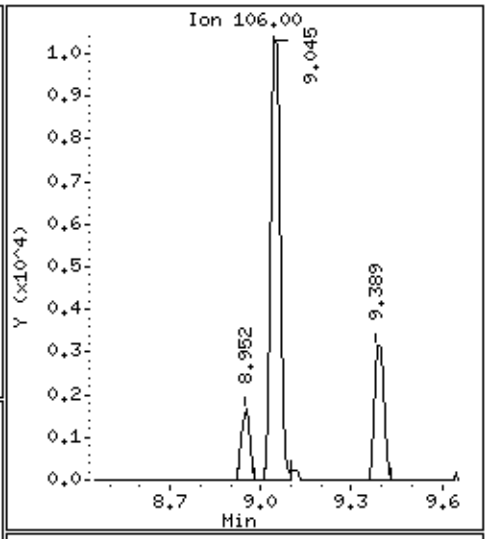
Column phase: RTX-624

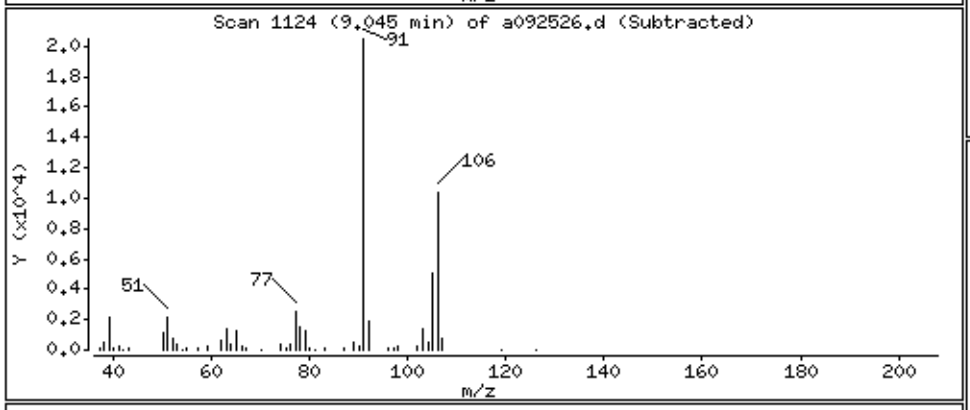
Column diameter: 0.25

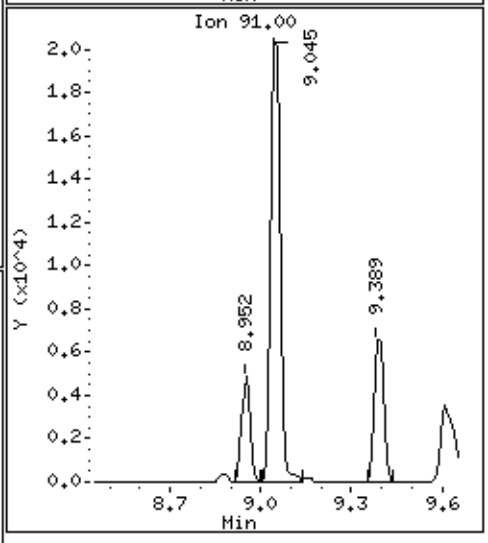
169 m,p-Xylene

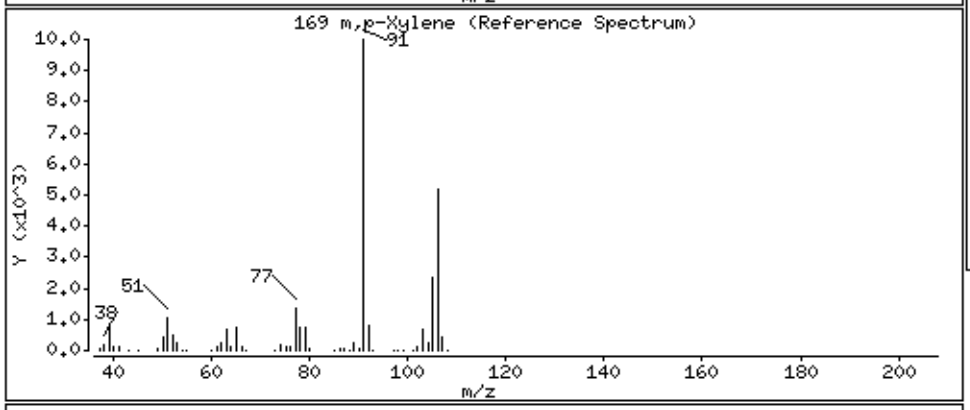
Concentration: 11.014 PPBV

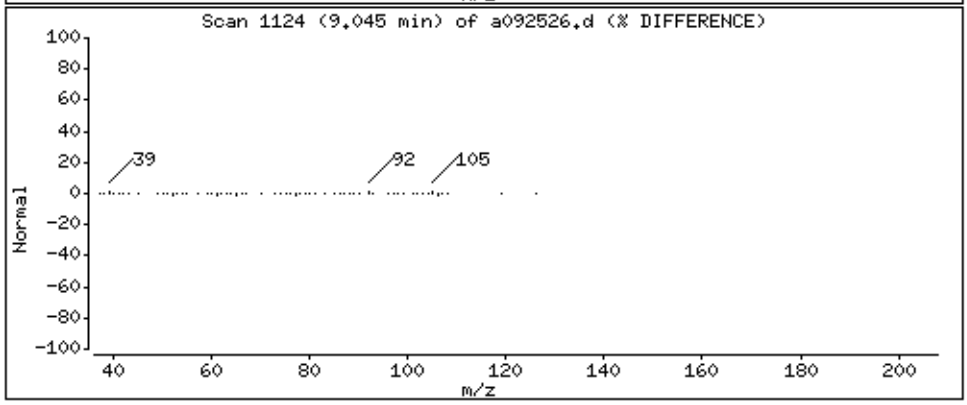












Data File: /chem/msda.i/25sep15.b/a092526.d

Date : 26-SEP-2015 02:05

Client ID:

Instrument: msda.i

Sample Info: 200ml 33388

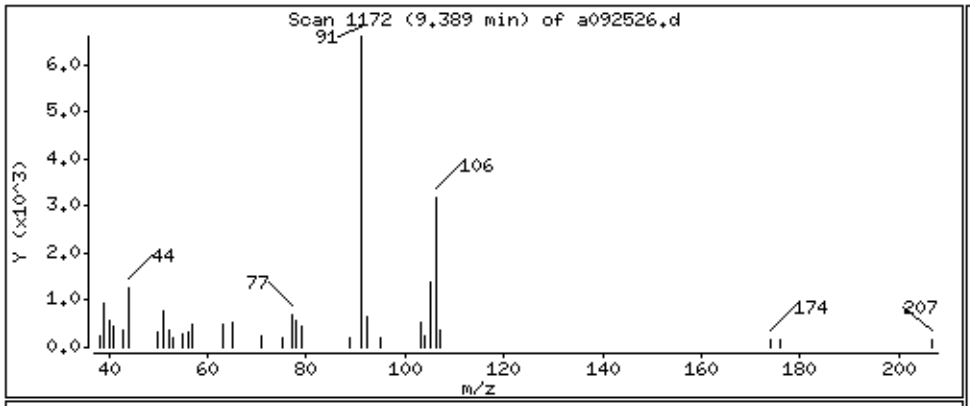
Operator: ea

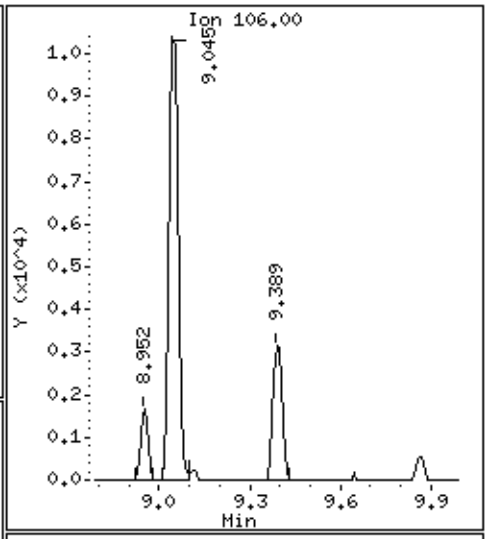
Column phase: RTX-624

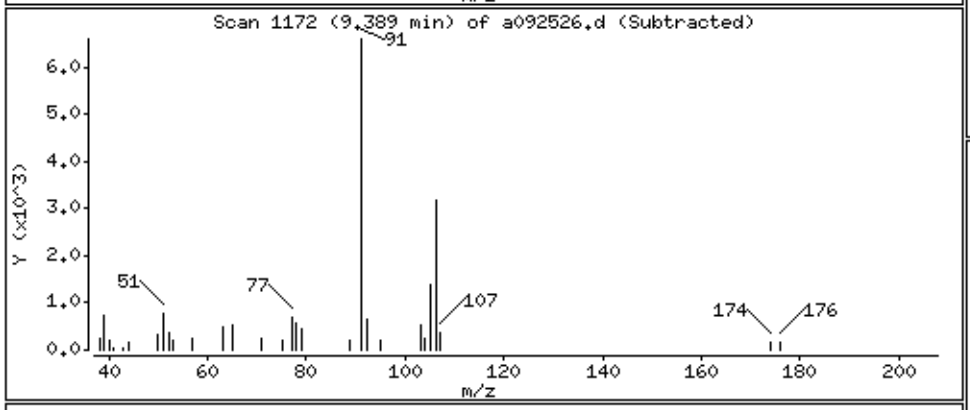
Column diameter: 0.25

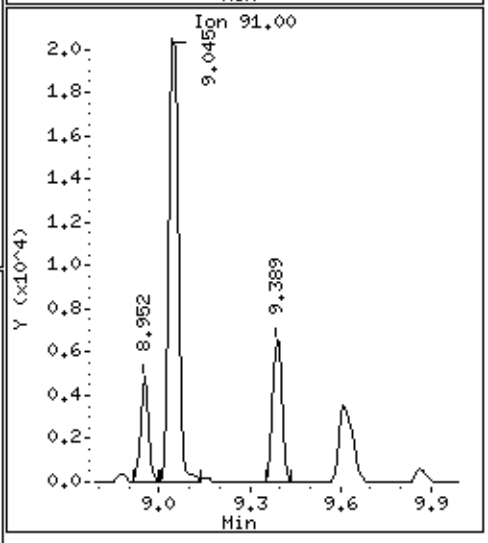
171 o-Xylene

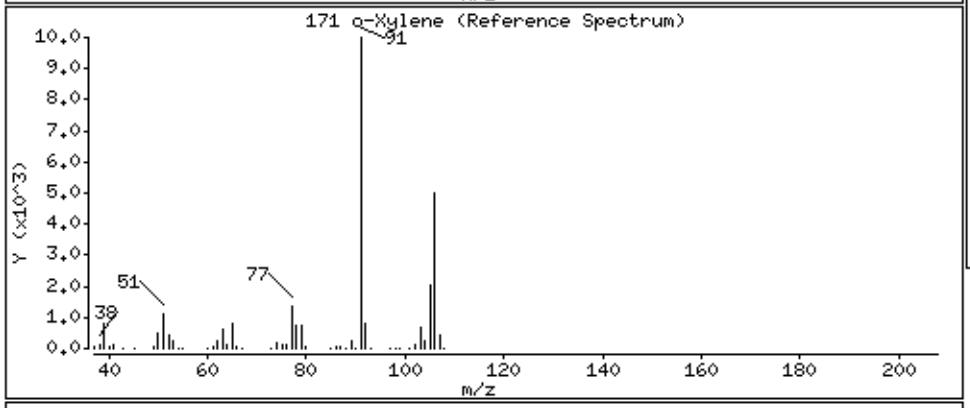
Concentration: 3.572 PPBV

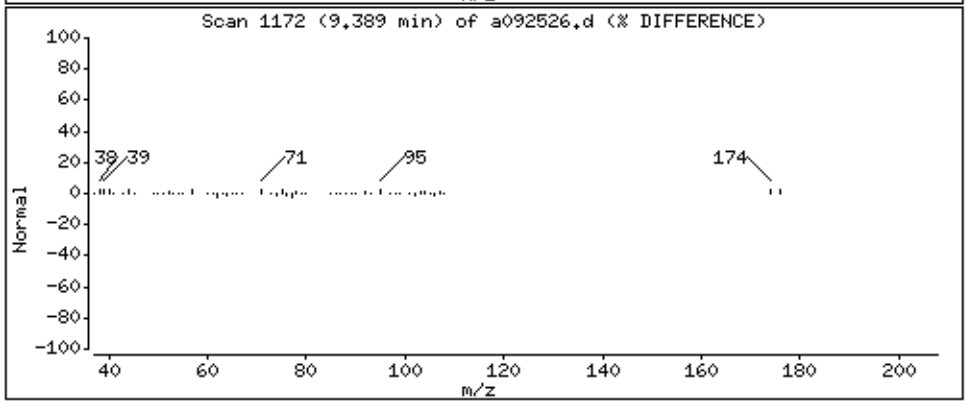












Data File: /chem/msda.i/25sep15.b/a092526.d

Date : 26-SEP-2015 02:05

Client ID:

Instrument: msda.i

Sample Info: 200ml 33388

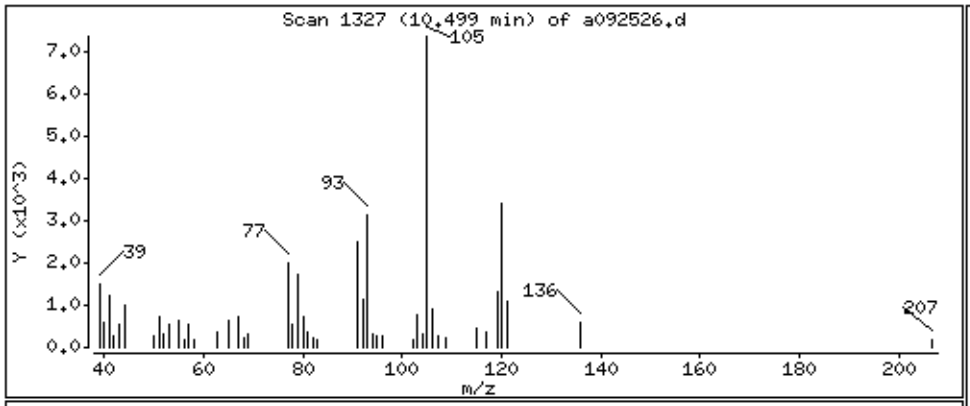
Operator: ea

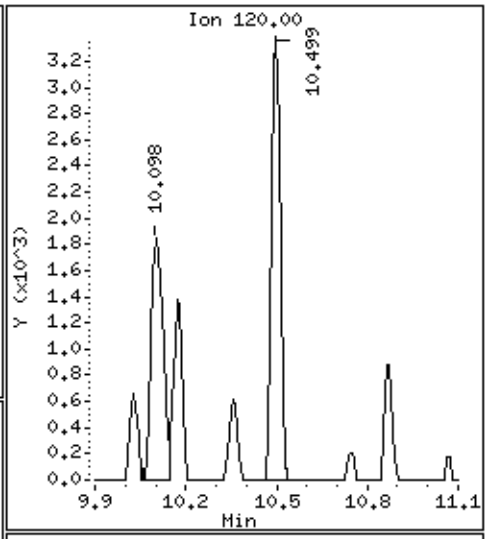
Column phase: RTX-624

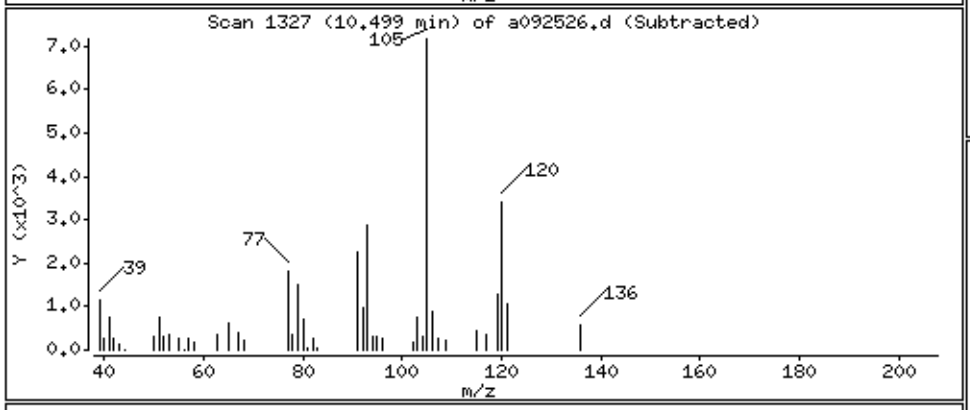
Column diameter: 0.25

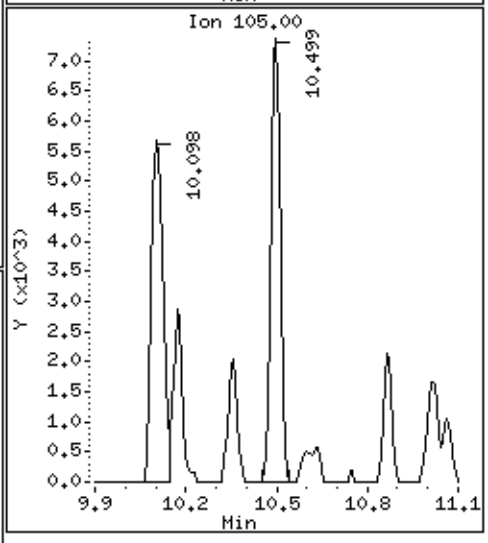
196 1,2,4-Trimethylbenzene

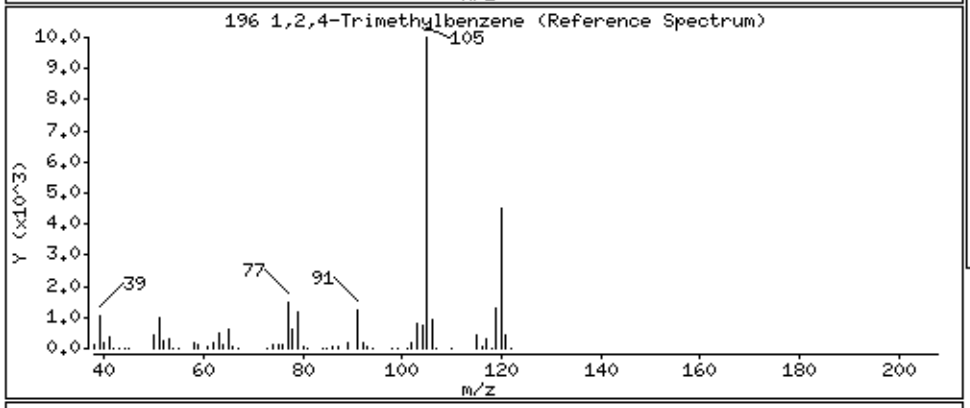
Concentration: 3.035 PPBV

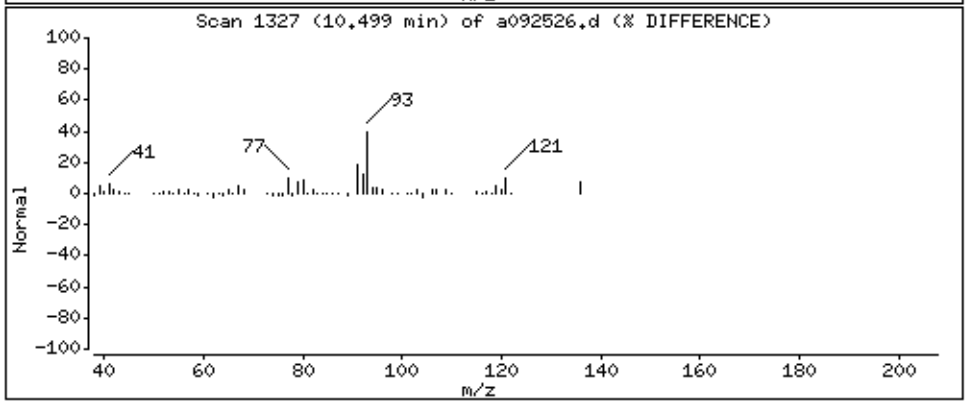












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: DUP-1 (091615)

Lab ID#: 1509345-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	1.2	18	6.0	88
Benzene	1.2	2.1	4.0	6.8
Toluene	1.2	7.9	4.7	30
Ethyl Benzene	1.2	3.1	5.4	13
m,p-Xylene	1.2	16	5.4	68
o-Xylene	1.2	5.8	5.4	25
1,2,4-Trimethylbenzene	1.2	4.0 J0	6.1	20 J0

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Client Sample ID: DUP-1 (091615)

Lab ID#: 1509345-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092527**	**Date of Collection:**	**9/16/15 12:51:00 PM**
Dil. Factor:	**2.48**	**Date of Analysis:**	**9/26/15 02:31 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Methylene Chloride	12	Not Detected	43	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
Chloroform	1.2	18	6.0	88
Benzene	1.2	2.1	4.0	6.8
1,2-Dichloroethane	1.2	Not Detected	5.0	Not Detected
Trichloroethene	1.2	Not Detected	6.7	Not Detected
Toluene	1.2	7.9	4.7	30
1,1,2-Trichloroethane	1.2	Not Detected	6.8	Not Detected
Tetrachloroethene	1.2	Not Detected	8.4	Not Detected
Ethyl Benzene	1.2	3.1	5.4	13
m,p-Xylene	1.2	16	5.4	68
o-Xylene	1.2	5.8	5.4	25
1,2,4-Trimethylbenzene	1.2	4.0 J0	6.1	20 J0

J0 = Estimated value due to bias in the CCV.

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	113	70-130
1,2-Dichloroethane-d4	109	70-130
4-Bromofluorobenzene	103	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/25sep15.b/a092527.d
Lab Smp Id: 1509345-06A
Inj Date : 26-SEP-2015 02:31
Operator : ea Inst ID: msda.i
Smp Info : 200ml 1006
Misc Info : 5.9 Hg->14.6 psi
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/25sep15.b/a15q0921a.m
Meth Date : 25-Sep-2015 20:42 ealcan Quant Type: ISTD
Cal Date : 22-SEP-2015 07:19 Cal File: a092114.d
Als bottle: 10
Dil Factor: 2.48000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.48000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.535	5.535 (1.000)	130	67694	25.0000		80.00- 120.00	100.00
5.535	5.535 (1.000)	128	51351			46.57- 106.57	75.86
5.535	5.535 (1.000)	49	72037			75.38- 135.38	106.41
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.424	6.424 (1.000)	114	338666	25.0000		80.00- 120.00	100.00
6.424	6.424 (1.000)	88	49295			0.00- 44.55	14.56
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.881	8.880 (1.000)	117	343642	25.0000		80.00- 120.00	100.00
8.881	8.880 (1.000)	82	171404			19.23- 79.23	49.88
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.073	6.073 (1.097)	65	91078	27.3114	27.311	80.00- 120.00	100.00
6.073	6.073 (1.097)	67	46495			27.41- 87.41	51.05

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.641	7.641 (1.190)	98	377750	28.3561	28.356	80.00- 120.00	100.00
7.641	7.641 (1.190)	70	37695			0.00- 39.72	9.98
7.641	7.641 (1.190)	100	240586			36.51- 96.51	63.69
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.869	9.869 (1.111)	174	220554	25.8648	25.865	80.00- 120.00	100.00
9.869	9.869 (1.111)	95	249611			82.23- 142.23	113.17
9.869	9.869 (1.111)	176	217261			67.41- 127.41	98.51
100 Chloroform					CAS #: 67-66-3		
5.600	5.593 (1.012)	83	28383	7.30028	18.105	80.00- 120.00	100.00
5.600	5.593 (1.012)	85	18936			33.64- 93.64	66.72
116 Benzene					CAS #: 71-43-2		
6.051	6.051 (0.942)	78	5646	0.86091	2.135	80.00- 120.00	100.00
6.051	6.051 (0.942)	77	1530			0.00- 53.40	27.11
147 Toluene					CAS #: 108-88-3		
7.699	7.699 (1.198)	91	28271	3.17754	7.880	80.00- 120.00	100.00
7.699	7.699 (1.198)	92	16768			28.59- 88.59	59.31
167 Ethyl Benzene					CAS #: 100-41-4		
8.952	8.952 (1.008)	106	5207	1.23654	3.067	80.00- 120.00	100.00
8.952	8.952 (1.008)	91	14984			268.22- 328.22	287.73
169 m,p-Xylene					CAS #: 108-38-3		
9.053	9.052 (1.019)	106	32346	6.28867	15.596	80.00- 120.00	100.00
9.045	9.052 (1.019)	91	63416			164.61- 224.61	196.05
171 o-Xylene					CAS #: 95-47-6		
9.389	9.389 (1.057)	106	11351	2.34665	5.820	80.00- 120.00	100.00
9.389	9.389 (1.057)	91	21301			171.64- 231.64	187.65
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.499	10.499 (1.182)	120	9281	1.61671	4.009	80.00- 120.00	100.00
10.499	10.499 (1.182)	105	22083			180.85- 240.85	237.92

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a092527.d
Lab Smp Id: 1509345-06A
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msda.i/25sep15.b/a15q0921a.m
Misc Info: 5.9 Hg->14.6 psi

Calibration Date: 25-SEP-2015
Calibration Time: 17:53
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	129526	77716	181336	67694	-47.74 <-
123 1,4-Difluorobenze	544288	326573	762003	338666	-37.78
163 Chlorobenzene-d5	415368	249221	581515	343642	-17.27

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.54	5.21	5.87	5.54	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.88	8.55	9.21	8.88	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 02-Oct-2015 09:21

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 25sep15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509345-06A
Level: LOW Operator: ea
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msda.i/25sep15.b/a15q0921a.m
Misc Info: 5.9 Hg->14.6 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	27.311	109.25	70-130
$ 146 Toluene-d8	25.000	28.356	113.42	70-130
$ 177 4-Bromofluorobenze	25.000	25.865	103.46	70-130

Data File: /chem/msda.i/25sep15.b/a092527.d

Page 1

Date : 26-SEP-2015 02:31

Client ID:

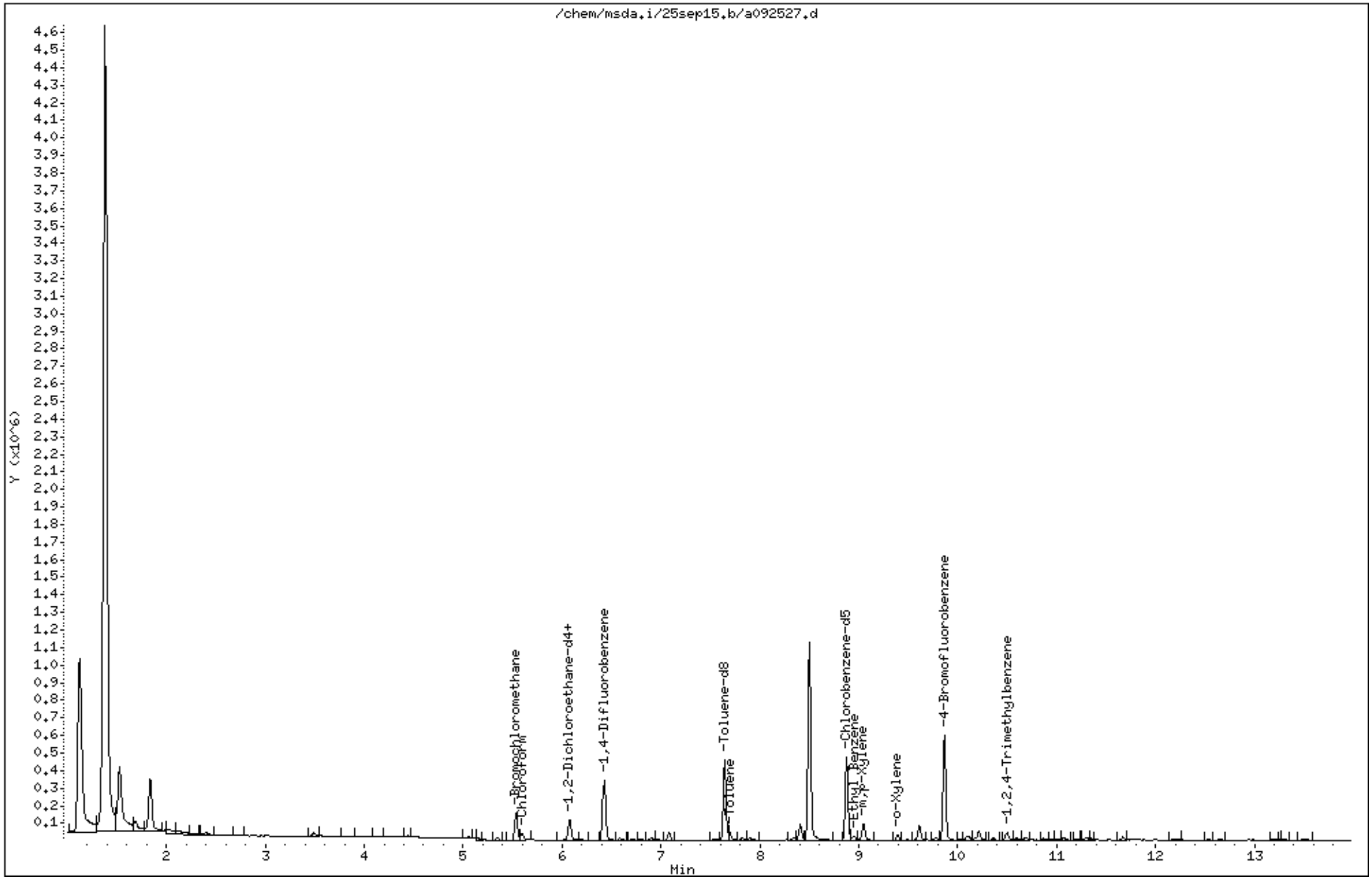
Instrument: msda.i

Sample Info: 200ml 1006

Operator: ea

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msda.i/25sep15.b/a092527.d

Date : 26-SEP-2015 02:31

Client ID:

Instrument: msda.i

Sample Info: 200ml 1006

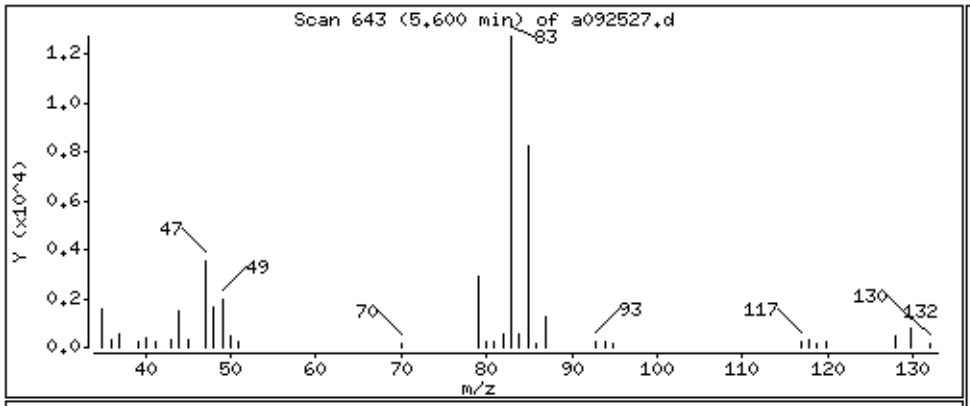
Operator: ea

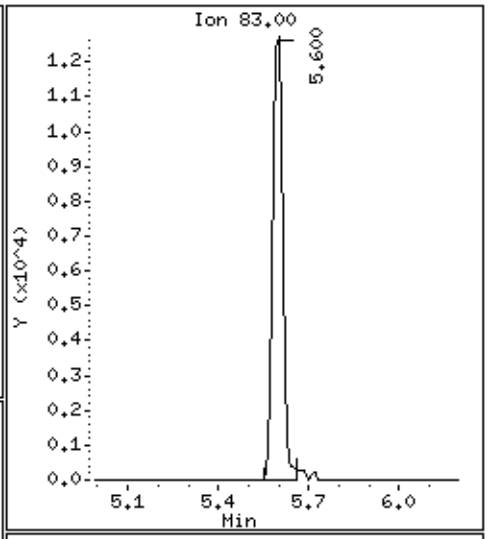
Column phase: RTX-624

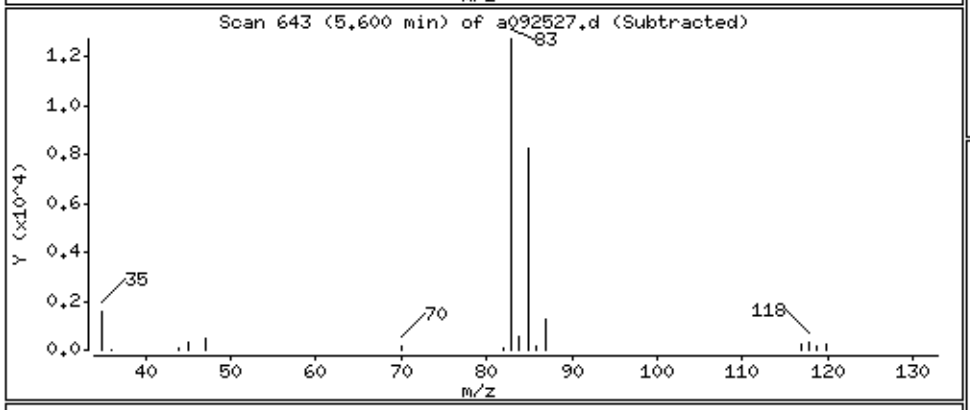
Column diameter: 0.25

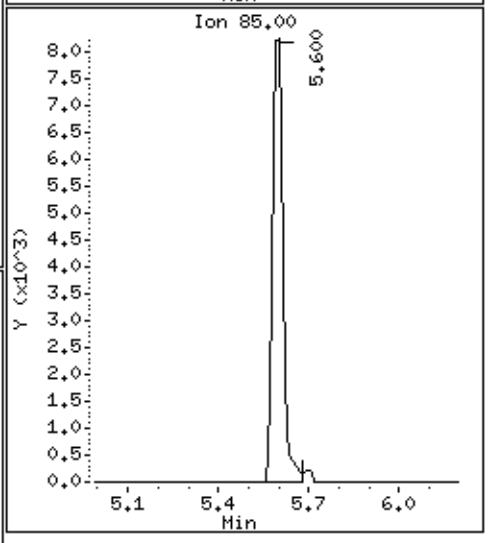
100 Chloroform

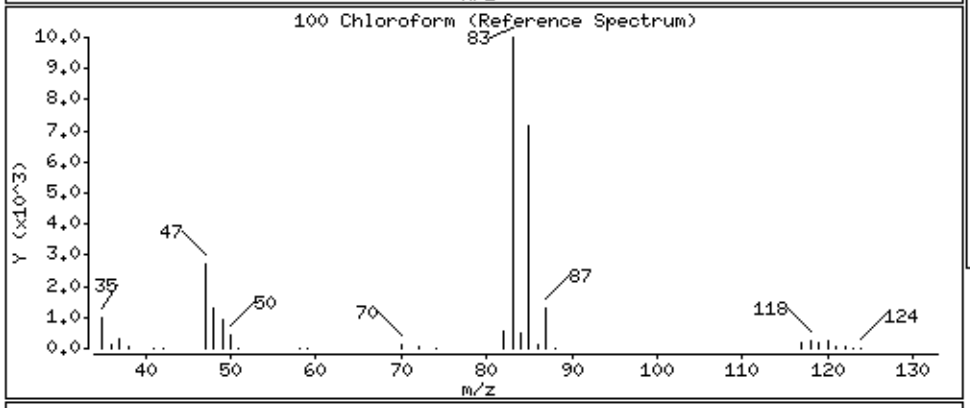
Concentration: 18.105 PPBV

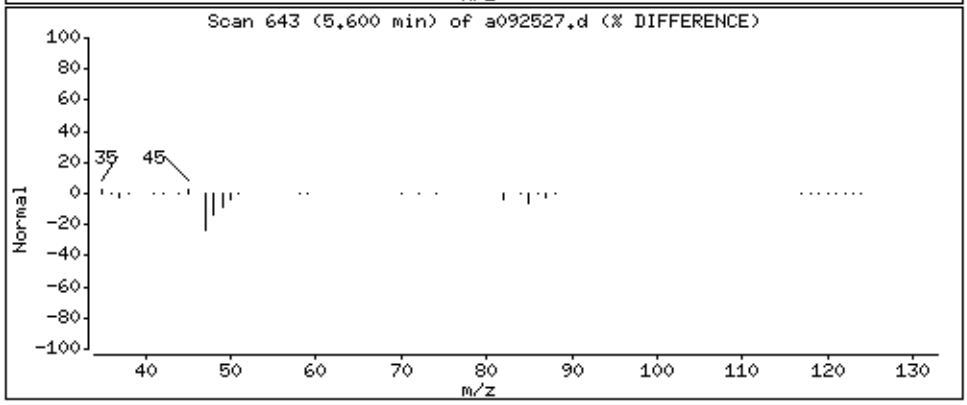












Data File: /chem/msda.i/25sep15.b/a092527.d

Date : 26-SEP-2015 02:31

Client ID:

Instrument: msda.i

Sample Info: 200ml 1006

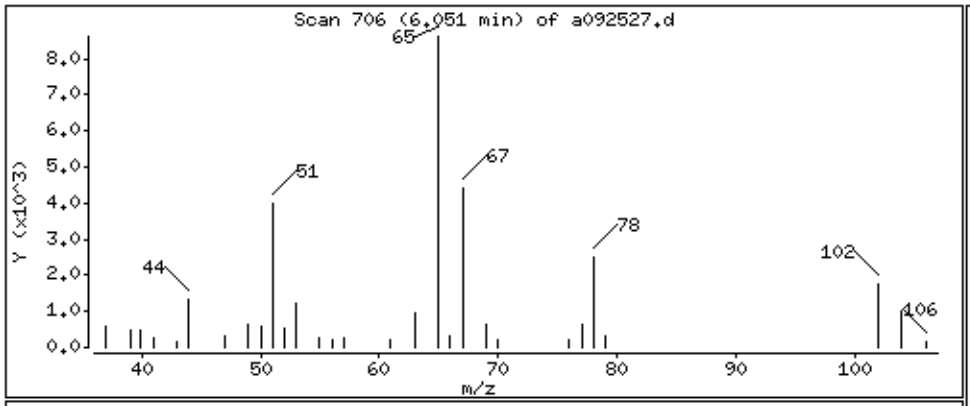
Operator: ea

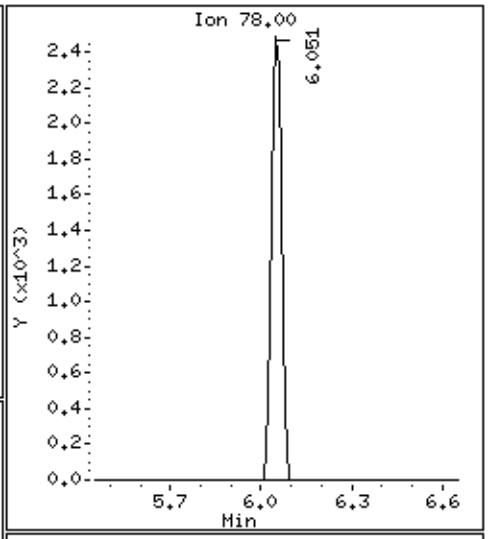
Column phase: RTX-624

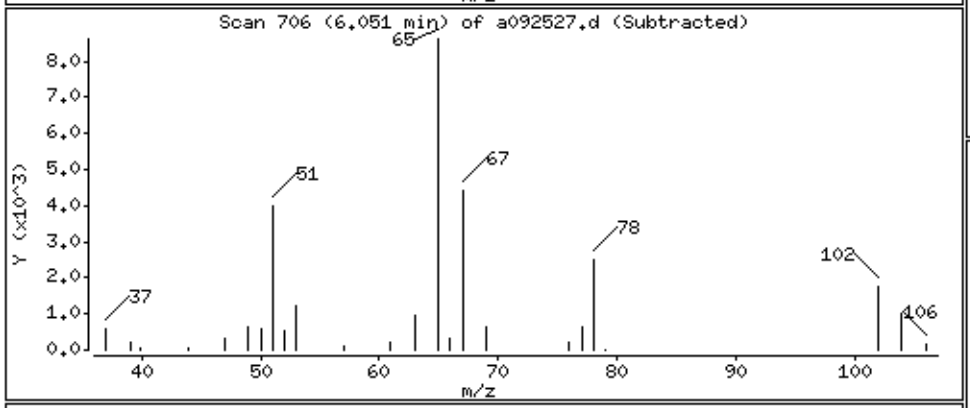
Column diameter: 0.25

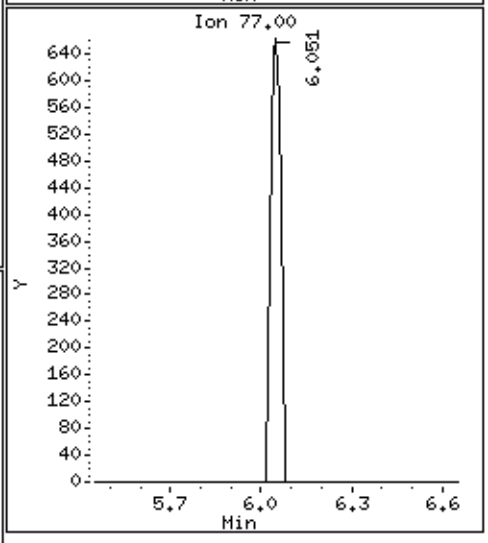
116 Benzene

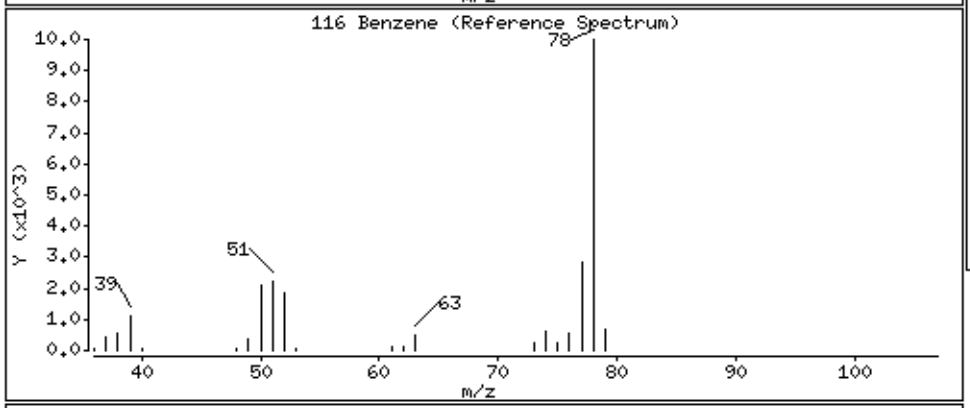
Concentration: 2.135 PPBV

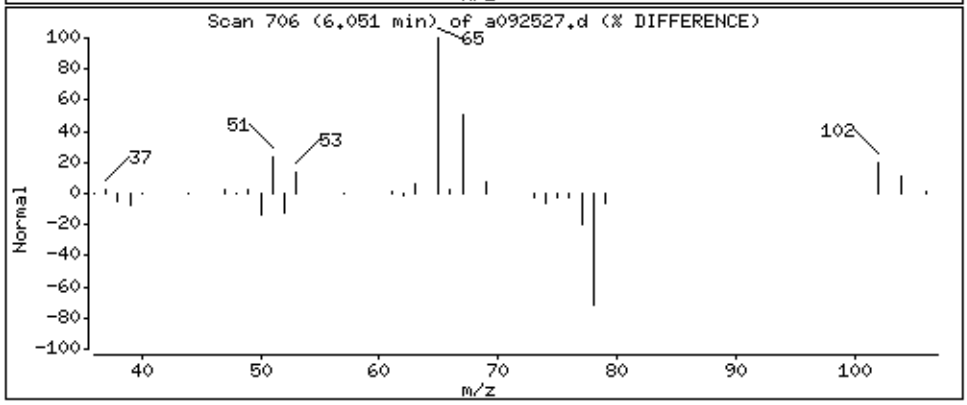












Data File: /chem/msda.i/25sep15.b/a092527.d

Date : 26-SEP-2015 02:31

Client ID:

Instrument: msda.i

Sample Info: 200ml 1006

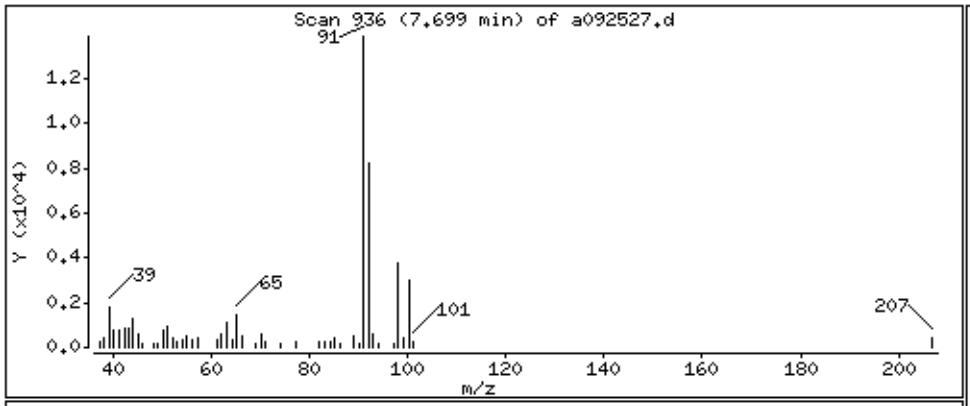
Operator: ea

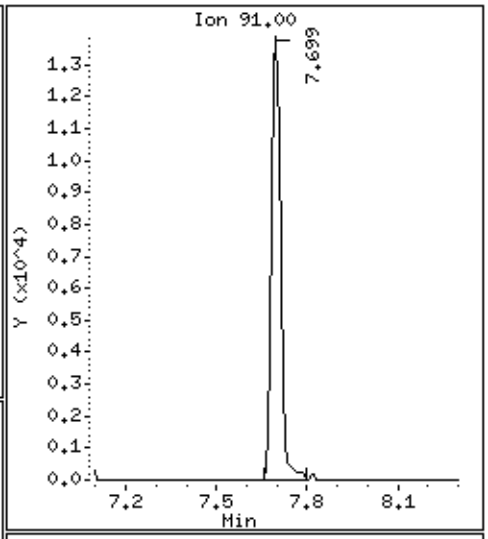
Column phase: RTX-624

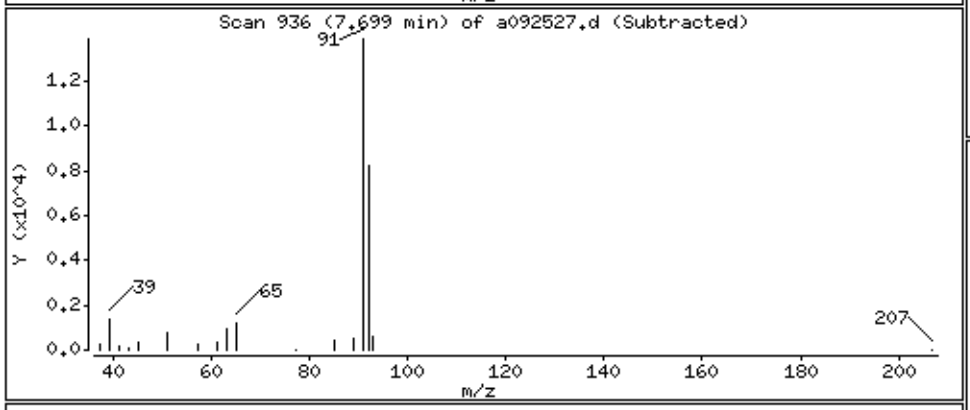
Column diameter: 0.25

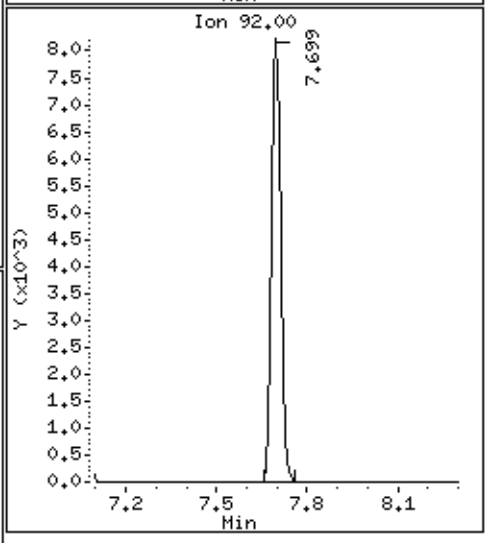
147 Toluene

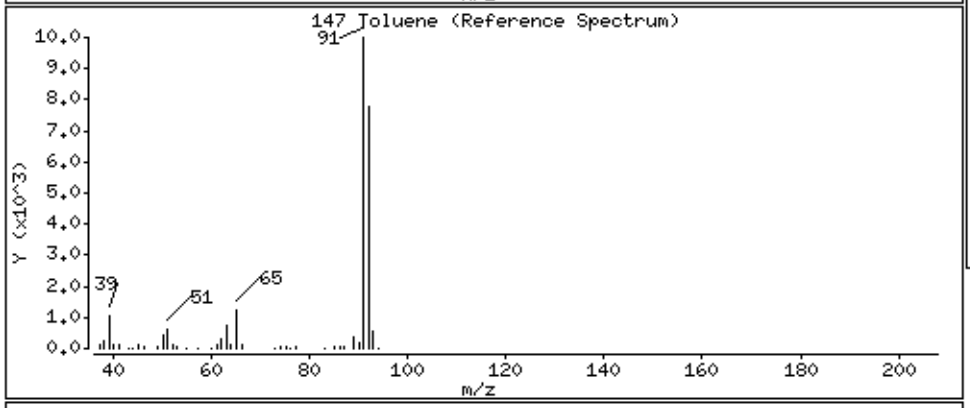
Concentration: 7.880 PPBV

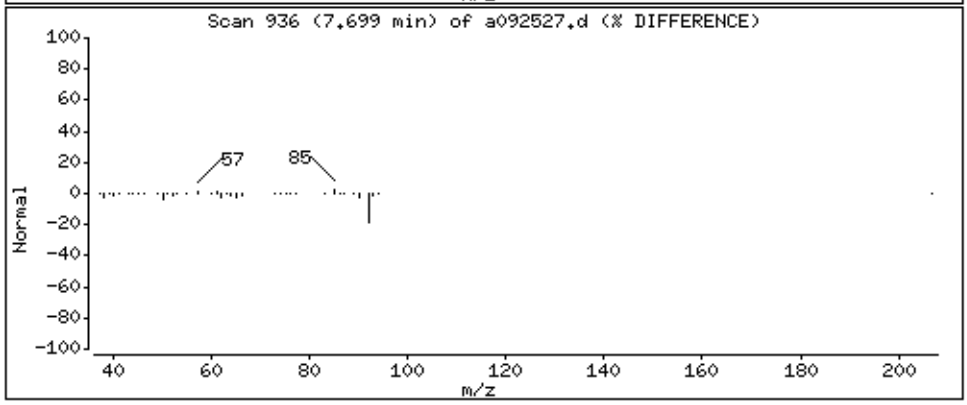












Data File: /chem/msda.i/25sep15.b/a092527.d

Date : 26-SEP-2015 02:31

Client ID:

Instrument: msda.i

Sample Info: 200ml 1006

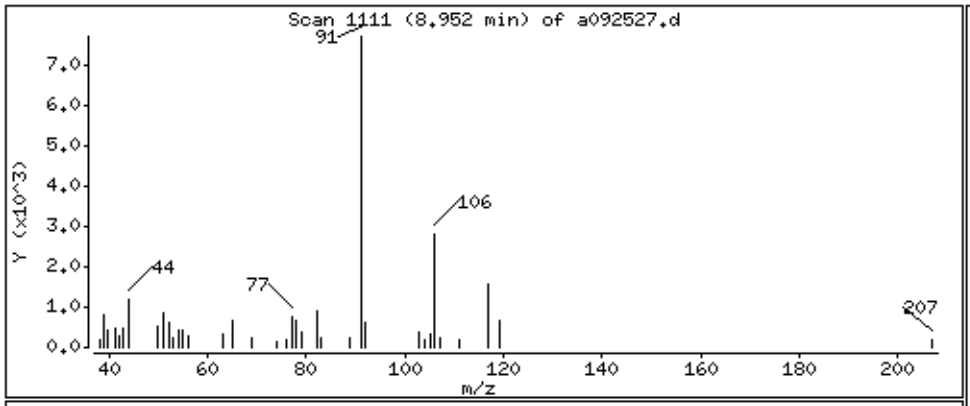
Operator: ea

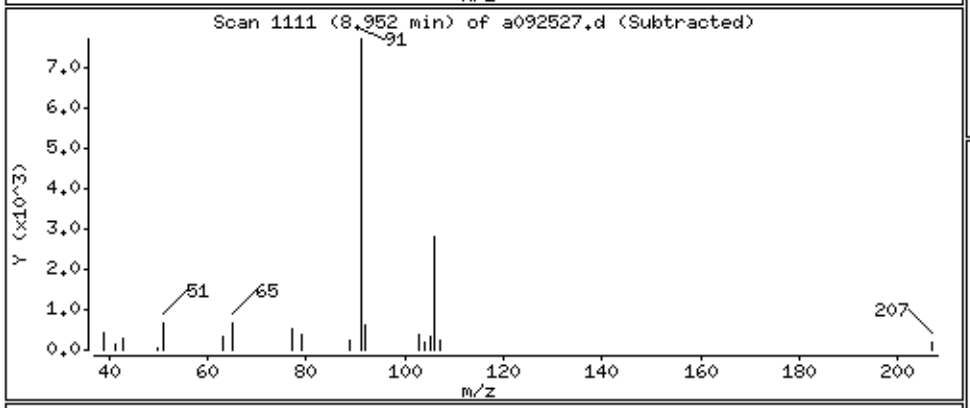
Column phase: RTX-624

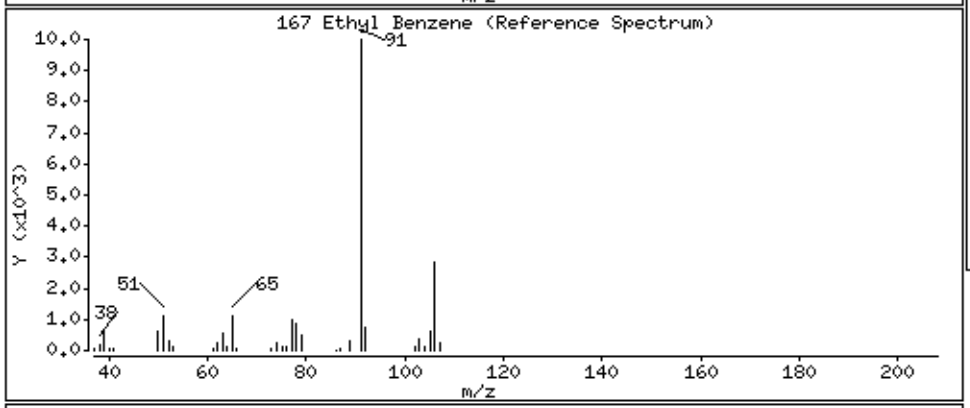
Column diameter: 0.25

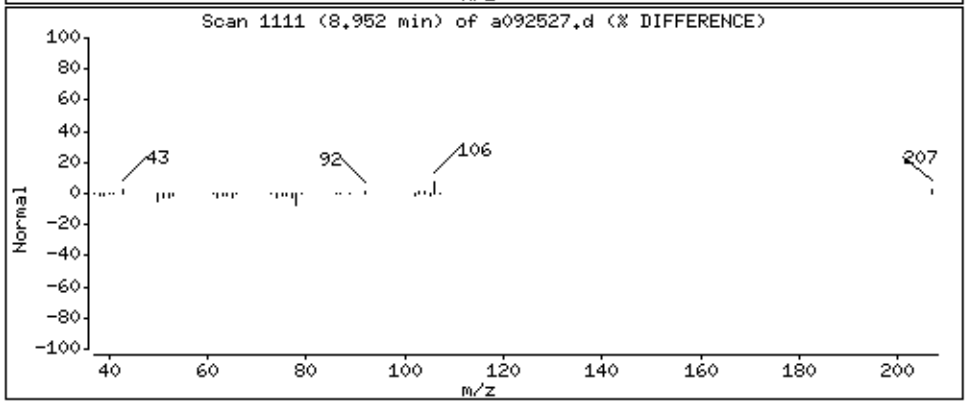
167 Ethyl Benzene

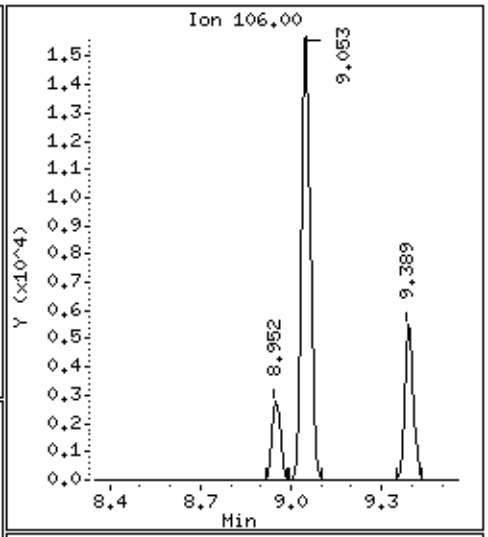
Concentration: 3.067 PPBV

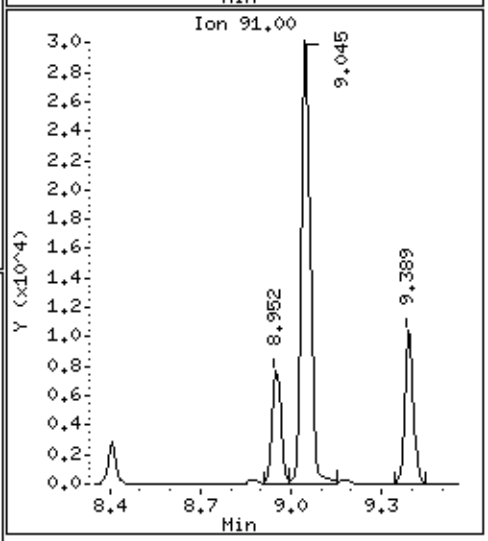












Data File: /chem/msda.i/25sep15.b/a092527.d

Date : 26-SEP-2015 02:31

Client ID:

Instrument: msda.i

Sample Info: 200ml 1006

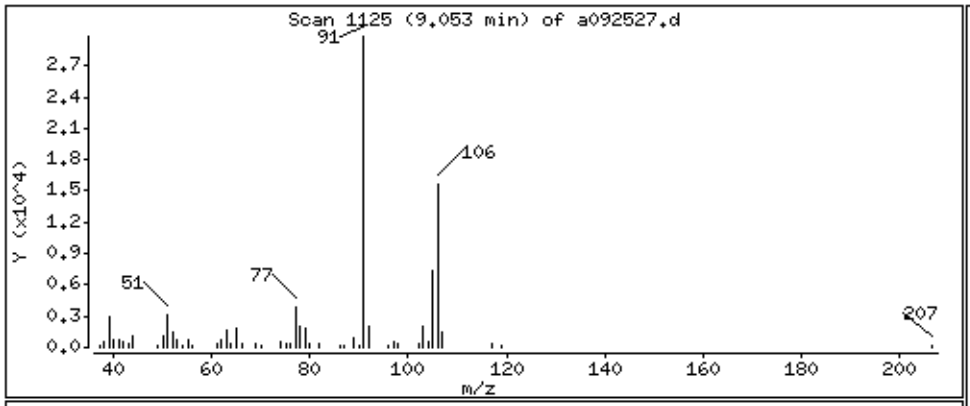
Operator: ea

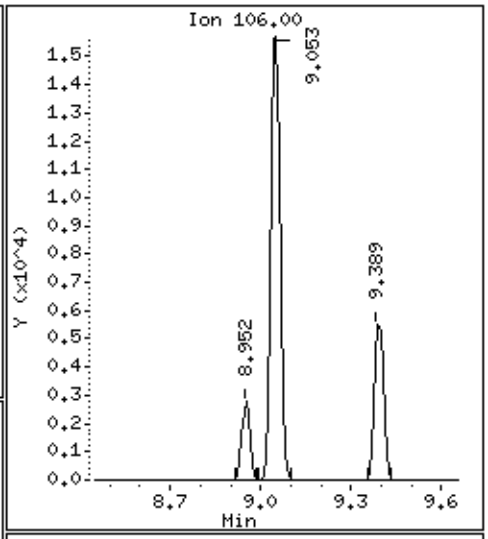
Column phase: RTX-624

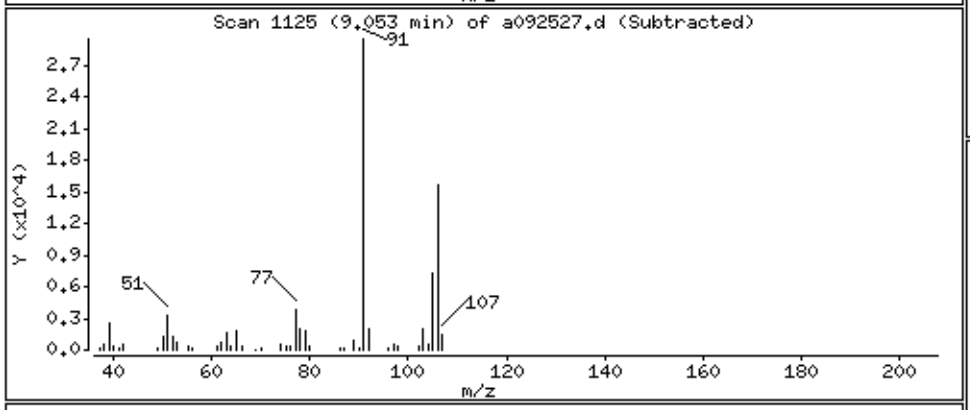
Column diameter: 0.25

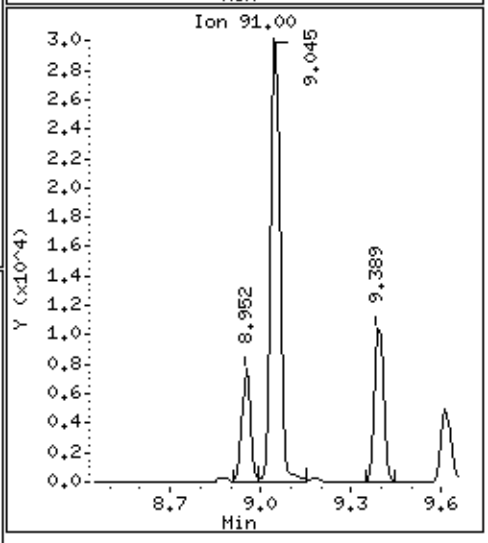
169 m,p-Xylene

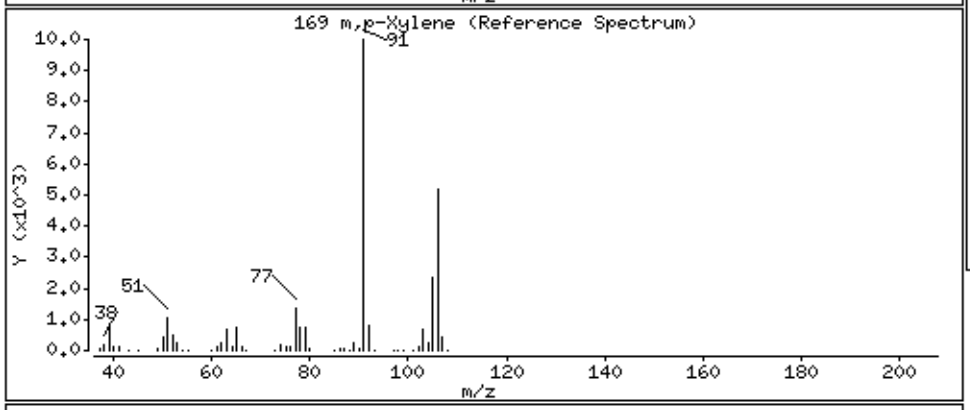
Concentration: 15.596 PPBV

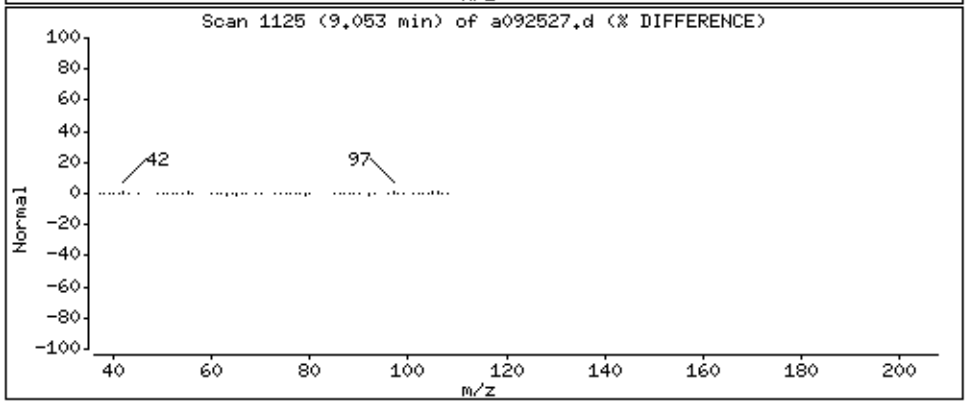












Data File: /chem/msda.i/25sep15.b/a092527.d

Date : 26-SEP-2015 02:31

Client ID:

Instrument: msda.i

Sample Info: 200ml 1006

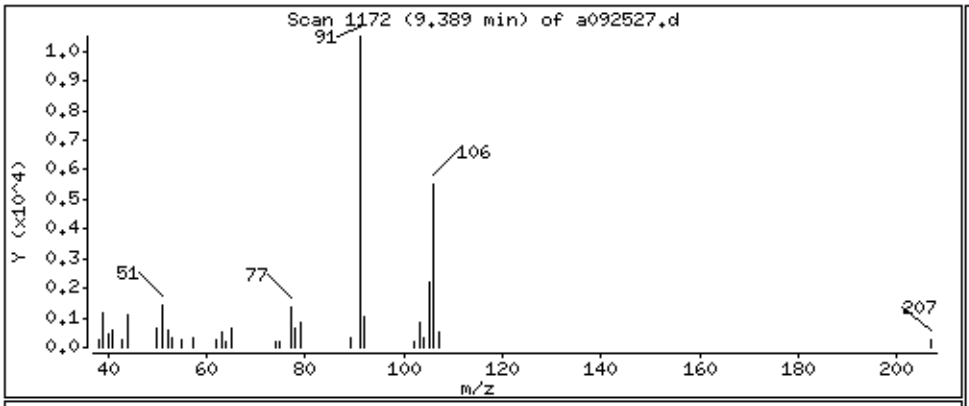
Operator: ea

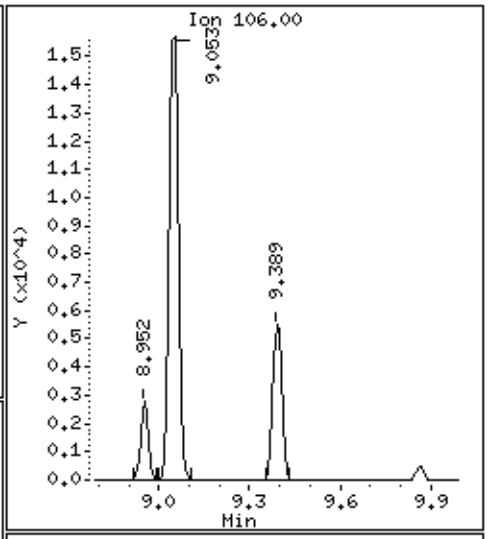
Column phase: RTX-624

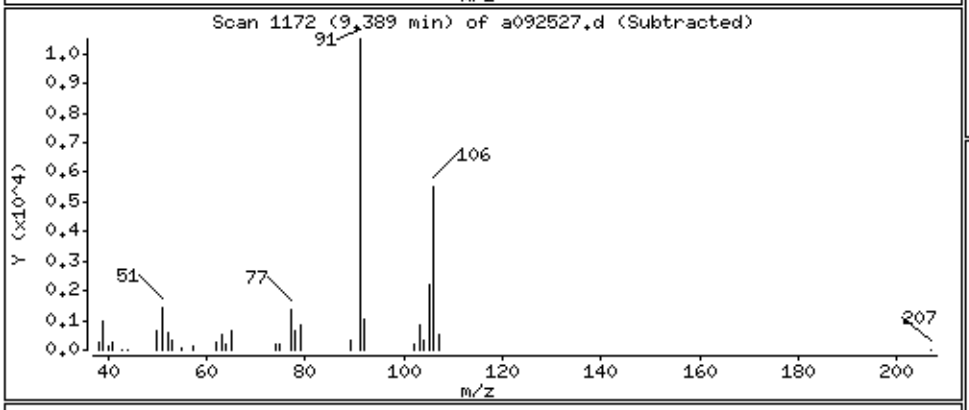
Column diameter: 0.25

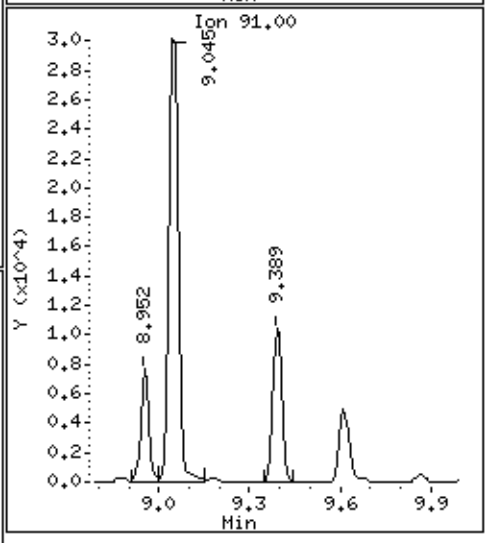
171 o-Xylene

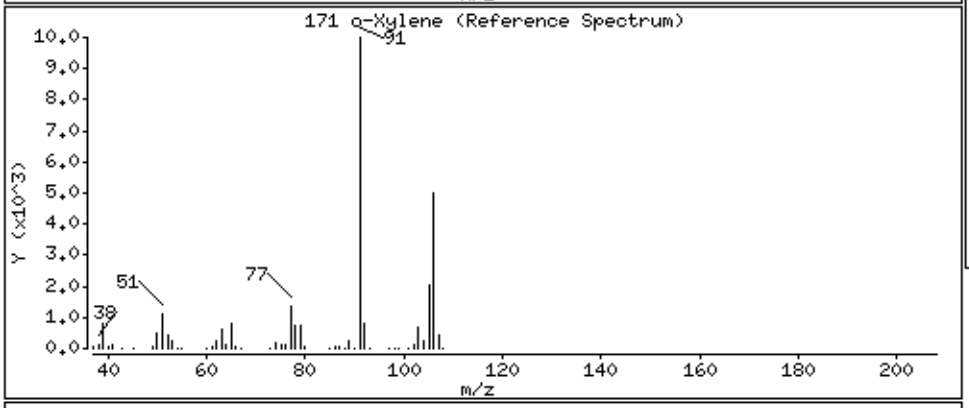
Concentration: 5.820 PPBV

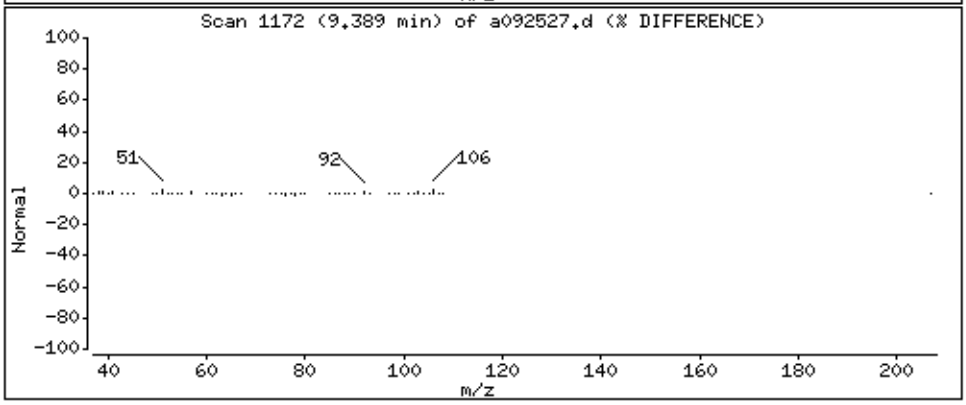












Data File: /chem/msda.i/25sep15.b/a092527.d

Date : 26-SEP-2015 02:31

Client ID:

Instrument: msda.i

Sample Info: 200ml 1006

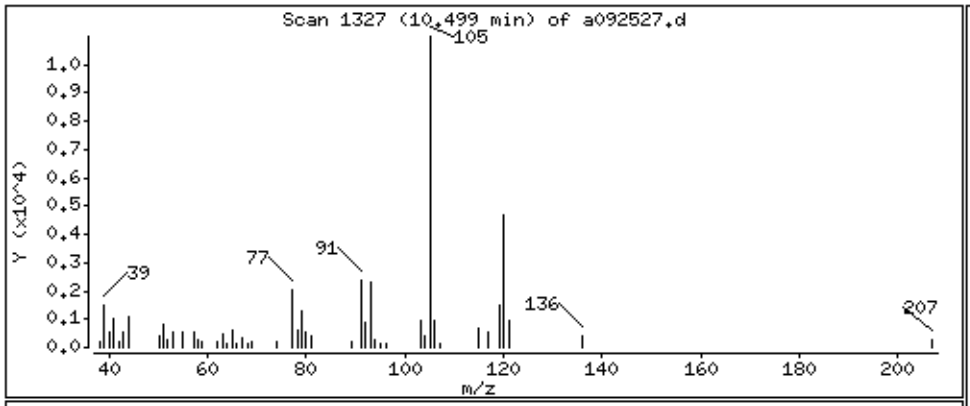
Operator: ea

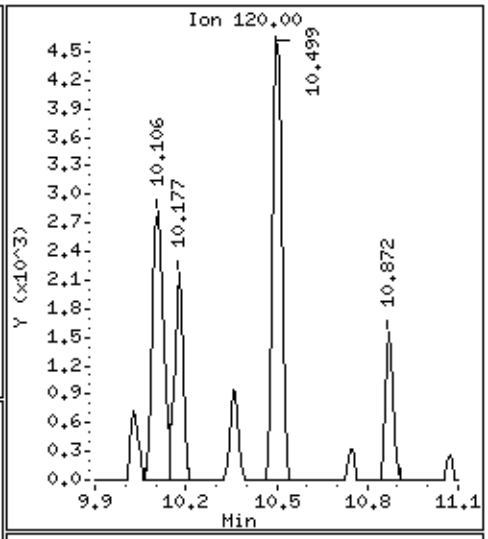
Column phase: RTX-624

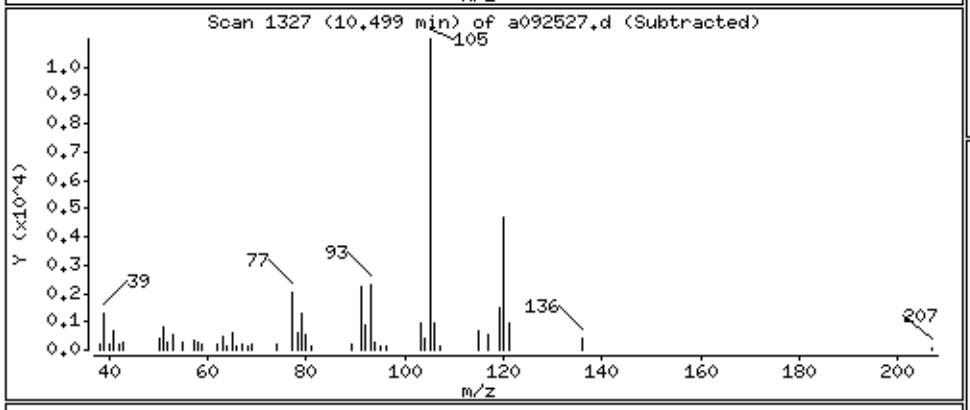
Column diameter: 0.25

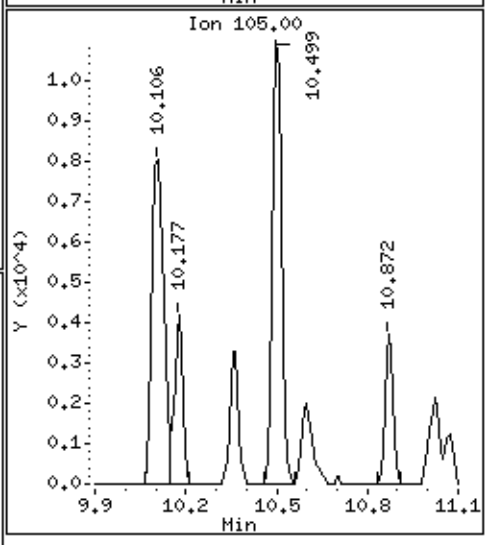
196 1,2,4-Trimethylbenzene

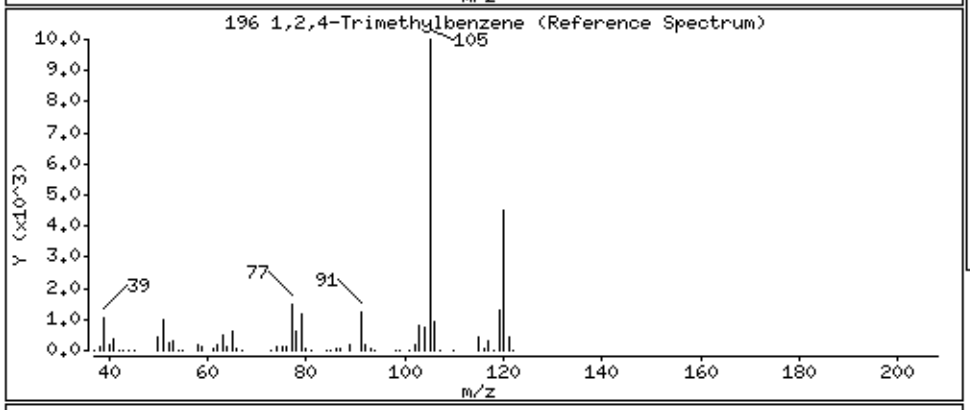
Concentration: 4.009 PPBV

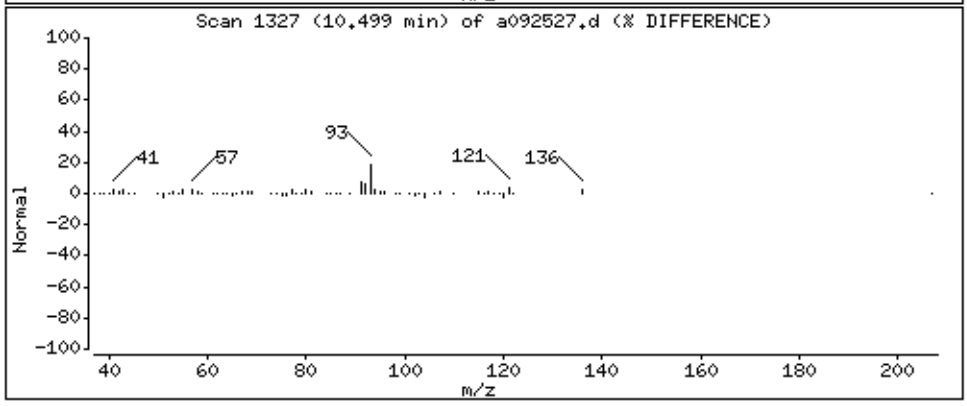












QC Results and Raw Data

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1509345-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092517**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/15 07:52 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	79	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/25sep15.b/a092517.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 25-SEP-2015 19:52
Operator : ea Inst ID: msda.i
Smp Info : 200ml 403
Misc Info : Humid
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/25sep15.b/a15q0921a.m
Meth Date : 25-Sep-2015 20:24 ealcan Quant Type: ISTD
Cal Date : 22-SEP-2015 07:19 Cal File: a092114.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12noNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.535	5.535 (1.000)	130	128632	25.0000		80.00- 120.00	100.00
5.535	5.535 (1.000)	128	96823			46.57- 106.57	75.27
5.535	5.535 (1.000)	49	144434			75.38- 135.38	112.28
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.424	6.424 (1.000)	114	555970	25.0000		80.00- 120.00	100.00
6.424	6.424 (1.000)	88	81173			0.00- 44.55	14.60
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.880	8.880 (1.000)	117	519560	25.0000		80.00- 120.00	100.00
8.880	8.880 (1.000)	82	252639			19.23- 79.23	48.63
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.073	6.073 (1.097)	65	163122	25.7421	25.742	80.00- 120.00	100.00
6.080	6.073 (1.098)	67	84748			27.41- 87.41	51.95

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.641	7.641 (1.190)	98	548162	25.0652	25.065	80.00- 120.00	100.00
7.641	7.641 (1.190)	70	53746			0.00- 39.72	9.80
7.641	7.641 (1.190)	100	360340			36.51- 96.51	65.74
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.869	9.869 (1.111)	174	255617	19.8269	19.827	80.00- 120.00	100.00
9.869	9.869 (1.111)	95	266459			82.23- 142.23	104.24
9.869	9.869 (1.111)	176	249587			67.41- 127.41	97.64

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a092517.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msda.i/25sep15.b/a15q0921a.m
Misc Info: Humid

Calibration Date: 25-SEP-2015
Calibration Time: 17:53
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	129526	77716	181336	128632	-0.69
123 1,4-Difluorobenze	544288	326573	762003	555970	2.15
163 Chlorobenzene-d5	415368	249221	581515	519560	25.08

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.54	5.21	5.87	5.54	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.88	8.55	9.21	8.88	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 25sep15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Level: LOW Operator: ea
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: AT12noNaph.sub
Method File: /chem/msda.i/25sep15.b/a15q0921a.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.742	102.97	70-130
$ 146 Toluene-d8	25.000	25.065	100.26	70-130
$ 177 4-Bromofluorobenze	25.000	19.827	79.31	70-130

Data File: /chem/msda.i/25sep15.b/a092517.d

Page 1

Date : 25-SEP-2015 19:52

Client ID: Lab Blank

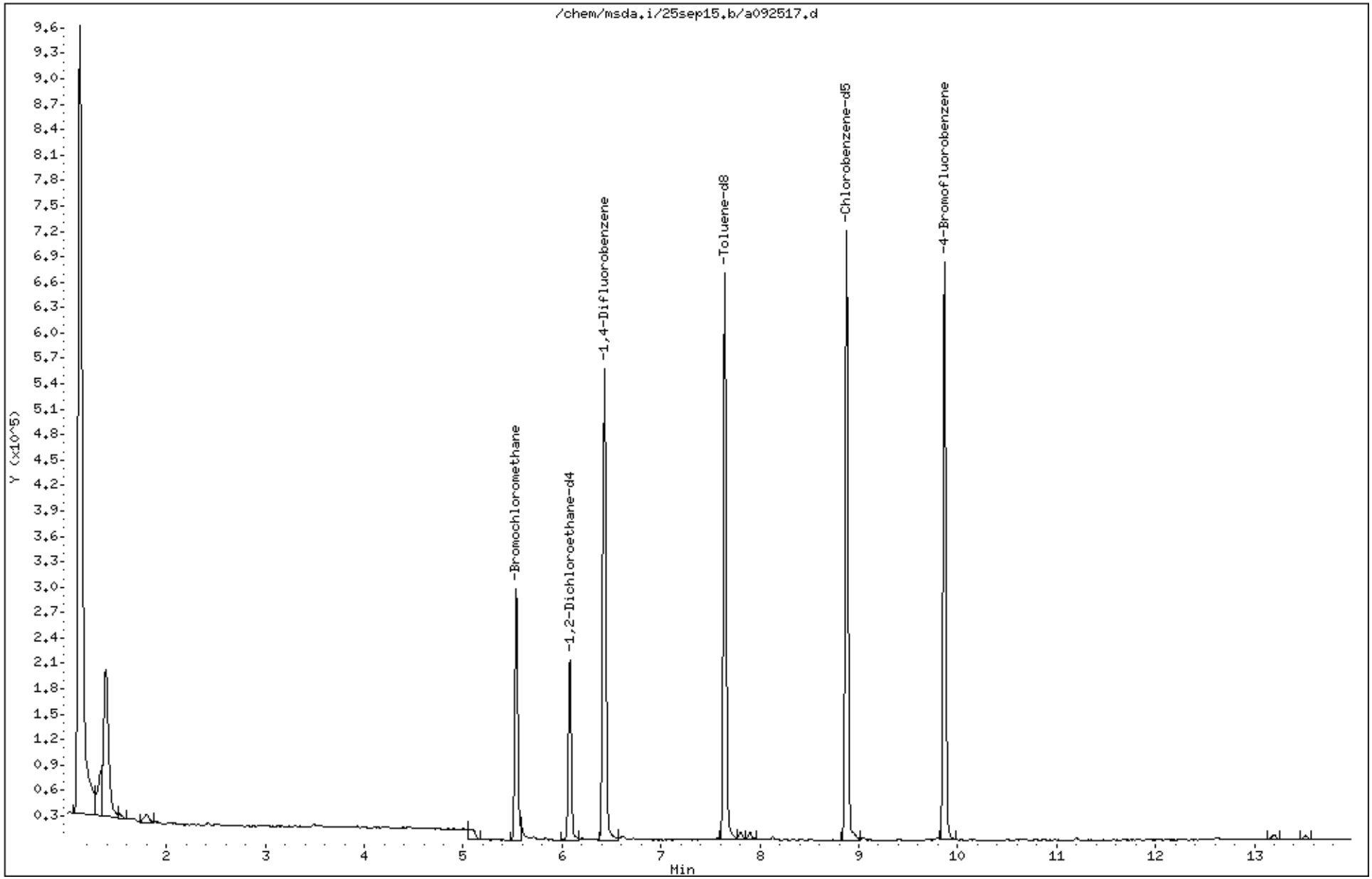
Instrument: msda.i

Sample Info: 200ml 403

Operator: ea

Column phase: RTX-624

Column diameter: 0.25



LEVEL-IV VALIDATABLE

EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 1509345

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	TOTAL OUT
01	SG-2 (091615)	101		103		99				0
02	SG-1 (091615)	99		100		99				0
03	SG-3 (091615)	103		98		104				0
04	SG-5 (091615)	106		110		103				0
05	SG-6 (091615)	113		111		103				0
06	DUP-1 (091615)	109		113		103				0
07	Lab Blank	103		100		79				0
08	CCV	99		101		122				0
09	LCS	98		102		104				0
10	LCSD	98		80		101				0
11										0
12										0
13										0
14										0
15										0
16										0
17										0
18										0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

1,2-Dichloroethane-d4 70 - 130
Toluene-d8 70 - 130
4-Bromofluorobenzene 70 - 130

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD | SDG No: 1509345

Lab File ID: a092513.d | Date Analyzed: 09/25/2015

Instrument ID: msda.i | Time Analyzed: 05:53 PM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	415368		8.88		544288		6.42		129526		5.54	
	UPPER LIMIT	581515		09.21		762003		06.75		181336		05.87	
	LOWER LIMIT	249221		08.55		326573		06.09		77716		05.21	
	CLIENT SAMPLE NO												
01	SG-2 (091615)	527296		8.88		543066		6.42		129794		5.54	
02	SG-1 (091615)	534636		8.88		559864		6.42		133596		5.54	
03	SG-3 (091615)	414246		8.88		443585		6.42		109793		5.54	
04	SG-5 (091615)	366006		8.88		358031		6.42		72620	*	5.54	
05	SG-6 (091615)	338558		8.88		328308		6.42		61476	*	5.54	
06	DUP-1 (091615)	343642		8.88		338666		6.42		67694	*	5.54	
07	Lab Blank	519560		8.88		555970		6.42		128632		5.54	
08	CCV	415368		8.88		544288		6.42		129526		5.54	
09	LCS	495523		8.88		543679		6.42		132431		5.54	
10	LCSD	519125		8.88		552661		6.42		131897		5.54	
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

'Area Upper Limit=+40% of internal standard area'

'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT

RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: a092515.d & a092514.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 9/25/15 & 9/25/15

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
79-00-5	1,1,2-Trichloroethane	104		94		10	
75-35-4	1,1-Dichloroethene	96		99		3.1	
95-63-6	1,2,4-Trimethylbenzene	114		100		13	
107-06-2	1,2-Dichloroethane	104		101		2.9	
71-43-2	Benzene	101		98		3.0	
67-66-3	Chloroform	100		100		0	
156-59-2	cis-1,2-Dichloroethene	114		112		1.8	
100-41-4	Ethyl Benzene	103		104		0.97	
108-38-3	m,p-Xylene	108		106		1.9	
75-09-2	Methylene Chloride	98		100		2.0	
95-47-6	o-Xylene	113		108		4.5	
127-18-4	Tetrachloroethene	98		84		15	
108-88-3	Toluene	102		82		22	
156-60-5	trans-1,2-Dichloroethene	91		89		2.2	
79-01-6	Trichloroethene	103		102		0.98	
75-01-4	Vinyl Chloride	97		102		5.0	

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 18:47
End Cal Date : 22-SEP-2015 07:19
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msda.i/21sep15.b/a15q0921a.m
Cal Date : 22-Sep-2015 11:24 mskidmor
Curve Type : Average

Calibration File Names:
Level 2: /chem/msda.i/21sep15.b/a092105.d
Level 3: /chem/msda.i/21sep15.b/a092113.d
Level 4: /chem/msda.i/21sep15.b/a092107.d
Level 5: /chem/msda.i/21sep15.b/a092108.d
Level 6: /chem/msda.i/21sep15.b/a092109.d
Level 7: /chem/msda.i/21sep15.b/a092110.d
Level 8: /chem/msda.i/21sep15.b/a092114.d

Compound	0.50000 Level 2 / 200.000 Level 8	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	RRF	% RSD
1 Dimethyl Ether	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2 Freon 14	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3 Acetaldehyde	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
4 Hexafluoropropene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
5 Freon 13	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
6 Freon 143a	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7 Freon 134a	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 18:47
End Cal Date : 22-SEP-2015 07:19
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msda.i/21sep15.b/a15q0921a.m
Cal Date : 22-Sep-2015 11:24 mskidmor
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
8 Propane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
9 Propylene	+++++	0.54132	0.52353	0.48021	0.42779	0.44392	0.47492	0.48195	9.132
10 1,1-Difluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
11 Freon 12	1.51274	1.69576	1.48897	1.58269	1.44302	1.45535	1.56040	1.53413	5.718
12 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Chlorodifluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
15 Freon 114	1.39780	1.34438	1.16431	1.35363	1.17883	1.21480	1.24907	1.27183	7.306
16 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
17 Chloromethane	+++++	0.60967	0.45169	0.48991	0.41128	0.40571	0.43513	0.46723	16.297

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 18:47
End Cal Date : 22-SEP-2015 07:19
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msda.i/21sep15.b/a15q0921a.m
Cal Date : 22-Sep-2015 11:24 mskidmor
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
18 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
19 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
20 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
21 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
22 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
23 Butane	+++++	0.08990	0.13287	0.10913	0.10075	0.10088	0.10305	0.10610	13.681
24 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25 Vinyl Chloride	0.53357	0.57454	0.49574	0.55672	0.49089	0.49828	0.54089	0.52723	6.236
26 1,3-Butadiene	0.46548	0.45583	0.39513	0.43659	0.37761	0.39964	0.42900	0.42275	7.777
27 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 18:47
End Cal Date : 22-SEP-2015 07:19
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msda.i/21sep15.b/a15q0921a.m
Cal Date : 22-Sep-2015 11:24 mskidmor
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
28 Methanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
29 Bromomethane	0.45571	0.49416	0.44205	0.52898	0.48624	0.47834	0.50690	0.48462	6.101
30 Chloroethane	+++++	0.27438	0.28632	0.28089	0.25015	0.26201	0.26977	0.27059	4.846
31 Isopentane	+++++	0.90836	0.72376	0.75192	0.64783	0.66101	0.70412	0.73283	12.868
32 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
33 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 Pentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
35 Freon 11	1.65936	1.84978	1.68571	1.90580	1.66864	1.68420	1.78960	1.74901	5.674
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
37 Dichlorofluoromethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 18:47
End Cal Date : 22-SEP-2015 07:19
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msda.i/21sep15.b/a15q0921a.m
Cal Date : 22-Sep-2015 11:24 mskidmor
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
38 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
39 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
40 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
41 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 Ethanol	+++++	0.40002	0.23263	0.26182	0.23082	0.22150	0.22763	0.26240	26.240
43 1,2-Dichloro-1-fluoroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
44 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
45 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
46 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
47 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
48 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Freon 113	1.18680	1.32672	1.15327	1.40591	1.20107	1.19571	1.25097	1.24578	7.237
50 1,1-Dichloroethene	0.42268	0.46033	0.35634	0.42677	0.37676	0.38106	0.40806	0.40457	8.793
51 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 Acetone	+++++	+++++	0.28775	0.28901	0.25131	0.25268	0.26817	0.26979	6.756
53 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
55 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Carbon Disulfide	+++++	2.06298	1.75560	1.81411	1.62223	1.67898	1.76292	1.78280	8.587
57 2-Propanol	+++++	1.31426	0.71084	1.09912	1.02548	1.07061	1.10935	1.05494	18.560

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
58 3-Chloropropene	+++++	0.33659	0.31848	0.31675	0.28038	0.30230	0.32373	0.31304	6.217
59 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
60 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
61 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
62 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
63 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
64 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
65 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
66 Methylene Chloride	+++++	0.82383	0.76169	0.75339	0.67405	0.67856	0.72261	0.73569	7.687
67 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
68 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
69 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
70 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
71 tert-Butyl alcohol	+++++	1.25404	0.64515	1.34616	1.18826	1.20002	1.26067	1.14905	22.030
72 Methyl tert-butyl ether	1.92834	1.84303	1.63339	1.86017	1.62634	1.65702	1.76049	1.75840	6.955
73 trans-1,2-Dichloroethene	0.33066	0.48308	0.38396	0.44711	0.40433	0.41722	0.43891	0.41504	11.818
74 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
75 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
76 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
77 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
78 Hexane	1.02366	1.04707	1.08345	1.05747	0.88709	0.92204	0.97287	0.99909	7.378
79 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
80 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
81 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
82 1,1-Dichloroethane	1.03984	1.24798	1.05812	1.14434	1.06999	1.08022	1.13103	1.11022	6.449
83 Isopropyl ether	+++++	2.33044	2.06687	2.41842	2.07804	2.08832	2.20852	2.19844	6.742
84 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
85 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
86 Vinyl Acetate	+++++	0.18162	0.14753	0.19035	0.16855	0.17487	0.18293	0.17431	8.646
87 Butanal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
88 Ethyl-tert-butyl ether	+++++	1.86544	1.89811	2.14532	1.88868	1.93596	2.02011	1.95894	5.421
89 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
90 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
91 cis-1,2-Dichloroethene	0.48369	0.44916	0.43952	0.46936	0.44932	0.46042	0.47219	0.46052	3.372
92 2-Butanone	+++++	0.38141	0.24254	0.32593	0.29293	0.29931	0.31575	0.30965	14.688
93 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
94 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
95 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
96 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
97 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
99 Tetrahydrofuran	1.01524	0.87739	0.66470	0.79859	0.72706	0.74332	0.77230	0.79980	14.430
100 Chloroform	1.51813	1.47962	1.38986	1.48735	1.35320	1.38577	1.43701	1.43585	4.293
101 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
102 Cyclohexane	0.84468	0.98442	0.87074	0.96288	0.84261	0.84436	0.88098	0.89010	6.656
103 1,1,1-Trichloroethane	1.61790	1.66833	1.47284	1.66169	1.49900	1.49666	1.56131	1.56825	5.225
104 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
105 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
106 Carbon Tetrachloride	1.64217	1.81958	1.64843	1.88351	1.65451	1.66399	1.75630	1.72407	5.627
107 1,1-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
108 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
109 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
110 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
111 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
113 2,2,4-Trimethylpentane	3.10604	3.37543	3.06341	3.24731	2.89088	2.93475	3.10338	3.10303	5.423
114 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
115 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
116 Benzene	0.53469	0.53064	0.44647	0.49899	0.44952	0.45359	0.47490	0.48412	7.808
118 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
119 tert-Amyl methyl ether	+++++	0.49554	0.46164	0.53151	0.48649	0.48363	0.50838	0.49453	4.807
120 1,2-Dichloroethane	0.24598	0.22729	0.19767	0.22344	0.20765	0.20856	0.21563	0.21803	7.286

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
121 Heptane	0.22339	0.16799	0.18337	0.18226	0.16436	0.15802	0.16876	0.17831	12.282
122 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
124 n-Butanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
125 Trichloroethene	0.27311	0.24834	0.21558	0.24533	0.23125	0.23555	0.24608	0.24218	7.331
126 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
127 Methylcyclohexane	1.41398	1.36635	1.19780	1.35825	1.20088	1.21116	1.26846	1.28812	7.013
128 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
129 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
130 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
131 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	RRF	% RSD
	200.000 Level 8							
132 1,2-Dichloropropane	0.18314	0.18275	0.16439	0.19500	0.17283	0.17258		
	0.18253						0.17903	5.550
133 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
134 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
135 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
136 1,4-Dioxane	+++++	0.14232	0.05549	0.12939	0.11887	0.11921		
	0.12623						0.11525	26.469
137 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
138 Bromodichloromethane	0.40438	0.39088	0.35486	0.40862	0.37377	0.37659		
	0.39984						0.38699	5.022
139 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
140 bis(chloromethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
141 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
142 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
143 2-Chloroethyl Vinyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
144 cis-1,3-Dichloropropene	0.32753	0.30611	0.28251	0.32944	0.30060	0.30409	0.32630	0.31094	5.630
145 4-Methyl-2-pentanone	0.15203	0.15783	0.06596	0.15539	0.14318	0.14285	0.15253	0.13854	23.466
147 Toluene	0.73024	0.65615	0.59086	0.71245	0.62197	0.62516	0.66061	0.65678	7.630
148 Octane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
149 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
150 trans-1,3-Dichloropropene	0.28915	0.31492	0.26873	0.32370	0.29216	0.29524	0.30697	0.29870	6.114
151 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
152 1-Chloro-2-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD	
153 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
154 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
155 1,1,2-Trichloroethane	0.24487	0.26553	0.22756	0.27092	0.24266	0.24138	0.24953	0.24892	5.979	
156 Tetrachloroethene	0.40624	0.41096	0.38116	0.41355	0.36130	0.35554	0.36941	0.38545	6.378	
157 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
158 2-Hexanone	+++++	0.23355	0.07079	0.23079	0.20654	0.20644	0.22065	0.19479	31.743	<-
159 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
160 Dibromochloromethane	0.52325	0.50620	0.46538	0.55608	0.50459	0.50149	0.52576	0.51182	5.428	
161 1,2-Dibromoethane (EDB)	0.38253	0.44118	0.36298	0.44987	0.40096	0.39839	0.41624	0.40745	7.589	
162 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

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Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
164 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
165 Chlorobenzene	0.62512	0.63907	0.55410	0.68748	0.60500	0.59174	0.62499	0.61822	6.706
166 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
167 Ethyl Benzene	0.32310	0.30707	0.27391	0.33801	0.29909	0.29567	0.30757	0.30635	6.669
168 1,1,1,2-Tetrachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
169 m,p-Xylene	0.32870	0.39512	0.33878	0.42146	0.37489	0.37255	0.38784	0.37419	8.580
170 Nonane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
171 o-Xylene	0.32459	0.35626	0.31679	0.39404	0.35272	0.35285	0.36605	0.35190	7.314
172 Styrene	0.51459	0.52269	0.47957	0.64347	0.58473	0.58296	0.60712	0.56216	10.326
173 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 18:47
End Cal Date : 22-SEP-2015 07:19
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msda.i/21sep15.b/a15q0921a.m
Cal Date : 22-Sep-2015 11:24 mskidmor
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
174 Bromoform	0.50793	0.49459	0.41082	0.55702	0.50648	0.51628	0.53864	0.50454	9.208
175 Cumene	1.02471	1.11188	0.96795	1.21743	1.09533	1.09154	1.11990	1.08982	7.186
176 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
178 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
179 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
180 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
181 1,1,2,2-Tetrachloroethane	0.55948	0.53569	0.42308	0.58549	0.51974	0.52125	0.54726	0.52743	9.743
182 Propylbenzene	1.32173	1.26226	1.05127	1.33898	1.21998	1.21774	1.26255	1.23922	7.655
183 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
184 trans-1,4-Dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 18:47
End Cal Date : 22-SEP-2015 07:19
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msda.i/21sep15.b/a15q0921a.m
Cal Date : 22-Sep-2015 11:24 mskidmor
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
185 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
186 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
187 Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
188 4-Ethyltoluene	0.34393	0.35142	0.28933	0.37161	0.35926	0.36117	0.36158	0.34833	7.872
189 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
190 1,3,5-Trimethylbenzene	0.44186	0.45818	0.40300	0.51479	0.47235	0.47536	0.49783	0.46620	7.897
191 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
192 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
193 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
194 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 18:47
End Cal Date : 22-SEP-2015 07:19
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msda.i/21sep15.b/a15q0921a.m
Cal Date : 22-Sep-2015 11:24 mskidmor
Curve Type : Average

Compound	0.50000 Level 2 / 200.000 Level 8	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	RRF	% RSD
195 tert-Butylbenzene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
196 1,2,4-Trimethylbenzene	0.40353 / 0.46043	0.40233	0.34070	0.44870	0.42774	0.44001	0.41763	9.653
197 Pentachloroethane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
198 Limonene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
199 D-Limonene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
200 Benzaldehyde	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
201 Indan	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
202 Indene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
203 sec-Butylbenzene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
204 Isobutylbenzene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 18:47
End Cal Date : 22-SEP-2015 07:19
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msda.i/21sep15.b/a15q0921a.m
Cal Date : 22-Sep-2015 11:24 mskidmor
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
205 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
206 bis(2-Chloroethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
207 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
208 1,3-Dichlorobenzene	0.59352	0.65288	0.53249	0.68189	0.65535	0.66707	0.69475	0.63971	8.935
209 1,4-Dichlorobenzene	0.66494	0.67815	0.50266	0.66942	0.65275	0.66753	0.69846	0.64770	10.110
210 1,2,3-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
211 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
212 alpha-Chlorotoluene	0.69872	0.74219	0.39481	0.80784	0.80001	0.83546	0.89240	0.73878	22.200
213 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
214 1,2-Dichlorobenzene	0.55397	0.62876	0.47707	0.61489	0.62182	0.63263	0.66785	0.59957	10.641

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msda.i/21sep15.b/a15q0921a.m
Cal Date : 22-Sep-2015 11:24 mskidmor
Curve Type : Average

Compound	0.50000 Level 2 / 200.000 Level 8	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	RRF	% RSD
215 Undecane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
216 4-Ethyl-1,2-dimethylbenzene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
217 Hexachloroethane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
218 1,3-Diethylbenzene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
219 1,4-Diethylbenzene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
220 1,2,4,5-tetramethylbenzene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
221 1,2-Dibromo-3-chloropropane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
222 1-Dodecene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
223 Nitrobenzene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
224 1,3,5-Trichlorobenzene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

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End Cal Date : 22-SEP-2015 07:19
Quant Method : ISTD
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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msda.i/21sep15.b/a15q0921a.m
Cal Date : 22-Sep-2015 11:24 mskidmor
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD	
225 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
226 1,2,4-Trichlorobenzene	+++++	0.50618	0.21371	0.34218	0.46776	0.55447	0.58859	0.44548	31.893	<-
227 Hexachlorobutadiene	+++++	0.39745	0.24943	0.30002	0.38662	0.43898	0.46713	0.37327	22.283	
228 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
229 1,2,3-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
230 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
231 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
234 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	

Eurofins Air Toxics Inc.

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Integrator : HP RTE
Method file : /chem/msda.i/21sep15.b/a15q0921a.m
Cal Date : 22-Sep-2015 11:24 mskidmor
Curve Type : Average

Compound	0.50000 Level 2 / 200.000 Level 8	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	RRF	% RSD
235 Phenanthrene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
236 Anthracene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 237 1,2-Dichloroethene (Total)	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 238 Chlorobutane (Total)	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 239 Total Xylene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
M 240 3 and 4-Ethyltoluene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
241 Total Volatile Hydrocarbons	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
242 TPH reference to Hexane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
243 TPH reference to Heptane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
244 TPH reference to Gasoline	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 18:47
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Quant Method : ISTD
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Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msda.i/21sep15.b/a15q0921a.m
Cal Date : 22-Sep-2015 11:24 mskidmor
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
245 TPH reference MineralSpirits	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
246 TPH reference to Stoddard	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
247 TVOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
248 TVOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
249 TVOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
250 TVOC reference to Toluene-d8	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
251 NMOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
252 NMOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
253 NMOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
254 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 18:47
End Cal Date : 22-SEP-2015 07:19
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msda.i/21sep15.b/a15q0921a.m
Cal Date : 22-Sep-2015 11:24 mskidmor
Curve Type : Average

Compound	0.50000 Level 2 / 200.000 Level 8	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	RRF	% RSD
255 C4 - C5 Hydrocarbons	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
256 C5 - C6 Hydrocarbons	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
257 C6 - C7 Hydrocarbons	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
258 C7 - C8 Hydrocarbons	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
259 C8 - C9 Hydrocarbons	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
260 C9 - C10 Hydrocarbons	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
261 C10+ Hydrocarbons	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
262 C5 - C6 Aliphatic ref C5 + C6	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
263 C6-C8 Aliphatic ref Heptane	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
264 C8-C10 Aliphatic ref Decane	+++++ +++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 18:47
End Cal Date : 22-SEP-2015 07:19
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msda.i/21sep15.b/a15q0921a.m
Cal Date : 22-Sep-2015 11:24 mskidmor
Curve Type : Average

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
265 C10-C12 Aliphatic ref Dodecan	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
266 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
267 C8-C10 Aromatic ref 1,2,3-TMB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
268 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
269 C10-C12 Aromatic 1,2,4,5-TMB	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
270 C10-C12 Aromatic Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 112 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 117 1,2-Dichloroethane-d4	1.25696	1.27392	1.25826	1.22932	1.16756	1.19936	1.23563	1.23157	3.021
$ 146 Toluene-d8	0.97950	0.97821	0.97114	0.98850	0.97196	0.98794	1.00647	0.98339	1.247
$ 177 4-Bromofluorobenzene	0.61275	0.61037	0.61350	0.61044	0.61493	0.63225	0.64824	0.62035	2.328

Calibration History

Method : /chem/msda.i/21sep15.b/a15q0921a.m
Start Cal Date: 21-SEP-2015 18:47
End Cal Date : 22-SEP-2015 07:19

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 2 , Cal Amount: 0.50000		
21-SEP-2015 18:47	AT12low	/chem/msda.i/21sep15.b/a092105.d
Cal Level: 3 , Cal Amount: 2.00000		
22-SEP-2015 06:40	AT12mdlnoNaph	/chem/msda.i/21sep15.b/a092113.d
Cal Level: 4 , Cal Amount: 5.00000		
21-SEP-2015 20:05	AT12noNaph	/chem/msda.i/21sep15.b/a092107.d
Cal Level: 5 , Cal Amount: 20.00000		
21-SEP-2015 20:42	AT12noNaph	/chem/msda.i/21sep15.b/a092108.d
Cal Level: 6 , Cal Amount: 50.00000		
21-SEP-2015 21:07	AT12noNaph	/chem/msda.i/21sep15.b/a092109.d
Cal Level: 7 , Cal Amount: 100.00000		
21-SEP-2015 21:34	AT12noNaph	/chem/msda.i/21sep15.b/a092110.d
Cal Level: 8 , Cal Amount: 200.00000		
22-SEP-2015 07:19	AT12noNaph	/chem/msda.i/21sep15.b/a092114.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 50.000		
21-SEP-2015 21:07	AT12noNaph	/chem/msda.i/21sep15.b/a092109.d
Ccal Level: 6 , Ccal Amount: 50.000		
21-SEP-2015 21:07	AT12noNaph	/chem/msda.i/21sep15.b/a092109a.d

Initial Calibration Narrative

A15Q0921A.m

A 7 point initial calibration was analyzed on MSD-A on 9/21/15 for TO-15 compounds.

ICAL: 2 out – Hexanone (32% RSD) and 1,2,4-Trichlorobenzene (32% RSD)

Level 3 (2.0ppbv) was reanalyzed due to non-linearity.

No Naphthalene! Naphthalene not included on this curve.

Acetone curved from 5ppbv -> 200ppbv

ICV - 0 out

ICV: File A092117; 50ml: #2736-186 (200ppbv); exp: 10/30/15.

Ok for DoD and In-house control limits.

Tune Files:

A) A092104

The MDL study was performed on 4/22/15.

MSDA

BFB verification of 176/174 ratio: (182634/186496) * 100 = 97.93%			
IS/S Std.#:	2736-128	Exp. Date:	10/22/2015
BCM	152,372		
1,4-DFB	627,705		
CB-d5	581,049		

Method TO-15/TO-14
SOP# 6
Vacuum: NA
Please check all standards

Surrogate# 2736-128		Exp. Date:	10/22/2015
Surrogate#	NA	Exp. Date:	NA

subVerified CCV vs ICAL mid-point (-40%): cb

Method: A15Q0921A.m

*Naphthalene LCS expired; reference CAR#FSAQA2185 for Naphthalene reporting

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	Amount	DF	Verify Load	Loaded Init	Date Analyzed	Time Analyzed	Review Init	Comments
√	A092104	BFB Tune Check	#2736-128	12	35ng	1.0ml	1.00	js	js	09/21/15	1800	js	
√	A092105	ICAL Level #2	2736-256	1	0.5ppbv (2.0ppbv)	50ml	1.00	js	js	09/21/15	1847	mjs	exp. 11/20/15
X	A092106	ICAL Level #3	2736-256	1	2.0ppbv (2.0ppbv)	200ml	1.00	js	js	09/21/15	1927	mjs	exp. 11/20/15
√	A092107	ICAL Level #4	2736-258	4	5.0ppbv (5.0ppbv)	200ml	1.00	js	js	09/21/15	2005	mjs	exp. 11/20/15
√	A092108	ICAL Level #5	2736-243	2	20ppbv (200ppbv)	20ml	1.00	js	js	09/21/15	2042	mjs	exp. 11/20/15
√	A092109	ICAL Level #6	2736-243	2	50ppbv (200ppbv)	50ml	1.00	js	js	09/21/15	2107	mjs	exp. 11/20/15
√	A092110	ICAL Level #7	2736-243	2	100ppbv (200ppbv)	100ml	1.00	js	js	09/21/15	2134	mjs	exp. 11/20/15
X	A092111	ICAL Level #8	2736-243	2	200ppbv (200ppbv)	200ml	1.00	js	js	09/21/15	2215	mjs	exp. 11/20/15. GC error.
√	A092112	System Blank	403	12	Humid	200ml	1.00	mjs	js	09/21/15	2241	mjs	
√	A092113	ICAL Level #3	2736-256	1	2.0ppbv (2.0ppbv)	200ml	1.00	mjs	mjs	09/22/15	0640	mjs	exp. 11/20/15
√	A092114	ICAL Level #8	2736-243	2	200ppbv (200ppbv)	200ml	1.00	mjs	mjs	09/22/15	0719	mjs	exp. 11/20/15
X	A092115	System Blank	403	12	Humid	200ml	1.00	cb	mjs	09/22/15	0745	cb	
√	A092116	System Blank	403	12	Humid	200ml	1.00	cb	cb	09/22/15	0824	cb	
√	A092117	ICV	2736-186	11	50ppbv (200ppbv)	50ml	1.00	cb	cb	09/22/15	0855	cb	exp 10/30/15 (Naph 9/12)

9/22/15

Modified EPA Methods TO-14A/TO-15
Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
3-Chloropropene
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
2,2,4-Trimethylpentane
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

CB 9/22/15

Start Cal Date : 21-SEP-2015 18:47
End Cal Date : 22-SEP-2015 07:19
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msda.i/21sep15.b/a15q0921a.m
Cal Date : 22-Sep-2015 11:24 mskidmor
Curve Type : Average

Calibration File Names:
Level 2: /chem/msda.i/21sep15.b/a092105.d
Level 3: /chem/msda.i/21sep15.b/a092113.d
Level 4: /chem/msda.i/21sep15.b/a092107.d
Level 5: /chem/msda.i/21sep15.b/a092108.d
Level 6: /chem/msda.i/21sep15.b/a092109.d
Level 7: /chem/msda.i/21sep15.b/a092110.d
Level 8: /chem/msda.i/21sep15.b/a092114.d

Compound	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD
1 Dimethyl Ether	*****	*****	*****	*****	*****	*****	*****	*****	*****
2 Freon 14	*****	*****	*****	*****	*****	*****	*****	*****	*****
3 Acetaldehyde	*****	*****	*****	*****	*****	*****	*****	*****	*****
4 Hexafluoropropene	*****	*****	*****	*****	*****	*****	*****	*****	*****
5 Freon 13	*****	*****	*****	*****	*****	*****	*****	*****	*****
6 Freon 143a	*****	*****	*****	*****	*****	*****	*****	*****	*****
7 Freon 134a	*****	*****	*****	*****	*****	*****	*****	*****	*****

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/21sep15.b/a092117.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 22-SEP-2015 08:55
Operator : cb Inst ID: msda.i
Smp Info : 50ml 2736-186
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/21sep15.b/a15q0921a.m
Meth Date : 22-Sep-2015 11:19 mskidmor Quant Type: ISTD
Cal Date : 22-SEP-2015 07:19 Cal File: a092114.d
Als bottle: 12 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12noNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.471	5.471 (1.000)	130	150776	25.0000		80.00- 120.00	100.00
5.471	5.471 (1.000)	128	116534			46.57- 106.57	77.29
5.464	5.471 (1.000)	49	162054			75.38- 135.38	107.48
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.381	6.381 (1.000)	114	625222	25.0000		80.00- 120.00	100.00
6.381	6.381 (1.000)	88	88135			0.00- 44.55	14.10
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	573463	25.0000		80.00- 120.00	100.00
8.866	8.866 (1.000)	82	284076			19.23- 79.23	49.54
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.022	6.022 (1.101)	65	180032	24.2380	24.238	80.00- 120.00	100.00
6.022	6.022 (1.101)	67	100103			27.41- 87.41	55.60

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.620	7.620 (1.194)	98	613623	24.9506	24.951	80.00- 120.00	100.00
7.620	7.620 (1.194)	70	60221			0.00- 39.72	9.81
7.620	7.620 (1.194)	100	405935			36.51- 96.51	66.15
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.862	9.862 (1.112)	174	355630	24.9916	24.992	80.00- 120.00	100.00
9.862	9.862 (1.112)	95	395962			82.23- 142.23	111.34
9.862	9.862 (1.112)	176	346176			67.41- 127.41	97.34
9 Propylene					CAS #: 115-07-1		
1.345	1.345 (0.246)	41	137604	47.3414	47.341	80.00- 120.00	100.00
1.345	1.345 (0.246)	42	89287			34.74- 94.74	64.89
1.345	1.345 (0.246)	39	100660			42.01- 102.01	73.15
11 Freon 12					CAS #: 75-71-8		
1.381	1.381 (0.252)	85	472177	51.0328	51.033	80.00- 120.00	100.00
1.381	1.381 (0.252)	87	158702			2.75- 62.75	33.61
15 Freon 114					CAS #: 76-14-2		
1.503	1.503 (0.275)	135	404644	52.7535	52.753	80.00- 120.00	100.00
1.503	1.503 (0.275)	137	128786			2.30- 62.30	31.83
17 Chloromethane					CAS #: 74-87-3		
1.581	1.581 (0.289)	50	134328	47.6695	47.669	80.00- 120.00	100.00
1.581	1.581 (0.289)	52	44424			2.93- 62.93	33.07
23 Butane					CAS #: 106-97-8		
1.667	1.667 (0.305)	58	33137	51.7861	51.786	80.00- 120.00	100.00
1.667	1.667 (0.305)	43	276356			790.29- 850.29	833.98
25 Vinyl Chloride					CAS #: 75-01-4		
1.703	1.703 (0.311)	62	164139	51.6198	51.620	80.00- 120.00	100.00
1.703	1.703 (0.311)	64	52067			1.64- 61.64	31.72
26 1,3-Butadiene					CAS #: 106-99-0		
1.732	1.732 (0.317)	54	126840	49.7480	49.748	80.00- 120.00	100.00
1.732	1.732 (0.317)	39	146670			88.19- 148.19	115.63
29 Bromomethane					CAS #: 74-83-9		
2.090	2.090 (0.382)	94	158720	54.3043	54.304	80.00- 120.00	100.00
2.090	2.090 (0.382)	96	153276			66.60- 126.60	96.57
30 Chloroethane					CAS #: 75-00-3		
2.212	2.204 (0.404)	64	85560	52.4290	52.429	80.00- 120.00	100.00
2.212	2.204 (0.404)	66	27643			1.66- 61.66	32.31

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.212	2.204 (0.404)	49	26307			2.43- 62.43	30.75
31 Isopentane					CAS #: 78-78-4		
2.233	2.233 (0.408)	43	217415	49.1918	49.192	80.00- 120.00	100.00
2.233	2.233 (0.408)	57	138956			33.38- 93.38	63.91
35 Freon 11					CAS #: 75-69-4		
2.470	2.470 (0.451)	101	554321	52.5504	52.550	80.00- 120.00	100.00
2.470	2.470 (0.451)	103	367590			35.05- 95.05	66.31
42 Ethanol					CAS #: 64-17-5		
2.806	2.806 (0.513)	45	75892	47.9555	47.955	80.00- 120.00	100.00
2.799	2.806 (0.512)	43	14559			0.00- 48.51	19.18
2.799	2.806 (0.512)	46	28808			6.94- 66.94	37.96
49 Freon 113					CAS #: 76-13-1		
3.136	3.143 (0.573)	151	386326	51.4187	51.419	80.00- 120.00	100.00
3.143	3.143 (0.574)	153	252046			33.28- 93.28	65.24
3.136	3.143 (0.573)	101	445070			84.64- 144.64	115.21
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.172	3.164 (0.580)	98	121582	49.8291	49.829	80.00- 120.00	100.00
3.172	3.164 (0.580)	96	194808			131.99- 191.99	160.23
3.164	3.164 (0.578)	61	285716			211.38- 271.38	235.00
52 Acetone					CAS #: 67-64-1		
3.329	3.329 (0.609)	58	82239	50.5438	50.544	80.00- 120.00	100.00
3.329	3.329 (0.609)	43	290213			323.78- 383.78	352.89
56 Carbon Disulfide					CAS #: 75-15-0		
3.408	3.408 (0.623)	76	464785	43.2271	43.227	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.508	3.508 (0.641)	45	341241	53.6339	53.634	80.00- 120.00	100.00
3.508	3.508 (0.641)	43	66358			0.00- 48.56	19.45
3.508	3.508 (0.641)	59	13070			0.00- 33.73	3.83
58 3-Chloropropene					CAS #: 107-05-1		
3.673	3.673 (0.671)	76	90670	48.0257	48.026	80.00- 120.00	100.00
3.673	3.673 (0.671)	41	232031			246.04- 306.04	255.91
66 Methylene Chloride					CAS #: 75-09-2		
3.859	3.859 (0.705)	49	223245	50.3148	50.315	80.00- 120.00	100.00
3.859	3.859 (0.705)	84	165451			48.40- 108.40	74.11
3.859	3.859 (0.705)	51	66349			0.91- 60.91	29.72

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.088	4.088 (0.747)	73	530938	50.0651	50.065	80.00- 120.00	100.00
4.088	4.088 (0.747)	57	121436			0.00- 51.56	22.87
4.088	4.088 (0.747)	41	120589			0.00- 53.23	22.71
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.117	4.117 (0.753)	98	109603	43.7867	43.787	80.00- 120.00	100.00
4.117	4.117 (0.753)	61	232027			176.45- 236.45	211.70
4.117	4.117 (0.753)	96	178918			128.76- 188.76	163.24
78 Hexane					CAS #: 110-54-3		
4.339	4.339 (0.793)	57	291983	48.4574	48.457	80.00- 120.00	100.00
4.332	4.339 (0.792)	43	194117			38.99- 98.99	66.48
4.339	4.339 (0.793)	86	48780			0.00- 47.90	16.71
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.626	4.626 (0.846)	63	336369	50.2360	50.236	80.00- 120.00	100.00
4.626	4.626 (0.846)	65	104177			1.73- 61.73	30.97
86 Vinyl Acetate					CAS #: 108-05-4		
4.676	4.676 (0.855)	86	53309	50.7095	50.710	80.00- 120.00	100.00
4.676	4.676 (0.855)	43	573567			1171.37-1231.37	1075.93
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.227	5.227 (0.955)	98	158318	57.0015	57.001	80.00- 120.00	100.00
5.227	5.227 (0.955)	96	246704			125.14- 185.14	155.83
5.227	5.227 (0.955)	61	285303			152.76- 212.76	180.21
92 2-Butanone					CAS #: 78-93-3		
5.256	5.256 (0.961)	72	91814	49.1645	49.164	80.00- 120.00	100.00
5.256	5.256 (0.961)	43	413673			417.31- 477.31	450.56
5.256	5.256 (0.961)	57	32643			6.26- 66.26	35.55
99 Tetrahydrofuran					CAS #: 109-99-9		
5.457	5.457 (0.997)	42	228242	47.3175	47.318	80.00- 120.00	100.00
5.457	5.457 (0.997)	71	81670			6.28- 66.28	35.78
5.457	5.457 (0.997)	72	88036			7.91- 67.91	38.57
100 Chloroform					CAS #: 67-66-3		
5.535	5.535 (1.012)	83	429382	49.5842	49.584	80.00- 120.00	100.00
5.535	5.535 (1.012)	85	278006			33.64- 93.64	64.75
102 Cyclohexane					CAS #: 110-82-7		
5.636	5.636 (1.030)	84	275087	51.2438	51.244	80.00- 120.00	100.00
5.636	5.636 (1.030)	56	315374			81.39- 141.39	114.65
5.636	5.636 (1.030)	41	186846			37.15- 97.15	67.92

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.657	5.657 (1.034)	97	482892	51.0556	51.056	80.00- 120.00	100.00
5.657	5.657 (1.034)	99	314458			35.23- 95.23	65.12
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.772	5.779 (1.055)	119	541955	52.1214	52.121	80.00- 120.00	100.00
5.772	5.779 (1.055)	117	549371			72.15- 132.15	101.37
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.979	5.979 (1.093)	57	932811	49.8443	49.844	80.00- 120.00	100.00
5.979	5.979 (1.093)	56	291310			0.25- 60.25	31.23
5.979	5.979 (1.093)	41	274670			0.00- 57.25	29.45
116 Benzene					CAS #: 71-43-2		
6.001	6.001 (0.940)	78	596015	49.2281	49.228	80.00- 120.00	100.00
6.001	6.001 (0.940)	77	139974			0.00- 53.40	23.48
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.094	6.087 (0.955)	62	276398	50.6893	50.689	80.00- 120.00	100.00
6.094	6.087 (0.955)	64	90207			2.46- 62.46	32.64
121 Heptane					CAS #: 142-82-5		
6.151	6.151 (0.964)	71	214646	48.1349	48.135	80.00- 120.00	100.00
6.151	6.151 (0.964)	43	391246			156.27- 216.27	182.28
6.151	6.151 (0.964)	57	220024			72.07- 132.07	102.51
125 Trichloroethene					CAS #: 79-01-6		
6.581	6.581 (1.031)	95	304241	50.2332	50.233	80.00- 120.00	100.00
6.581	6.581 (1.031)	130	338265			80.99- 140.99	111.18
6.581	6.581 (1.031)	97	199026			35.67- 95.67	65.42
127 Methylcyclohexane					CAS #: 108-87-2		
6.681	6.681 (1.221)	83	388140	49.9618	49.962	80.00- 120.00	100.00
6.681	6.681 (1.221)	98	182601			17.02- 77.02	47.05
6.681	6.681 (1.221)	55	294396			45.78- 105.78	75.85
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.825	6.825 (1.070)	63	232649	51.9607	51.961	80.00- 120.00	100.00
6.825	6.825 (1.070)	62	158530			39.44- 99.44	68.14
6.825	6.825 (1.070)	41	139217			29.63- 89.63	59.84
136 1,4-Dioxane					CAS #: 123-91-1		
6.911	6.911 (1.083)	88	156587	54.3266	54.327	80.00- 120.00	100.00
6.911	6.911 (1.083)	58	97253			35.98- 95.98	62.11
6.911	6.911 (1.083)	57	34407			0.00- 51.57	21.97

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
138 Bromodichloromethane					CAS #: 75-27-4		
7.054	7.054 (1.106)	83	508802	52.5717	52.572	80.00- 120.00	100.00
7.054	7.054 (1.106)	85	322179			33.11- 93.11	63.32
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.434	7.434 (1.165)	75	372572	47.9114	47.911	80.00- 120.00	100.00
7.434	7.434 (1.165)	77	123353			2.26- 62.26	33.11
7.434	7.434 (1.165)	39	208481			24.05- 84.05	55.96
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.548	7.548 (1.183)	58	190197	54.8958	54.896	80.00- 120.00	100.00
7.548	7.548 (1.183)	43	542696			255.05- 315.05	285.33
7.548	7.548 (1.183)	85	90834			16.86- 76.86	47.76
147 Toluene					CAS #: 108-88-3		
7.677	7.677 (1.203)	91	832592	50.6896	50.690	80.00- 120.00	100.00
7.677	7.677 (1.203)	92	487509			28.59- 88.59	58.55
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.921	7.921 (0.893)	75	357320	52.1510	52.151	80.00- 120.00	100.00
7.921	7.921 (0.893)	77	115619			2.75- 62.75	32.36
7.921	7.921 (0.893)	39	189332			22.39- 82.39	52.99
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.078	8.078 (0.911)	97	297765	52.1492	52.149	80.00- 120.00	100.00
8.078	8.078 (0.911)	99	185585			33.52- 93.52	62.33
8.078	8.078 (0.911)	83	252749			54.98- 114.98	84.88
156 Tetrachloroethene					CAS #: 127-18-4		
8.114	8.114 (0.915)	166	447572	50.6206	50.621	80.00- 120.00	100.00
8.114	8.114 (0.915)	129	343680			48.24- 108.24	76.79
8.114	8.114 (0.915)	131	333247			44.94- 104.94	74.46
158 2-Hexanone					CAS #: 591-78-6		
8.250	8.250 (0.931)	58	254185	56.8869	56.887	80.00- 120.00	100.00
8.250	8.250 (0.931)	43	531253			177.49- 237.49	209.00
8.250	8.250 (0.931)	100	57718			0.00- 53.07	22.71
160 Dibromochloromethane					CAS #: 124-48-1		
8.393	8.393 (0.947)	129	621865	52.9678	52.968	80.00- 120.00	100.00
8.393	8.393 (0.947)	127	474985			45.72- 105.72	76.38
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.508	8.508 (0.960)	107	493200	52.7696	52.770	80.00- 120.00	100.00
8.508	8.508 (0.960)	109	477800			67.26- 127.26	96.88

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
165 Chlorobenzene					CAS #: 108-90-7		
8.895	8.895 (1.003)	112	738687	52.0901	52.090	80.00- 120.00	100.00
8.895	8.895 (1.003)	114	230587			1.53- 61.53	31.22
8.888	8.895 (1.002)	77	371786			21.26- 81.26	50.33
167 Ethyl Benzene					CAS #: 100-41-4		
8.945	8.945 (1.009)	106	362621	51.6029	51.603	80.00- 120.00	100.00
8.945	8.945 (1.009)	91	1094946			268.22- 328.22	301.95
169 m,p-Xylene					CAS #: 108-38-3		
9.038	9.038 (1.019)	106	458350	53.3994	53.399	80.00- 120.00	100.00
9.038	9.038 (1.019)	91	884943			164.61- 224.61	193.07
171 o-Xylene					CAS #: 95-47-6		
9.389	9.389 (1.059)	106	436954	54.1317	54.132	80.00- 120.00	100.00
9.382	9.389 (1.058)	91	883136			171.64- 231.64	202.11
172 Styrene					CAS #: 100-42-5		
9.403	9.403 (1.061)	104	686906	53.2687	53.269	80.00- 120.00	100.00
9.403	9.403 (1.061)	78	319468			16.00- 76.00	46.51
174 Bromoform					CAS #: 75-25-2		
9.604	9.604 (1.083)	173	626206	54.1076	54.108	80.00- 120.00	100.00
9.604	9.604 (1.083)	171	316654			20.98- 80.98	50.57
175 Cumene					CAS #: 98-82-8		
9.676	9.676 (1.091)	105	1334187	53.3699	53.370	80.00- 120.00	100.00
9.676	9.676 (1.091)	120	367564			0.00- 57.78	27.55
9.676	9.676 (1.091)	51	119357			0.00- 38.75	8.95
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.991	9.991 (1.127)	83	630599	52.1225	52.122	80.00- 120.00	100.00
9.991	9.991 (1.127)	85	407082			34.49- 94.49	64.55
182 Propylbenzene					CAS #: 103-65-1		
10.027	10.027 (1.131)	91	1510761	53.1475	53.148	80.00- 120.00	100.00
10.027	10.027 (1.131)	120	380138			0.00- 55.48	25.16
10.027	10.027 (1.131)	105	58730			0.00- 33.87	3.89
188 4-Ethyltoluene					CAS #: 622-96-8		
10.120	10.120 (1.141)	120	430374	53.8630	53.863	80.00- 120.00	100.00
10.120	10.120 (1.141)	105	1334175			281.42- 341.42	310.00
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.177	10.177 (1.148)	120	562135	52.5662	52.566	80.00- 120.00	100.00
10.177	10.177 (1.148)	105	1135872			170.60- 230.60	202.06

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.499	10.499 (1.184)	120	504628	52.6758	52.676	80.00- 120.00	100.00
10.499	10.499 (1.184)	105	1079392			180.85- 240.85	213.90
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.786	10.786 (1.217)	146	780896	53.2165	53.216	80.00- 120.00	100.00
10.786	10.786 (1.217)	148	503909			34.13- 94.13	64.53
10.786	10.786 (1.217)	111	303900			8.40- 68.40	38.92
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.872	10.865 (1.226)	146	783444	52.7314	52.731	80.00- 120.00	100.00
10.872	10.865 (1.226)	148	511474			35.82- 95.82	65.29
10.865	10.865 (1.225)	111	290767			7.65- 67.65	37.11
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.986	10.986 (1.239)	91	962514	56.7975	56.798	80.00- 120.00	100.00
10.986	10.986 (1.239)	126	229177			0.00- 54.31	23.81
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.201	11.194 (1.263)	146	727572	52.9019	52.902	80.00- 120.00	100.00
11.201	11.194 (1.263)	148	473046			34.29- 94.29	65.02
11.201	11.194 (1.263)	111	288745			9.37- 69.37	39.69
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.627	12.620 (1.424)	180	486153	47.5749	47.575	80.00- 120.00	100.00
12.627	12.620 (1.424)	182	468559			66.30- 126.30	96.38
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.720	12.713 (1.435)	225	404820	47.2793	47.279	80.00- 120.00	100.00
12.720	12.713 (1.435)	223	255403			32.59- 92.59	63.09

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a092117.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msda.i/21sep15.b/a15q0921a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 21-SEP-2015
Calibration Time: 21:07
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	152172	91303	213041	150776	-0.92
123 1,4-Difluorobenze	627705	376623	878787	625222	-0.40
163 Chlorobenzene-d5	581049	348629	813469	573463	-1.31

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.47	5.14	5.80	5.47	0.00
123 1,4-Difluorobenze	6.38	6.05	6.71	6.38	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 21sep15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: ICV Client Smp ID: ICV
Level: LOW Operator: cb
Data Type: MS DATA SampleType: LCS
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: AT12noNaph.sub
Method File: /chem/msda.i/21sep15.b/a15q0921a.m
Misc Info: 50ppbv (200ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9 Propylene	50.000	47.341	94.68	70-130
11 Freon 12	50.000	51.033	102.07	70-130
15 Freon 114	50.000	52.753	105.51	70-130
17 Chloromethane	50.000	47.669	95.34	70-130
23 Butane	50.000	51.786	103.57	70-130
25 Vinyl Chloride	50.000	51.620	103.24	70-130
26 1,3-Butadiene	50.000	49.748	99.50	70-130
29 Bromomethane	50.000	54.304	108.61	70-130
30 Chloroethane	50.000	52.429	104.86	70-130
31 Isopentane	50.000	49.192	98.38	70-130
35 Freon 11	50.000	52.550	105.10	70-130
42 Ethanol	50.000	47.955	95.91	70-130
49 Freon 113	50.000	51.419	102.84	70-130
50 1,1-Dichloroethene	50.000	49.829	99.66	70-130
52 Acetone	50.000	50.544	101.09	70-130
56 Carbon Disulfide	50.000	43.227	86.45	70-130
57 2-Propanol	50.000	53.634	107.27	70-130
58 3-Chloropropene	50.000	48.026	96.05	70-130
66 Methylene Chloride	50.000	50.315	100.63	70-130
72 Methyl tert-butyl	50.000	50.065	100.13	70-130
73 trans-1,2-Dichloro	50.000	43.787	87.57	70-130
78 Hexane	50.000	48.457	96.91	70-130
82 1,1-Dichloroethane	50.000	50.236	100.47	70-130
86 Vinyl Acetate	50.000	50.710	101.42	70-130
91 cis-1,2-Dichloroet	50.000	57.001	114.00	70-130
92 2-Butanone	50.000	49.164	98.33	70-130
99 Tetrahydrofuran	50.000	47.318	94.64	70-130
100 Chloroform	50.000	49.584	99.17	70-130
103 1,1,1-Trichloroeth	50.000	51.056	102.11	70-130
106 Carbon Tetrachlori	50.000	52.121	104.24	70-130
102 Cyclohexane	50.000	51.244	102.49	70-130
113 2,2,4-Trimethylpen	50.000	49.844	99.69	70-130
116 Benzene	50.000	49.228	98.46	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	50.000	50.689	101.38	70-130
121 Heptane	50.000	48.135	96.27	70-130
125 Trichloroethene	50.000	50.233	100.47	70-130
127 Methylcyclohexane	50.000	49.962	99.92	70-130
132 1,2-Dichloropropan	50.000	51.961	103.92	70-130
136 1,4-Dioxane	50.000	54.327	108.65	70-130
138 Bromodichlorometha	50.000	52.572	105.14	70-130
144 cis-1,3-Dichloropr	50.000	47.911	95.82	70-130
145 4-Methyl-2-pentano	50.000	54.896	109.79	70-130
147 Toluene	50.000	50.690	101.38	70-130
150 trans-1,3-Dichloro	50.000	52.151	104.30	70-130
155 1,1,2-Trichloroeth	50.000	52.149	104.30	70-130
156 Tetrachloroethene	50.000	50.621	101.24	70-130
158 2-Hexanone	50.000	56.887	113.77	70-130
160 Dibromochlorometha	50.000	52.968	105.94	70-130
161 1,2-Dibromoethane	50.000	52.770	105.54	70-130
165 Chlorobenzene	50.000	52.090	104.18	70-130
167 Ethyl Benzene	50.000	51.603	103.21	70-130
169 m,p-Xylene	50.000	53.399	106.80	70-130
171 o-Xylene	50.000	54.132	108.26	70-130
172 Styrene	50.000	53.269	106.54	70-130
174 Bromoform	50.000	54.108	108.22	70-130
175 Cumene	50.000	53.370	106.74	70-130
181 1,1,2,2-Tetrachlor	50.000	52.122	104.25	70-130
182 Propylbenzene	50.000	53.148	106.30	70-130
188 4-Ethyltoluene	50.000	53.863	107.73	70-130
190 1,3,5-Trimethylben	50.000	52.566	105.13	70-130
196 1,2,4-Trimethylben	50.000	52.676	105.35	70-130
208 1,3-Dichlorobenzen	50.000	53.216	106.43	70-130
209 1,4-Dichlorobenzen	50.000	52.731	105.46	70-130
212 alpha-Chlorotoluen	50.000	56.798	113.60	70-130
214 1,2-Dichlorobenzen	50.000	52.902	105.80	70-130
226 1,2,4-Trichloroben	50.000	47.575	95.15	70-130
227 Hexachlorobutadien	50.000	47.279	94.56	70-130
228 Naphthalene	5.000	0.000	0.00*	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	24.238	96.95	70-130
$ 146 Toluene-d8	25.000	24.951	99.80	70-130
$ 177 4-Bromofluorobenze	25.000	24.992	99.97	70-130

Data File: /chem/msda.i/21sep15.b/a092117.d

Date : 22-SEP-2015 08:55

Client ID: ICV

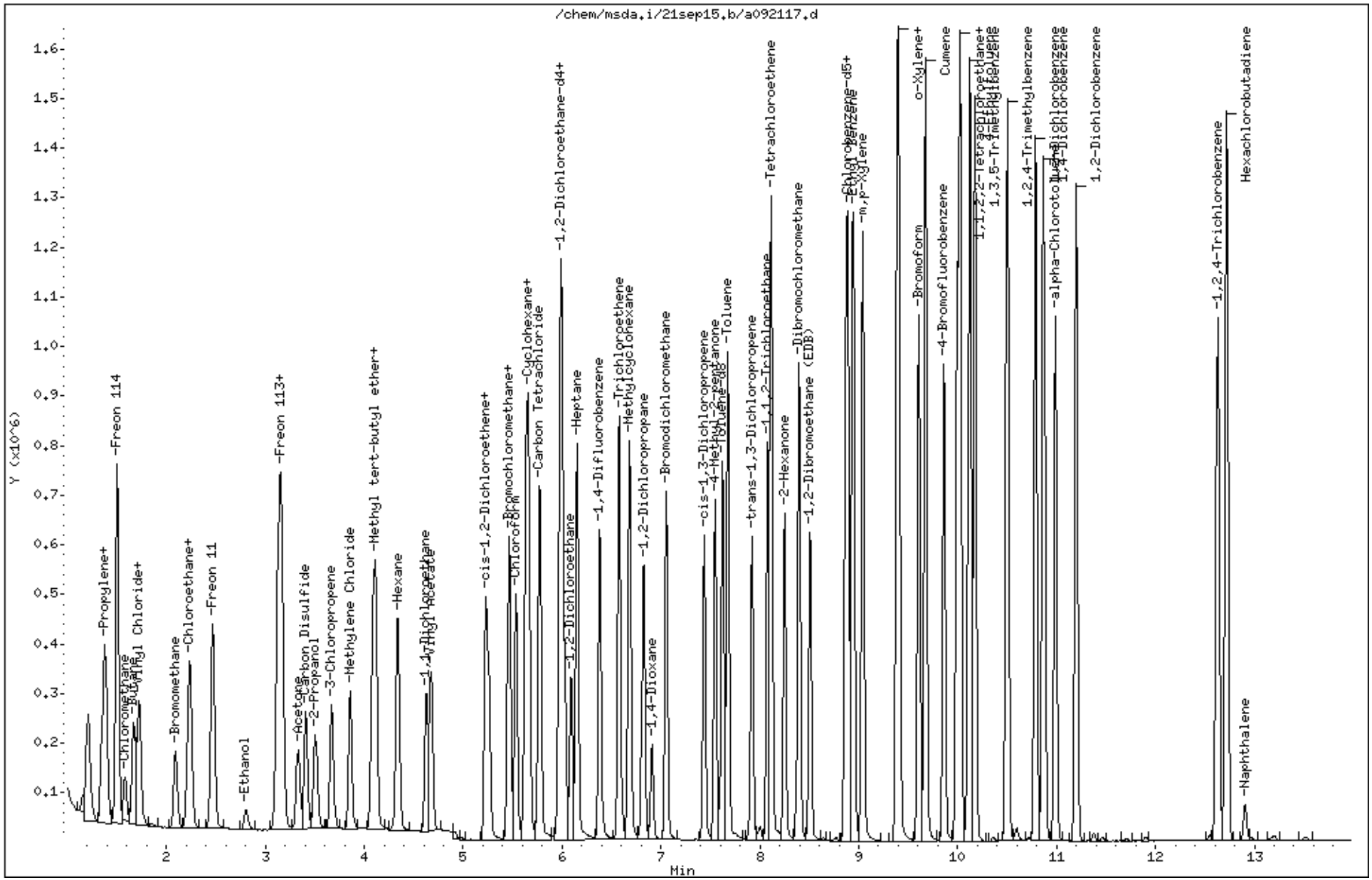
Sample Info: 50ml 2736-186

Column phase: RTX-624

Instrument: msda.i

Operator: cb

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/21sep15.b/a092105.d
Lab Smp Id: ICAL Level #2
Inj Date : 21-SEP-2015 18:47
Operator : js Inst ID: msda.i
Smp Info : 50ml 2736-256
Misc Info : 0.5ppbv (2.0ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/21sep15.b/a15q0921a.m
Meth Date : 22-Sep-2015 11:24 mskidmor Quant Type: ISTD
Cal Date : 21-SEP-2015 18:47 Cal File: a092105.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12low.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.464	5.464 (1.000)	130	148340	25.0000		80.00- 120.00	100.00
5.464	5.464 (1.000)	128	120119			46.57- 106.57	80.98
5.464	5.464 (1.000)	49	169908			75.38- 135.38	114.54
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.381	6.381 (1.000)	114	628494	25.0000		80.00- 120.00	100.00
6.381	6.381 (1.000)	88	92051			0.00- 44.55	14.65
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	571333	25.0000		80.00- 120.00	100.00
8.866	8.866 (1.000)	82	281989			19.23- 79.23	49.36
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.023	6.023 (1.102)	65	186457	25.0000	25.515	80.00- 120.00	100.00
6.023	6.023 (1.102)	67	94881			27.41- 87.41	50.89

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.620	7.620 (1.194)	98	615611	25.0000	24.901	80.00- 120.00	100.00
7.620	7.620 (1.194)	70	60937			0.00- 39.72	9.90
7.620	7.620 (1.194)	100	402455			36.51- 96.51	65.37
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.862	9.862 (1.112)	174	350087	25.0000	24.694	80.00- 120.00	100.00
9.862	9.862 (1.112)	95	386412			82.23- 142.23	110.38
9.862	9.862 (1.112)	176	342634			67.41- 127.41	97.87
11 Freon 12					CAS #: 75-71-8		
1.374	1.374 (0.251)	85	4488	0.50000	0.4930	80.00- 120.00	100.00(a)
1.381	1.381 (0.253)	87	1203			2.75- 62.75	26.80
15 Freon 114					CAS #: 76-14-2		
1.495	1.495 (0.274)	135	4147	0.50000	0.5495	80.00- 120.00	100.00
1.503	1.503 (0.275)	137	1126			2.30- 62.30	27.15
25 Vinyl Chloride					CAS #: 75-01-4		
1.696	1.696 (0.310)	62	1583	0.50000	0.5060	80.00- 120.00	100.00
1.710	1.710 (0.313)	64	358			1.64- 61.64	22.62
26 1,3-Butadiene					CAS #: 106-99-0		
1.725	1.725 (0.316)	54	1381	0.50000	0.5505	80.00- 120.00	100.00
1.725	1.725 (0.316)	39	1656			88.19- 148.19	119.91
29 Bromomethane					CAS #: 74-83-9		
2.090	2.090 (0.383)	94	1352	0.50000	0.4702	80.00- 120.00	100.00(a)
2.090	2.090 (0.383)	96	1533			66.60- 126.60	113.39
35 Freon 11					CAS #: 75-69-4		
2.462	2.462 (0.451)	101	4923	0.50000	0.4744	80.00- 120.00	100.00(a)
2.462	2.462 (0.451)	103	4000			35.05- 95.05	81.25
49 Freon 113					CAS #: 76-13-1		
3.129	3.129 (0.573)	151	3521	0.50000	0.4763	80.00- 120.00	100.00(a)
3.136	3.136 (0.574)	153	2683			33.28- 93.28	76.20
3.136	3.136 (0.574)	101	4446			84.64- 144.64	126.27
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.164	3.164 (0.579)	98	1254	0.50000	0.5224	80.00- 120.00	100.00
3.164	3.164 (0.579)	96	2007			131.99- 191.99	160.05
3.164	3.164 (0.579)	61	2505			211.38- 271.38	199.76
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.088	4.088 (0.748)	73	5721	0.50000	0.5483	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether (continued)							
4.096	4.096 (0.750)	57	1199			0.00- 51.56	20.96
4.096	4.096 (0.750)	41	1402			0.00- 53.23	24.51
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.110	4.110 (0.752)	98	981	0.50000	0.3983	80.00- 120.00	100.00(a)
4.110	4.110 (0.752)	61	2591			176.45- 236.45	264.12
4.110	4.110 (0.752)	96	2065			128.76- 188.76	210.50
78 Hexane					CAS #: 110-54-3		
4.332	4.332 (0.793)	57	3037	0.50000	0.5123	80.00- 120.00	100.00
4.325	4.325 (0.792)	43	3636			38.99- 98.99	119.72
4.332	4.332 (0.793)	86	272			0.00- 47.90	8.96
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.626	4.626 (0.847)	63	3085	0.50000	0.4683	80.00- 120.00	100.00(a)
4.626	4.626 (0.847)	65	844			1.73- 61.73	27.36
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.227	5.227 (0.957)	98	1435	0.50000	0.5251	80.00- 120.00	100.00
5.227	5.227 (0.957)	96	2698			125.14- 185.14	188.01
5.227	5.227 (0.957)	61	2265			152.76- 212.76	157.84
99 Tetrahydrofuran					CAS #: 109-99-9		
5.464	5.464 (1.000)	42	3012	0.50000	0.6347	80.00- 120.00	100.00
5.471	5.471 (1.001)	71	735			6.28- 66.28	24.40
5.464	5.464 (1.000)	72	1053			7.91- 67.91	34.96
100 Chloroform					CAS #: 67-66-3		
5.528	5.528 (1.012)	83	4504	0.50000	0.5286	80.00- 120.00	100.00
5.528	5.528 (1.012)	85	2702			33.64- 93.64	59.99
102 Cyclohexane					CAS #: 110-82-7		
5.636	5.636 (1.031)	84	2506	0.50000	0.4745	80.00- 120.00	100.00(a)
5.636	5.636 (1.031)	56	3008			81.39- 141.39	120.03
5.629	5.629 (1.030)	41	2725			37.15- 97.15	108.74
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.657	5.657 (1.035)	97	4800	0.50000	0.5158	80.00- 120.00	100.00
5.657	5.657 (1.035)	99	3131			35.23- 95.23	65.23
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.772	5.772 (1.056)	119	4872	0.50000	0.4762	80.00- 120.00	100.00(a)
5.772	5.772 (1.056)	117	5464			72.15- 132.15	112.15
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.980	5.980 (1.094)	57	9215	0.50000	0.5005	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
113 2,2,4-Trimethylpentane (continued)							
5.972	5.972 (1.093)	56	3423			0.25- 60.25	37.15
5.980	5.980 (1.094)	41	3529			0.00- 57.25	38.30
116 Benzene					CAS #: 71-43-2		
5.994	5.994 (0.939)	78	6721	0.50000	0.5522	80.00- 120.00	100.00
6.001	6.001 (0.940)	77	2031			0.00- 53.40	30.22
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.087	6.087 (0.954)	62	3092	0.50000	0.5641	80.00- 120.00	100.00
6.087	6.087 (0.954)	64	1138			2.46- 62.46	36.80
121 Heptane					CAS #: 142-82-5		
6.151	6.151 (0.964)	71	2808	0.50000	0.6264	80.00- 120.00	100.00
6.151	6.151 (0.964)	43	4386			156.27- 216.27	156.20
6.144	6.144 (0.963)	57	2377			72.07- 132.07	84.65
125 Trichloroethene					CAS #: 79-01-6		
6.574	6.574 (1.030)	95	3433	0.50000	0.5639	80.00- 120.00	100.00
6.574	6.574 (1.030)	130	3222			80.99- 140.99	93.85
6.581	6.581 (1.031)	97	2216			35.67- 95.67	64.55
127 Methylcyclohexane					CAS #: 108-87-2		
6.674	6.674 (1.222)	83	4195	0.50000	0.5488	80.00- 120.00	100.00(a)
6.682	6.682 (1.223)	98	1868			17.02- 77.02	44.53
6.674	6.674 (1.222)	55	3515			45.78- 105.78	83.79
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.818	6.818 (1.068)	63	2302	0.50000	0.5115	80.00- 120.00	100.00
6.825	6.825 (1.070)	62	1788			39.44- 99.44	77.67
6.825	6.825 (1.070)	41	2473			29.63- 89.63	107.43
138 Bromodichloromethane					CAS #: 75-27-4		
7.047	7.047 (1.104)	83	5083	0.50000	0.5225	80.00- 120.00	100.00
7.047	7.047 (1.104)	85	2809			33.11- 93.11	55.26
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.434	7.434 (1.165)	75	4117	0.50000	0.5267	80.00- 120.00	100.00
7.441	7.441 (1.166)	77	6156			2.26- 62.26	149.53
7.434	7.434 (1.165)	39	2497			24.05- 84.05	60.65
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.548	7.548 (1.183)	58	1911	0.50000	0.5487	80.00- 120.00	100.00
7.548	7.548 (1.183)	43	7001			255.05- 315.05	366.35
7.555	7.555 (1.184)	85	1134			16.86- 76.86	59.34

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
147 Toluene					CAS #: 108-88-3		
7.677	7.677 (1.203)	91	9179	0.50000	0.5559	80.00- 120.00	100.00
7.677	7.677 (1.203)	92	5020			28.59- 88.59	54.69
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.921	7.921 (0.893)	75	3304	0.50000	0.4840	80.00- 120.00	100.00(a)
7.921	7.921 (0.893)	77	2617			2.75- 62.75	79.21
7.921	7.921 (0.893)	39	2640			22.39- 82.39	79.90
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.078	8.078 (0.911)	97	2798	0.50000	0.4918	80.00- 120.00	100.00(a)
8.078	8.078 (0.911)	99	1994			33.52- 93.52	71.27
8.078	8.078 (0.911)	83	2558			54.98- 114.98	91.42
156 Tetrachloroethene					CAS #: 127-18-4		
8.114	8.114 (0.915)	166	4642	0.50000	0.5270	80.00- 120.00	100.00
8.114	8.114 (0.915)	129	3766			48.24- 108.24	81.13
8.114	8.114 (0.915)	131	3702			44.94- 104.94	79.75
160 Dibromochloromethane					CAS #: 124-48-1		
8.393	8.393 (0.947)	129	5979	0.50000	0.5112	80.00- 120.00	100.00
8.393	8.393 (0.947)	127	4523			45.72- 105.72	75.65
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.508	8.508 (0.960)	107	4371	0.50000	0.4694	80.00- 120.00	100.00(a)
8.508	8.508 (0.960)	109	4750			67.26- 127.26	108.67
165 Chlorobenzene					CAS #: 108-90-7		
8.888	8.888 (1.002)	112	7143	0.50000	0.5056	80.00- 120.00	100.00
8.888	8.888 (1.002)	114	2855			1.53- 61.53	39.97
8.873	8.873 (1.001)	77	8675			21.26- 81.26	121.45
167 Ethyl Benzene					CAS #: 100-41-4		
8.938	8.938 (1.008)	106	3692	0.50000	0.5274	80.00- 120.00	100.00
8.945	8.945 (1.009)	91	10289			268.22- 328.22	278.68
169 m,p-Xylene					CAS #: 108-38-3		
9.045	9.045 (1.020)	106	3756	0.50000	0.4392	80.00- 120.00	100.00(a)
9.038	9.038 (1.019)	91	8389			164.61- 224.61	223.35
171 o-Xylene					CAS #: 95-47-6		
9.389	9.389 (1.059)	106	3709	0.50000	0.4612	80.00- 120.00	100.00(a)
9.382	9.382 (1.058)	91	7687			171.64- 231.64	207.25
172 Styrene					CAS #: 100-42-5		
9.403	9.403 (1.061)	104	5880	0.50000	0.4577	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
172 Styrene (continued)							
9.403	9.403 (1.061)	78	2715			16.00- 76.00	46.17
174 Bromoform					CAS #: 75-25-2		
9.604	9.604 (1.083)	173	5804	0.50000	0.5034	80.00- 120.00	100.00
9.604	9.604 (1.083)	171	2329			20.98- 80.98	40.13
175 Cumene					CAS #: 98-82-8		
9.676	9.676 (1.091)	105	11709	0.50000	0.4701	80.00- 120.00	100.00(a)
9.676	9.676 (1.091)	120	3234			0.00- 57.78	27.62
9.676	9.676 (1.091)	51	1302			0.00- 38.75	11.12
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.991	9.991 (1.127)	83	6393	0.50000	0.5304	80.00- 120.00	100.00
9.991	9.991 (1.127)	85	4045			34.49- 94.49	63.27
182 Propylbenzene					CAS #: 103-65-1		
10.027	10.027 (1.131)	91	15103	0.50000	0.5333	80.00- 120.00	100.00
10.027	10.027 (1.131)	120	3338			0.00- 55.48	22.10
10.027	10.027 (1.131)	105	487			0.00- 33.87	3.22
188 4-Ethyltoluene					CAS #: 622-96-8		
10.127	10.127 (1.142)	120	3930	0.50000	0.4937	80.00- 120.00	100.00(a)
10.120	10.120 (1.141)	105	12144			281.42- 341.42	309.01
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.170	10.170 (1.147)	120	5049	0.50000	0.4739	80.00- 120.00	100.00(a)
10.177	10.177 (1.148)	105	9489			170.60- 230.60	187.94
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.499	10.499 (1.184)	120	4611	0.50000	0.4831	80.00- 120.00	100.00(a)
10.499	10.499 (1.184)	105	10132			180.85- 240.85	219.74
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.786	10.786 (1.217)	146	6782	0.50000	0.4639	80.00- 120.00	100.00(a)
10.786	10.786 (1.217)	148	4511			34.13- 94.13	66.51
10.786	10.786 (1.217)	111	2247			8.40- 68.40	33.13
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.872	10.872 (1.226)	146	7598	0.50000	0.5133	80.00- 120.00	100.00
10.872	10.872 (1.226)	148	4049			35.82- 95.82	53.29
10.872	10.872 (1.226)	111	2735			7.65- 67.65	36.00
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.987	10.987 (1.239)	91	7984	0.50000	0.4729	80.00- 120.00	100.00(a)
10.987	10.987 (1.239)	126	1529			0.00- 54.31	19.15

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.201	11.201 (1.263)	146	6330	0.50000	0.4620	80.00- 120.00	100.00(a)
11.201	11.201 (1.263)	148	3795			34.29- 94.29	59.95
11.201	11.201 (1.263)	111	2767			9.37- 69.37	43.71

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a092105.d
Lab Smp Id: ICAL Level #2
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msda.i/21sep15.b/a15q0921a.m
Misc Info: 0.5ppbv (2.0ppbv)

Calibration Date: 21-SEP-2015
Calibration Time: 21:07
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	152172	91303	213041	148340	-2.52
123 1,4-Difluorobenze	627705	376623	878787	628494	0.13
163 Chlorobenzene-d5	581049	348629	813469	571333	-1.67

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.47	5.14	5.80	5.46	-0.13
123 1,4-Difluorobenze	6.38	6.05	6.71	6.38	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msda.i/21sep15.b/a092105.d

Date : 21-SEP-2015 18:47

Client ID:

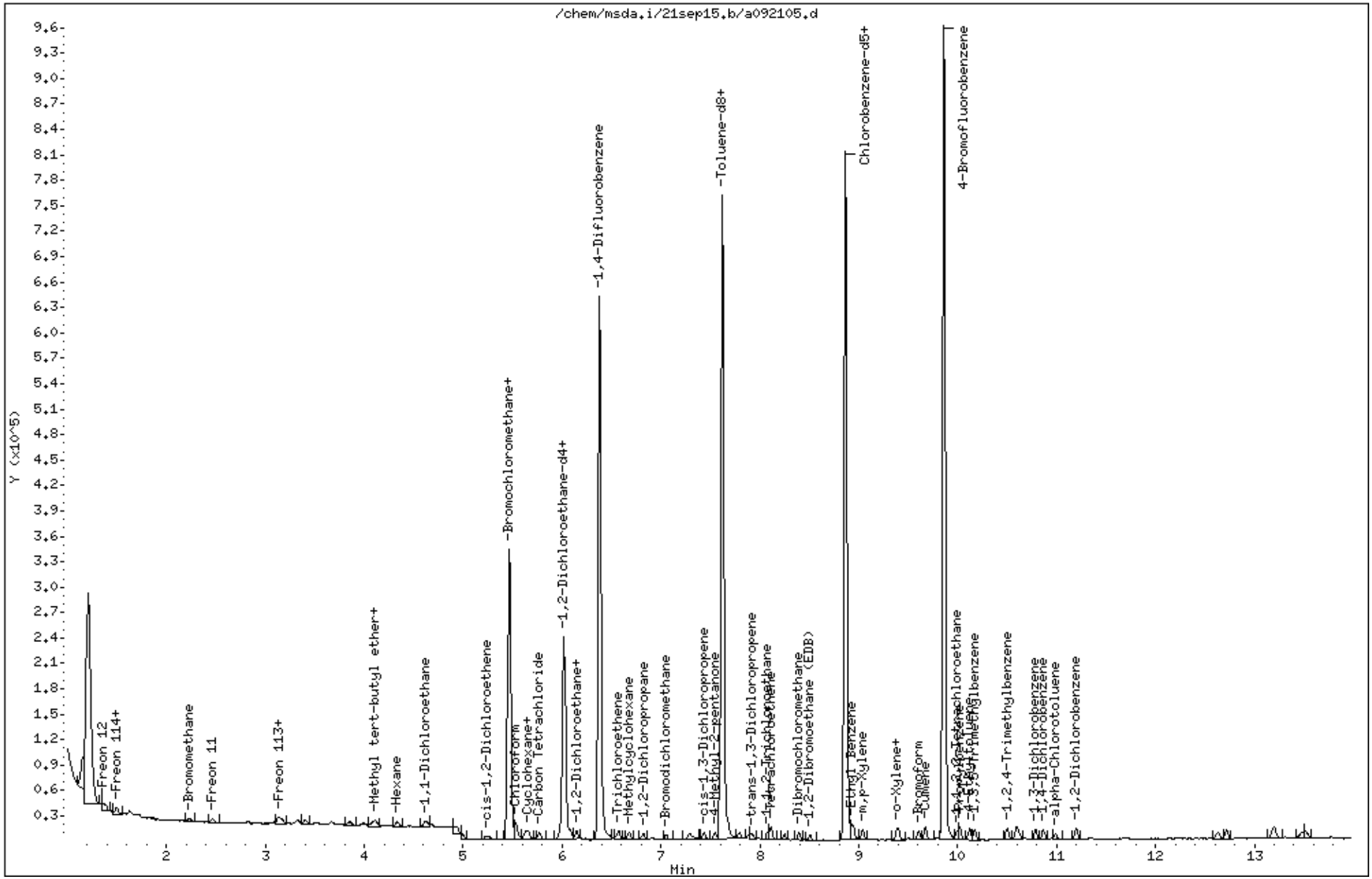
Sample Info: 50ml 2736-256

Column phase: RTX-624

Instrument: msda.i

Operator: js

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/21sep15.b/a092113.d
Lab Smp Id: ICAL Level #3
Inj Date : 22-SEP-2015 06:40
Operator : mjs Inst ID: msda.i
Smp Info : 200ml 2736-256
Misc Info : 2.0ppbv (2.0ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/21sep15.b/a15q0921a.m
Meth Date : 22-Sep-2015 11:24 mskidmor Quant Type: ISTD
Cal Date : 22-SEP-2015 06:40 Cal File: a092113.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12mdlnoNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.492	5.492 (1.000)	130	144463	25.0000		80.00- 120.00	100.00
5.492	5.492 (1.000)	128	115568			46.57- 106.57	80.00
5.492	5.492 (1.000)	49	164384			75.38- 135.38	113.79
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.402	6.402 (1.000)	114	620782	25.0000		80.00- 120.00	100.00
6.402	6.402 (1.000)	88	91249			0.00- 44.55	14.70
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.873	8.873 (1.000)	117	563315	25.0000		80.00- 120.00	100.00
8.873	8.873 (1.000)	82	277535			19.23- 79.23	49.27
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.044	6.044 (1.100)	65	184035	25.0000	25.860	80.00- 120.00	100.00
6.044	6.044 (1.100)	67	93506			27.41- 87.41	50.81

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.191)	98	607254	25.0000	24.868	80.00- 120.00	100.00
7.627	7.627 (1.191)	70	59116			0.00- 39.72	9.73
7.627	7.627 (1.191)	100	404971			36.51- 96.51	66.69
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.869	9.869 (1.112)	174	343832	25.0000	24.598	80.00- 120.00	100.00
9.862	9.862 (1.111)	95	385959			82.23- 142.23	112.25
9.869	9.869 (1.112)	176	336717			67.41- 127.41	97.93
9 Propylene					CAS #: 115-07-1		
1.424	1.424 (0.259)	41	6256	2.00000	2.246	80.00- 120.00	100.00
1.424	1.424 (0.259)	42	5069			34.74- 94.74	81.03
1.424	1.424 (0.259)	39	4443			42.01- 102.01	71.02
11 Freon 12					CAS #: 75-71-8		
1.452	1.452 (0.264)	85	19598	2.00000	2.211	80.00- 120.00	100.00
1.452	1.452 (0.264)	87	6500			2.75- 62.75	33.17
15 Freon 114					CAS #: 76-14-2		
1.574	1.574 (0.287)	135	15537	2.00000	2.114	80.00- 120.00	100.00
1.574	1.574 (0.287)	137	4949			2.30- 62.30	31.85
17 Chloromethane					CAS #: 74-87-3		
1.653	1.653 (0.301)	50	7046	2.00000	2.610	80.00- 120.00	100.00(aH)
1.660	1.660 (0.302)	52	2286			2.93- 62.93	32.44
23 Butane					CAS #: 106-97-8		
1.732	1.732 (0.315)	58	1039	2.00000	1.695	80.00- 120.00	100.00(a)
1.739	1.739 (0.317)	43	13714			790.29- 850.29	1319.92
25 Vinyl Chloride					CAS #: 75-01-4		
1.775	1.775 (0.323)	62	6640	2.00000	2.179	80.00- 120.00	100.00
1.782	1.782 (0.324)	64	2173			1.64- 61.64	32.73
26 1,3-Butadiene					CAS #: 106-99-0		
1.803	1.803 (0.328)	54	5268	2.00000	2.156	80.00- 120.00	100.00
1.796	1.796 (0.327)	39	6349			88.19- 148.19	120.52
29 Bromomethane					CAS #: 74-83-9		
2.162	2.162 (0.394)	94	5711	2.00000	2.039	80.00- 120.00	100.00(a)
2.169	2.169 (0.395)	96	5836			66.60- 126.60	102.19
30 Chloroethane					CAS #: 75-00-3		
2.283	2.283 (0.416)	64	3171	2.00000	2.028	80.00- 120.00	100.00
2.276	2.276 (0.414)	66	1009			1.66- 61.66	31.82

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.291	2.291 (0.417)	49	1162			2.43- 62.43	36.64
31 Isopentane					CAS #: 78-78-4		
2.305	2.305 (0.420)	43	10498	2.00000	2.479	80.00- 120.00	100.00
2.305	2.305 (0.420)	57	6210			33.38- 93.38	59.15
35 Freon 11					CAS #: 75-69-4		
2.534	2.534 (0.461)	101	21378	2.00000	2.115	80.00- 120.00	100.00
2.534	2.534 (0.461)	103	14479			35.05- 95.05	67.73
42 Ethanol					CAS #: 64-17-5		
2.885	2.885 (0.525)	45	4623	2.00000	3.049	80.00- 120.00	100.00
2.864	2.864 (0.521)	43	554			0.00- 48.51	11.98
2.892	2.892 (0.527)	46	1553			6.94- 66.94	33.59
49 Freon 113					CAS #: 76-13-1		
3.200	3.200 (0.583)	151	15333	2.00000	2.130	80.00- 120.00	100.00
3.200	3.200 (0.583)	153	9756			33.28- 93.28	63.63
3.200	3.200 (0.583)	101	18216			84.64- 144.64	118.80
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.236	3.236 (0.589)	98	5320	2.00000	2.276	80.00- 120.00	100.00
3.229	3.229 (0.588)	96	7904			131.99- 191.99	148.57
3.229	3.229 (0.588)	61	11449			211.38- 271.38	215.21
52 Acetone					CAS #: 67-64-1		
3.401	3.401 (0.619)	58	6678	2.00000	4.284	80.00- 120.00	100.00(a)
3.394	3.394 (0.618)	43	23843			323.78- 383.78	357.04
56 Carbon Disulfide					CAS #: 75-15-0		
3.472	3.472 (0.632)	76	23842	2.00000	2.314	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.566	3.566 (0.649)	45	15189	2.00000	2.492	80.00- 120.00	100.00
3.566	3.566 (0.649)	43	4395			0.00- 48.56	28.94
3.566	3.566 (0.649)	59	293			0.00- 33.73	1.93
58 3-Chloropropene					CAS #: 107-05-1		
3.716	3.716 (0.677)	76	3890	2.00000	2.150	80.00- 120.00	100.00
3.723	3.723 (0.678)	41	10082			246.04- 306.04	259.18
66 Methylene Chloride					CAS #: 75-09-2		
3.909	3.909 (0.712)	49	9521	2.00000	2.240	80.00- 120.00	100.00(a)
3.909	3.909 (0.712)	84	7124			48.40- 108.40	74.82
3.909	3.909 (0.712)	51	2951			0.91- 60.91	30.99

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.038	4.038 (0.735)	59	14493	2.00000	2.183	80.00- 120.00	100.00
4.038	4.038 (0.735)	41	3177			0.00- 52.50	21.92
4.038	4.038 (0.735)	57	1491			0.00- 40.56	10.29
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.139	4.139 (0.754)	73	21300	2.00000	2.096	80.00- 120.00	100.00
4.139	4.139 (0.754)	57	4861			0.00- 51.56	22.82
4.139	4.139 (0.754)	41	5058			0.00- 53.23	23.75
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.160	4.160 (0.757)	98	5583	2.00000	2.328	80.00- 120.00	100.00
4.160	4.160 (0.757)	61	10263			176.45- 236.45	183.83
4.160	4.160 (0.757)	96	8232			128.76- 188.76	147.45
78 Hexane					CAS #: 110-54-3		
4.375	4.375 (0.797)	57	12101	2.00000	2.096	80.00- 120.00	100.00
4.375	4.375 (0.797)	43	7670			38.99- 98.99	63.38
4.375	4.375 (0.797)	86	2032			0.00- 47.90	16.79
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.669	4.669 (0.850)	63	14423	2.00000	2.248	80.00- 120.00	100.00
4.662	4.662 (0.849)	65	4904			1.73- 61.73	34.00
83 Isopropyl ether					CAS #: 108-20-3		
4.662	4.662 (0.849)	45	26933	2.00000	2.120	80.00- 120.00	100.00
4.662	4.662 (0.849)	87	6650			0.00- 57.31	24.69
4.662	4.662 (0.849)	59	2418			0.00- 40.63	8.98
86 Vinyl Acetate					CAS #: 108-05-4		
4.712	4.712 (0.858)	86	2099	2.00000	2.084	80.00- 120.00	100.00
4.712	4.712 (0.858)	43	22391			1171.37-1231.37	1066.75
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.020	5.020 (0.914)	59	21559	2.00000	1.904	80.00- 120.00	100.00(a)
5.020	5.020 (0.914)	87	10090			13.29- 73.29	46.80
5.020	5.020 (0.914)	41	4289			0.00- 49.66	19.89
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.256	5.256 (0.957)	98	5191	2.00000	1.951	80.00- 120.00	100.00
5.256	5.256 (0.957)	96	9214			125.14- 185.14	177.50
5.256	5.256 (0.957)	61	11230			152.76- 212.76	216.34
92 2-Butanone					CAS #: 78-93-3		
5.292	5.292 (0.963)	72	4408	2.00000	2.464	80.00- 120.00	100.00
5.292	5.292 (0.963)	43	20119			417.31- 477.31	456.42

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.292	5.292 (0.963)	57	1801			6.26- 66.26	40.86
99 Tetrahydrofuran					CAS #: 109-99-9		
5.492	5.492 (1.000)	42	10140	2.00000	2.194	80.00- 120.00	100.00
5.492	5.492 (1.000)	71	3344			6.28- 66.28	32.98
5.492	5.492 (1.000)	72	3191			7.91- 67.91	31.47
100 Chloroform					CAS #: 67-66-3		
5.557	5.557 (1.012)	83	17100	2.00000	2.061	80.00- 120.00	100.00
5.557	5.557 (1.012)	85	11529			33.64- 93.64	67.42
102 Cyclohexane					CAS #: 110-82-7		
5.664	5.664 (1.031)	84	11377	2.00000	2.212	80.00- 120.00	100.00
5.664	5.664 (1.031)	56	13202			81.39- 141.39	116.04
5.657	5.657 (1.030)	41	7722			37.15- 97.15	67.87
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.686	5.686 (1.035)	97	19281	2.00000	2.128	80.00- 120.00	100.00
5.686	5.686 (1.035)	99	12591			35.23- 95.23	65.30
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.800	5.800 (1.056)	119	21029	2.00000	2.111	80.00- 120.00	100.00
5.800	5.800 (1.056)	117	21587			72.15- 132.15	102.65
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.001	6.001 (1.093)	57	39010	2.00000	2.176	80.00- 120.00	100.00
6.001	6.001 (1.093)	56	11814			0.25- 60.25	30.28
6.001	6.001 (1.093)	41	11974			0.00- 57.25	30.69
116 Benzene					CAS #: 71-43-2		
6.022	6.022 (0.941)	78	26353	2.00000	2.192	80.00- 120.00	100.00
6.022	6.022 (0.941)	77	5745			0.00- 53.40	21.80
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.094	6.094 (1.110)	87	5727	2.00000	2.004	80.00- 120.00	100.00
6.094	6.094 (1.110)	73	22791			349.72- 409.72	397.96
6.087	6.087 (1.108)	55	5951			62.29- 122.29	103.91
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.108	6.108 (0.954)	62	11288	2.00000	2.085	80.00- 120.00	100.00
6.116	6.116 (0.955)	64	3946			2.46- 62.46	34.96
121 Heptane					CAS #: 142-82-5		
6.173	6.173 (0.964)	71	8343	2.00000	1.884	80.00- 120.00	100.00
6.166	6.166 (0.963)	43	14942			156.27- 216.27	179.10

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.173	6.173 (0.964)	57	8705			72.07- 132.07	104.34
125 Trichloroethene					CAS #: 79-01-6		
6.596	6.596 (1.030)	95	12333	2.00000	2.051	80.00- 120.00	100.00
6.596	6.596 (1.030)	130	13712			80.99- 140.99	111.18
6.596	6.596 (1.030)	97	7541			35.67- 95.67	61.14
127 Methylcyclohexane					CAS #: 108-87-2		
6.696	6.696 (1.219)	83	15791	2.00000	2.121	80.00- 120.00	100.00
6.696	6.696 (1.219)	98	7045			17.02- 77.02	44.61
6.696	6.696 (1.219)	55	12233			45.78- 105.78	77.47
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.832	6.832 (1.067)	63	9076	2.00000	2.042	80.00- 120.00	100.00
6.832	6.832 (1.067)	62	6026			39.44- 99.44	66.39
6.839	6.839 (1.068)	41	6277			29.63- 89.63	69.16
136 1,4-Dioxane					CAS #: 123-91-1		
6.925	6.925 (1.082)	88	7068	2.00000	2.470	80.00- 120.00	100.00
6.925	6.925 (1.082)	58	5063			35.98- 95.98	71.63
6.925	6.925 (1.082)	57	2558			0.00- 51.57	36.19
138 Bromodichloromethane					CAS #: 75-27-4		
7.061	7.061 (1.103)	83	19412	2.00000	2.020	80.00- 120.00	100.00
7.061	7.061 (1.103)	85	12329			33.11- 93.11	63.51
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.448	7.448 (1.163)	75	15202	2.00000	1.969	80.00- 120.00	100.00
7.448	7.448 (1.163)	77	8893			2.26- 62.26	58.50
7.448	7.448 (1.163)	39	9093			24.05- 84.05	59.81
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.563	7.563 (1.181)	58	7838	2.00000	2.278	80.00- 120.00	100.00
7.555	7.555 (1.180)	43	23102			255.05- 315.05	294.74
7.555	7.555 (1.180)	85	3786			16.86- 76.86	48.30
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.200)	91	32586	2.00000	1.998	80.00- 120.00	100.00
7.684	7.684 (1.200)	92	19021			28.59- 88.59	58.37
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.928	7.928 (0.893)	75	14192	2.00000	2.109	80.00- 120.00	100.00
7.928	7.928 (0.893)	77	6093			2.75- 62.75	42.93
7.928	7.928 (0.893)	39	8990			22.39- 82.39	63.35

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.085	8.085 (0.911)	97	11966	2.00000	2.133	80.00- 120.00	100.00
8.085	8.085 (0.911)	99	7756			33.52- 93.52	64.82
8.085	8.085 (0.911)	83	9776			54.98- 114.98	81.70
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.915)	166	18520	2.00000	2.132	80.00- 120.00	100.00
8.121	8.121 (0.915)	129	14268			48.24- 108.24	77.04
8.121	8.121 (0.915)	131	13709			44.94- 104.94	74.02
158 2-Hexanone					CAS #: 591-78-6		
8.257	8.257 (0.931)	58	10525	2.00000	2.398	80.00- 120.00	100.00
8.257	8.257 (0.931)	43	22148			177.49- 237.49	210.43
8.257	8.257 (0.931)	100	2471			0.00- 53.07	23.48
160 Dibromochloromethane					CAS #: 124-48-1		
8.401	8.401 (0.947)	129	22812	2.00000	1.978	80.00- 120.00	100.00
8.401	8.401 (0.947)	127	17721			45.72- 105.72	77.68
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.515	8.515 (0.960)	107	19882	2.00000	2.166	80.00- 120.00	100.00
8.515	8.515 (0.960)	109	17458			67.26- 127.26	87.81
165 Chlorobenzene					CAS #: 108-90-7		
8.895	8.895 (1.002)	112	28800	2.00000	2.067	80.00- 120.00	100.00
8.895	8.895 (1.002)	114	9679			1.53- 61.53	33.61
8.895	8.895 (1.002)	77	20925			21.26- 81.26	72.66
167 Ethyl Benzene					CAS #: 100-41-4		
8.945	8.945 (1.008)	106	13838	2.00000	2.005	80.00- 120.00	100.00
8.945	8.945 (1.008)	91	42639			268.22- 328.22	308.13
169 m,p-Xylene					CAS #: 108-38-3		
9.045	9.045 (1.019)	106	17806	2.00000	2.112	80.00- 120.00	100.00
9.045	9.045 (1.019)	91	31943			164.61- 224.61	179.39
171 o-Xylene					CAS #: 95-47-6		
9.389	9.389 (1.058)	106	16055	2.00000	2.025	80.00- 120.00	100.00
9.389	9.389 (1.058)	91	32515			171.64- 231.64	202.52
172 Styrene					CAS #: 100-42-5		
9.411	9.411 (1.061)	104	23555	2.00000	1.860	80.00- 120.00	100.00
9.411	9.411 (1.061)	78	11862			16.00- 76.00	50.36
174 Bromoform					CAS #: 75-25-2		
9.611	9.611 (1.083)	173	22289	2.00000	1.960	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.611	9.611 (1.083)	171	10766			20.98- 80.98	48.30
175 Cumene					CAS #: 98-82-8		
9.683	9.683 (1.091)	105	50107	2.00000	2.040	80.00- 120.00	100.00
9.683	9.683 (1.091)	120	12853			0.00- 57.78	25.65
9.683	9.683 (1.091)	51	4517			0.00- 38.75	9.01
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.998	9.998 (1.127)	83	24141	2.00000	2.031	80.00- 120.00	100.00
9.998	9.998 (1.127)	85	15216			34.49- 94.49	63.03
182 Propylbenzene					CAS #: 103-65-1		
10.027	10.027 (1.130)	91	56884	2.00000	2.037	80.00- 120.00	100.00
10.027	10.027 (1.130)	120	14556			0.00- 55.48	25.59
10.027	10.027 (1.130)	105	2347			0.00- 33.87	4.13
188 4-Ethyltoluene					CAS #: 622-96-8		
10.127	10.127 (1.141)	120	15837	2.00000	2.018	80.00- 120.00	100.00
10.120	10.120 (1.140)	105	48778			281.42- 341.42	308.00
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.177	10.177 (1.147)	120	20648	2.00000	1.966	80.00- 120.00	100.00
10.177	10.177 (1.147)	105	42475			170.60- 230.60	205.71
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.507	10.507 (1.184)	120	18131	2.00000	1.927	80.00- 120.00	100.00
10.499	10.499 (1.183)	105	39141			180.85- 240.85	215.88
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.786	10.786 (1.216)	146	29422	2.00000	2.041	80.00- 120.00	100.00
10.793	10.793 (1.216)	148	19634			34.13- 94.13	66.73
10.793	10.793 (1.216)	111	11405			8.40- 68.40	38.76
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.872	10.872 (1.225)	146	30561	2.00000	2.094	80.00- 120.00	100.00
10.872	10.872 (1.225)	148	20080			35.82- 95.82	65.70
10.872	10.872 (1.225)	111	10498			7.65- 67.65	34.35
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.986	10.986 (1.238)	91	33447	2.00000	2.009	80.00- 120.00	100.00
10.994	10.994 (1.239)	126	8150			0.00- 54.31	24.37
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.201	11.201 (1.262)	146	28335	2.00000	2.097	80.00- 120.00	100.00
11.201	11.201 (1.262)	148	18180			34.29- 94.29	64.16

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.201	11.201 (1.262)	111	10911			9.37- 69.37	38.51
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.627	12.627 (1.423)	180	22811	2.00000	2.272	80.00- 120.00	100.00
12.627	12.627 (1.423)	182	20921			66.30- 126.30	91.71
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.720	12.720 (1.433)	225	17911	2.00000	2.130	80.00- 120.00	100.00
12.720	12.720 (1.433)	223	12319			32.59- 92.59	68.78

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a092113.d
Lab Smp Id: ICAL Level #3
Analysis Type: VOA
Quant Type: ISTD
Operator: mjs
Method File: /chem/msda.i/21sep15.b/a15q0921a.m
Misc Info: 2.0ppbv (2.0ppbv)

Calibration Date: 21-SEP-2015
Calibration Time: 21:07
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	152172	91303	213041	144463	-5.07
123 1,4-Difluorobenze	627705	376623	878787	620782	-1.10
163 Chlorobenzene-d5	581049	348629	813469	563315	-3.05

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.47	5.14	5.80	5.49	0.39
123 1,4-Difluorobenze	6.38	6.05	6.71	6.40	0.34
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msda.i/21sep15.b/a092113.d

Page 1

Date : 22-SEP-2015 06:40

Client ID:

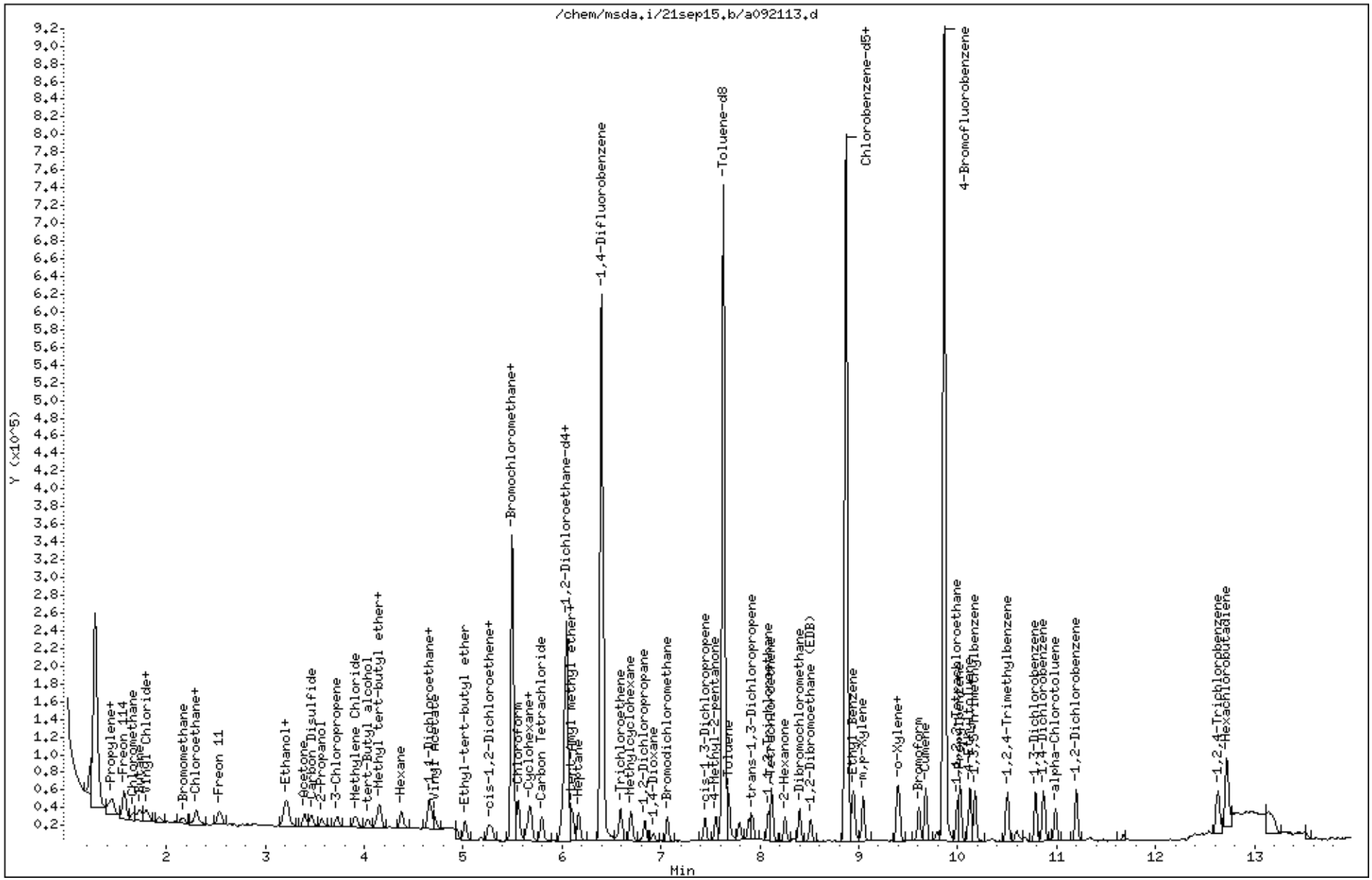
Instrument: msda.i

Sample Info: 200ml 2736-256

Operator: mjs

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/21sep15.b/a092107.d
Lab Smp Id: ICAL Level #4
Inj Date : 21-SEP-2015 20:05
Operator : js Inst ID: msda.i
Smp Info : 200ml 2736-258
Misc Info : 5.0ppbv (5.0ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/21sep15.b/a15q0921a.m
Meth Date : 22-Sep-2015 11:24 mskidmor Quant Type: ISTD
Cal Date : 21-SEP-2015 20:05 Cal File: a092107.d
Als bottle: 4 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12noNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.471	5.471 (1.000)	130	146306	25.0000		80.00- 120.00	100.00
5.471	5.471 (1.000)	128	115911			46.57- 106.57	79.23
5.471	5.471 (1.000)	49	160298			75.38- 135.38	109.56
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.388	6.388 (1.000)	114	630350	25.0000		80.00- 120.00	100.00
6.388	6.388 (1.000)	88	93402			0.00- 44.55	14.82
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	562785	25.0000		80.00- 120.00	100.00
8.866	8.866 (1.000)	82	274547			19.23- 79.23	48.78
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.022	6.022 (1.101)	65	184091	25.0000	25.542	80.00- 120.00	100.00
6.022	6.022 (1.101)	67	97178			27.41- 87.41	52.79

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.620	7.620 (1.193)	98	612161	25.0000	24.689	80.00- 120.00	100.00
7.620	7.620 (1.193)	70	59699			0.00- 39.72	9.75
7.620	7.620 (1.193)	100	396633			36.51- 96.51	64.79
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.862	9.862 (1.112)	174	345270	25.0000	24.724	80.00- 120.00	100.00
9.862	9.862 (1.112)	95	381018			82.23- 142.23	110.35
9.869	9.869 (1.113)	176	334945			67.41- 127.41	97.01
9 Propylene					CAS #: 115-07-1		
1.359	1.359 (0.248)	41	15319	5.00000	5.431	80.00- 120.00	100.00
1.359	1.359 (0.248)	42	9515			34.74- 94.74	62.11
1.359	1.359 (0.248)	39	10831			42.01- 102.01	70.70
11 Freon 12					CAS #: 75-71-8		
1.395	1.395 (0.255)	85	43569	5.00000	4.853	80.00- 120.00	100.00
1.395	1.395 (0.255)	87	14997			2.75- 62.75	34.42
15 Freon 114					CAS #: 76-14-2		
1.517	1.517 (0.277)	135	34069	5.00000	4.577	80.00- 120.00	100.00
1.517	1.517 (0.277)	137	11428			2.30- 62.30	33.54
17 Chloromethane					CAS #: 74-87-3		
1.596	1.596 (0.292)	50	13217	5.00000	4.834	80.00- 120.00	100.00(a)
1.596	1.596 (0.292)	52	4950			2.93- 62.93	37.45
23 Butane					CAS #: 106-97-8		
1.682	1.682 (0.307)	58	3888	5.00000	6.262	80.00- 120.00	100.00
1.682	1.682 (0.307)	43	33776			790.29- 850.29	868.72
25 Vinyl Chloride					CAS #: 75-01-4		
1.717	1.717 (0.314)	62	14506	5.00000	4.701	80.00- 120.00	100.00
1.717	1.717 (0.314)	64	4862			1.64- 61.64	33.52
26 1,3-Butadiene					CAS #: 106-99-0		
1.746	1.746 (0.319)	54	11562	5.00000	4.673	80.00- 120.00	100.00
1.746	1.746 (0.319)	39	14292			88.19- 148.19	123.61
29 Bromomethane					CAS #: 74-83-9		
2.104	2.104 (0.385)	94	12935	5.00000	4.561	80.00- 120.00	100.00(a)
2.104	2.104 (0.385)	96	11977			66.60- 126.60	92.59
30 Chloroethane					CAS #: 75-00-3		
2.226	2.226 (0.407)	64	8378	5.00000	5.291	80.00- 120.00	100.00
2.226	2.226 (0.407)	66	2181			1.66- 61.66	26.03

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.233	2.233 (0.408)	49	2327			2.43- 62.43	27.78
31 Isopentane					CAS #: 78-78-4		
2.247	2.247 (0.411)	43	21178	5.00000	4.938	80.00- 120.00	100.00
2.247	2.247 (0.411)	57	12801			33.38- 93.38	60.44
35 Freon 11					CAS #: 75-69-4		
2.484	2.484 (0.454)	101	49326	5.00000	4.819	80.00- 120.00	100.00
2.477	2.477 (0.453)	103	31657			35.05- 95.05	64.18
42 Ethanol					CAS #: 64-17-5		
2.820	2.820 (0.516)	45	6807	5.00000	4.433	80.00- 120.00	100.00
2.813	2.813 (0.514)	43	575			0.00- 48.51	8.45
2.820	2.820 (0.516)	46	2182			6.94- 66.94	32.06
49 Freon 113					CAS #: 76-13-1		
3.150	3.150 (0.576)	151	33746	5.00000	4.629	80.00- 120.00	100.00
3.150	3.150 (0.576)	153	22145			33.28- 93.28	65.62
3.150	3.150 (0.576)	101	40961			84.64- 144.64	121.38
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.179	3.179 (0.581)	98	10427	5.00000	4.404	80.00- 120.00	100.00
3.179	3.179 (0.581)	96	18446			131.99- 191.99	176.91
3.179	3.179 (0.581)	61	26002			211.38- 271.38	249.37
52 Acetone					CAS #: 67-64-1		
3.343	3.343 (0.611)	58	8420	5.00000	5.333	80.00- 120.00	100.00
3.343	3.343 (0.611)	43	29135			323.78- 383.78	346.02
56 Carbon Disulfide					CAS #: 75-15-0		
3.415	3.415 (0.624)	76	51371	5.00000	4.924	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.522	3.522 (0.644)	45	20800	5.00000	3.369	80.00- 120.00	100.00
3.522	3.522 (0.644)	43	4112			0.00- 48.56	19.77
3.515	3.515 (0.643)	59	828			0.00- 33.73	3.98
58 3-Chloropropene					CAS #: 107-05-1		
3.680	3.680 (0.673)	76	9319	5.00000	5.087	80.00- 120.00	100.00
3.680	3.680 (0.673)	41	24690			246.04- 306.04	264.94
66 Methylene Chloride					CAS #: 75-09-2		
3.866	3.866 (0.707)	49	22288	5.00000	5.177	80.00- 120.00	100.00
3.866	3.866 (0.707)	84	16866			48.40- 108.40	75.67
3.873	3.873 (0.708)	51	7201			0.91- 60.91	32.31

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.002	4.002 (0.732)	59	18878	5.00000	2.807	80.00- 120.00	100.00
4.002	4.002 (0.732)	41	5600			0.00- 52.50	29.66
4.002	4.002 (0.732)	57	3634			0.00- 40.56	19.25
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.103	4.103 (0.750)	73	47795	5.00000	4.644	80.00- 120.00	100.00
4.103	4.103 (0.750)	57	11059			0.00- 51.56	23.14
4.103	4.103 (0.750)	41	11314			0.00- 53.23	23.67
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.124	4.124 (0.754)	98	11235	5.00000	4.626	80.00- 120.00	100.00
4.124	4.124 (0.754)	61	24848			176.45- 236.45	221.17
4.124	4.124 (0.754)	96	19602			128.76- 188.76	174.47
78 Hexane					CAS #: 110-54-3		
4.339	4.339 (0.793)	57	31703	5.00000	5.422	80.00- 120.00	100.00
4.339	4.339 (0.793)	43	22520			38.99- 98.99	71.03
4.346	4.346 (0.794)	86	5449			0.00- 47.90	17.19
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.633	4.633 (0.847)	63	30962	5.00000	4.765	80.00- 120.00	100.00
4.633	4.633 (0.847)	65	9538			1.73- 61.73	30.81
83 Isopropyl ether					CAS #: 108-20-3		
4.626	4.626 (0.846)	45	60479	5.00000	4.701	80.00- 120.00	100.00
4.626	4.626 (0.846)	87	15904			0.00- 57.31	26.30
4.626	4.626 (0.846)	59	6104			0.00- 40.63	10.09
86 Vinyl Acetate					CAS #: 108-05-4		
4.683	4.683 (0.856)	86	4317	5.00000	4.232	80.00- 120.00	100.00
4.683	4.683 (0.856)	43	48047			1171.37-1231.37	1112.97
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.998	4.998 (0.914)	59	55541	5.00000	4.845	80.00- 120.00	100.00
4.998	4.998 (0.914)	87	24285			13.29- 73.29	43.72
4.998	4.998 (0.914)	41	13534			0.00- 49.66	24.37
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.234	5.234 (0.957)	98	12861	5.00000	4.772	80.00- 120.00	100.00
5.234	5.234 (0.957)	96	20554			125.14- 185.14	159.82
5.234	5.234 (0.957)	61	25249			152.76- 212.76	196.32
92 2-Butanone					CAS #: 78-93-3		
5.270	5.270 (0.963)	72	7097	5.00000	3.916	80.00- 120.00	100.00
5.263	5.263 (0.962)	43	33632			417.31- 477.31	473.89

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.263	5.263 (0.962)	57	2704			6.26- 66.26	38.10
99 Tetrahydrofuran					CAS #: 109-99-9		
5.464	5.464 (0.999)	42	19450	5.00000	4.155	80.00- 120.00	100.00
5.471	5.471 (1.000)	71	6597			6.28- 66.28	33.92
5.471	5.471 (1.000)	72	7488			7.91- 67.91	38.50
100 Chloroform					CAS #: 67-66-3		
5.535	5.535 (1.012)	83	40669	5.00000	4.840	80.00- 120.00	100.00
5.535	5.535 (1.012)	85	26386			33.64- 93.64	64.88
102 Cyclohexane					CAS #: 110-82-7		
5.643	5.643 (1.031)	84	25479	5.00000	4.891	80.00- 120.00	100.00
5.643	5.643 (1.031)	56	30284			81.39- 141.39	118.86
5.643	5.643 (1.031)	41	16218			37.15- 97.15	63.65
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.664	5.664 (1.035)	97	43097	5.00000	4.696	80.00- 120.00	100.00
5.664	5.664 (1.035)	99	28252			35.23- 95.23	65.55
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.779	5.779 (1.056)	119	48235	5.00000	4.781	80.00- 120.00	100.00
5.779	5.779 (1.056)	117	48215			72.15- 132.15	99.96
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.987	5.987 (1.094)	57	89639	5.00000	4.936	80.00- 120.00	100.00
5.987	5.987 (1.094)	56	27878			0.25- 60.25	31.10
5.979	5.979 (1.093)	41	27134			0.00- 57.25	30.27
116 Benzene					CAS #: 71-43-2		
6.001	6.001 (0.939)	78	56287	5.00000	4.611	80.00- 120.00	100.00
6.001	6.001 (0.939)	77	12270			0.00- 53.40	21.80
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.073	6.073 (1.110)	87	13508	5.00000	4.667	80.00- 120.00	100.00
6.073	6.073 (1.110)	73	50964			349.72- 409.72	377.29
6.073	6.073 (1.110)	55	13860			62.29- 122.29	102.61
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.094	6.094 (0.954)	62	24920	5.00000	4.533	80.00- 120.00	100.00
6.094	6.094 (0.954)	64	8854			2.46- 62.46	35.53
121 Heptane					CAS #: 142-82-5		
6.151	6.151 (0.963)	71	23117	5.00000	5.142	80.00- 120.00	100.00
6.151	6.151 (0.963)	43	41765			156.27- 216.27	180.67

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.151	6.151 (0.963)	57	22015			72.07- 132.07	95.23
125 Trichloroethene					CAS #: 79-01-6		
6.581	6.581 (1.030)	95	27178	5.00000	4.451	80.00- 120.00	100.00
6.581	6.581 (1.030)	130	31075			80.99- 140.99	114.34
6.581	6.581 (1.030)	97	18071			35.67- 95.67	66.49
127 Methylcyclohexane					CAS #: 108-87-2		
6.681	6.681 (1.221)	83	35049	5.00000	4.649	80.00- 120.00	100.00
6.681	6.681 (1.221)	98	15781			17.02- 77.02	45.03
6.681	6.681 (1.221)	55	28367			45.78- 105.78	80.94
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.825	6.825 (1.068)	63	20725	5.00000	4.591	80.00- 120.00	100.00
6.825	6.825 (1.068)	62	13644			39.44- 99.44	65.83
6.825	6.825 (1.068)	41	12736			29.63- 89.63	61.45
136 1,4-Dioxane					CAS #: 123-91-1		
6.918	6.918 (1.083)	88	6996	5.00000	2.407	80.00- 120.00	100.00
6.918	6.918 (1.083)	58	4899			35.98- 95.98	70.03
6.911	6.911 (1.082)	57	2125			0.00- 51.57	30.37
138 Bromodichloromethane					CAS #: 75-27-4		
7.054	7.054 (1.104)	83	44737	5.00000	4.585	80.00- 120.00	100.00
7.054	7.054 (1.104)	85	27112			33.11- 93.11	60.60
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.433	7.433 (1.164)	75	35616	5.00000	4.543	80.00- 120.00	100.00
7.441	7.441 (1.165)	77	15336			2.26- 62.26	43.06
7.433	7.433 (1.164)	39	19158			24.05- 84.05	53.79
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.548	7.548 (1.182)	58	8316	5.00000	2.381	80.00- 120.00	100.00
7.548	7.548 (1.182)	43	21997			255.05- 315.05	264.51
7.548	7.548 (1.182)	85	3863			16.86- 76.86	46.45
147 Toluene					CAS #: 108-88-3		
7.677	7.677 (1.202)	91	74490	5.00000	4.498	80.00- 120.00	100.00
7.677	7.677 (1.202)	92	43856			28.59- 88.59	58.88
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.921	7.921 (0.893)	75	30247	5.00000	4.498	80.00- 120.00	100.00
7.921	7.921 (0.893)	77	10386			2.75- 62.75	34.34
7.921	7.921 (0.893)	39	16689			22.39- 82.39	55.18

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.078	8.078 (0.911)	97	25614	5.00000	4.571	80.00- 120.00	100.00
8.078	8.078 (0.911)	99	16504			33.52- 93.52	64.43
8.078	8.078 (0.911)	83	21559			54.98- 114.98	84.17
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.916)	166	42902	5.00000	4.944	80.00- 120.00	100.00
8.114	8.114 (0.915)	129	32772			48.24- 108.24	76.39
8.121	8.121 (0.916)	131	31683			44.94- 104.94	73.85
158 2-Hexanone					CAS #: 591-78-6		
8.250	8.250 (0.931)	58	7968	5.00000	1.817	80.00- 120.00	100.00(a)
8.250	8.250 (0.931)	43	16820			177.49- 237.49	211.09
8.250	8.250 (0.931)	100	1473			0.00- 53.07	18.49
160 Dibromochloromethane					CAS #: 124-48-1		
8.393	8.393 (0.947)	129	52382	5.00000	4.546	80.00- 120.00	100.00
8.393	8.393 (0.947)	127	37689			45.72- 105.72	71.95
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.508	8.508 (0.960)	107	40856	5.00000	4.454	80.00- 120.00	100.00
8.508	8.508 (0.960)	109	37868			67.26- 127.26	92.69
165 Chlorobenzene					CAS #: 108-90-7		
8.895	8.895 (1.003)	112	62368	5.00000	4.481	80.00- 120.00	100.00
8.895	8.895 (1.003)	114	20127			1.53- 61.53	32.27
8.888	8.888 (1.002)	77	36165			21.26- 81.26	57.99
167 Ethyl Benzene					CAS #: 100-41-4		
8.945	8.945 (1.009)	106	30830	5.00000	4.470	80.00- 120.00	100.00
8.945	8.945 (1.009)	91	92112			268.22- 328.22	298.77
169 m,p-Xylene					CAS #: 108-38-3		
9.045	9.045 (1.020)	106	38132	5.00000	4.527	80.00- 120.00	100.00
9.038	9.038 (1.019)	91	73356			164.61- 224.61	192.37
171 o-Xylene					CAS #: 95-47-6		
9.389	9.389 (1.059)	106	35657	5.00000	4.501	80.00- 120.00	100.00
9.389	9.389 (1.059)	91	71382			171.64- 231.64	200.19
172 Styrene					CAS #: 100-42-5		
9.410	9.410 (1.061)	104	53979	5.00000	4.265	80.00- 120.00	100.00
9.403	9.403 (1.061)	78	24893			16.00- 76.00	46.12
174 Bromoform					CAS #: 75-25-2		
9.604	9.604 (1.083)	173	46241	5.00000	4.071	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.604	9.604 (1.083)	171	24523			20.98- 80.98	53.03
175 Cumene					CAS #: 98-82-8		
9.676	9.676 (1.091)	105	108950	5.00000	4.441	80.00- 120.00	100.00
9.676	9.676 (1.091)	120	29270			0.00- 57.78	26.87
9.676	9.676 (1.091)	51	9842			0.00- 38.75	9.03
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.991	9.991 (1.127)	83	47621	5.00000	4.011	80.00- 120.00	100.00
9.991	9.991 (1.127)	85	31912			34.49- 94.49	67.01
182 Propylbenzene					CAS #: 103-65-1		
10.027	10.027 (1.131)	91	118328	5.00000	4.242	80.00- 120.00	100.00
10.027	10.027 (1.131)	120	30270			0.00- 55.48	25.58
10.027	10.027 (1.131)	105	4880			0.00- 33.87	4.12
188 4-Ethyltoluene					CAS #: 622-96-8		
10.120	10.120 (1.141)	120	32566	5.00000	4.153	80.00- 120.00	100.00
10.120	10.120 (1.141)	105	105755			281.42- 341.42	324.74
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.177	10.177 (1.148)	120	45361	5.00000	4.322	80.00- 120.00	100.00
10.177	10.177 (1.148)	105	90448			170.60- 230.60	199.40
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.499	10.499 (1.184)	120	38348	5.00000	4.079	80.00- 120.00	100.00
10.499	10.499 (1.184)	105	83290			180.85- 240.85	217.20
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.786	10.786 (1.217)	146	59936	5.00000	4.162	80.00- 120.00	100.00
10.786	10.786 (1.217)	148	38814			34.13- 94.13	64.76
10.786	10.786 (1.217)	111	22978			8.40- 68.40	38.34
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.872	10.872 (1.226)	146	56578	5.00000	3.880	80.00- 120.00	100.00
10.872	10.872 (1.226)	148	38049			35.82- 95.82	67.25
10.872	10.872 (1.226)	111	21304			7.65- 67.65	37.65
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.986	10.986 (1.239)	91	44439	5.00000	2.672	80.00- 120.00	100.00
10.994	10.994 (1.240)	126	10833			0.00- 54.31	24.38
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.201	11.201 (1.263)	146	53698	5.00000	3.978	80.00- 120.00	100.00
11.201	11.201 (1.263)	148	35363			34.29- 94.29	65.86

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.201	11.201 (1.263)	111	20289			9.37- 69.37	37.78
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.627	12.627 (1.424)	180	24054	5.00000	2.398	80.00- 120.00	100.00
12.627	12.627 (1.424)	182	22466			66.30- 126.30	93.40
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.720	12.720 (1.435)	225	28075	5.00000	3.341	80.00- 120.00	100.00
12.720	12.720 (1.435)	223	17893			32.59- 92.59	63.73

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a092107.d
Lab Smp Id: ICAL Level #4
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msda.i/21sep15.b/a15q0921a.m
Misc Info: 5.0ppbv (5.0ppbv)

Calibration Date: 21-SEP-2015
Calibration Time: 21:07
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	152172	91303	213041	146306	-3.85
123 1,4-Difluorobenze	627705	376623	878787	630350	0.42
163 Chlorobenzene-d5	581049	348629	813469	562785	-3.14

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.47	5.14	5.80	5.47	0.00
123 1,4-Difluorobenze	6.38	6.05	6.71	6.39	0.11
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msda.i/21sep15.b/a092107.d

Date : 21-SEP-2015 20:05

Client ID:

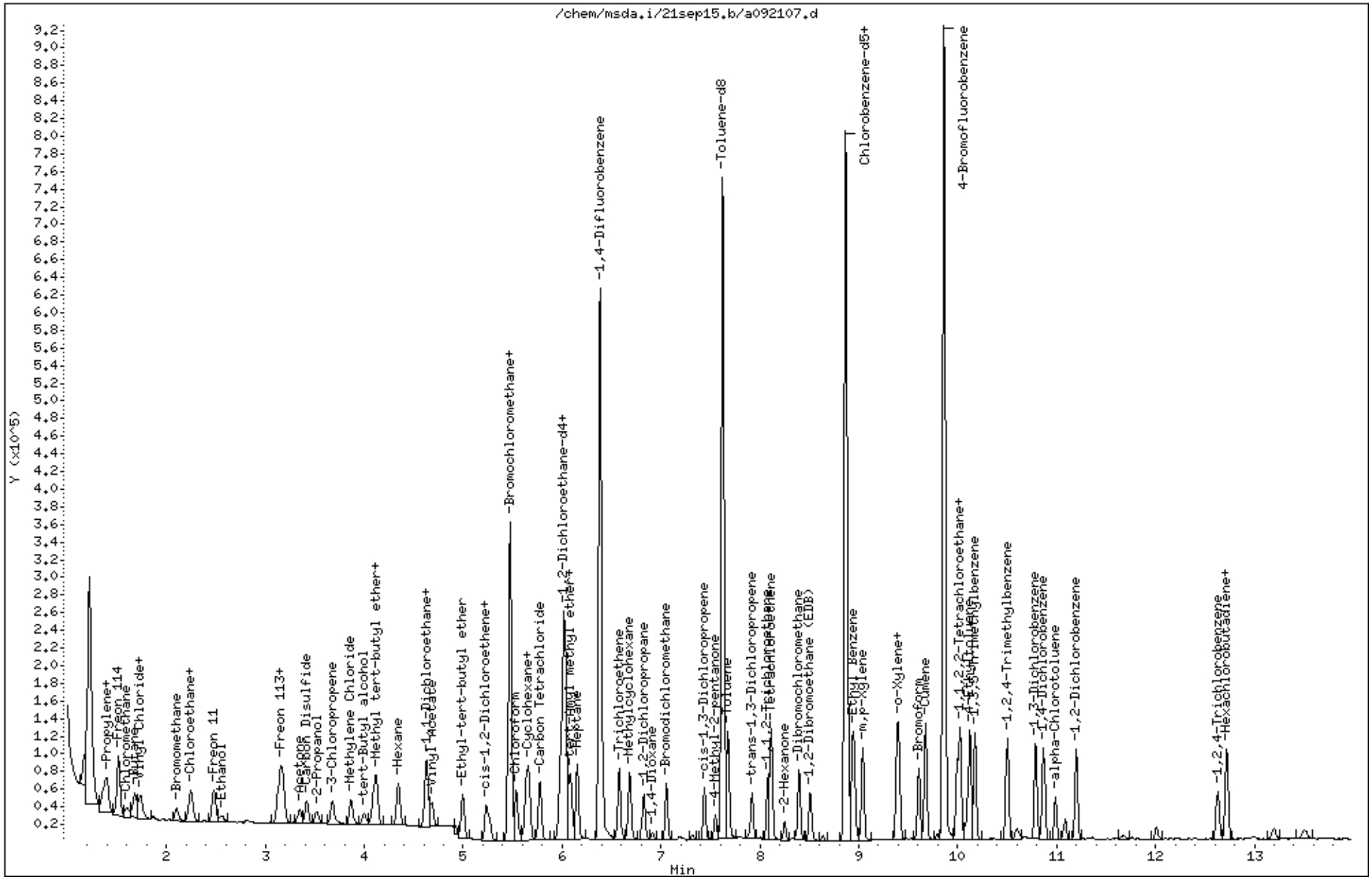
Sample Info: 200ml 2736-258

Column phase: RTX-624

Instrument: msda.i

Operator: js

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/21sep15.b/a092108.d
Lab Smp Id: ICAL Level #5
Inj Date : 21-SEP-2015 20:42
Operator : js Inst ID: msda.i
Smp Info : 20ml 2736-243
Misc Info : 20ppbv (200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/21sep15.b/a15q0921a.m
Meth Date : 22-Sep-2015 11:24 mskidmor Quant Type: ISTD
Cal Date : 21-SEP-2015 20:42 Cal File: a092108.d
Als bottle: 2 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12noNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

				AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
RT	EXP RT (REL RT)	MASS	RESPONSE				
* 98 Bromochloromethane					CAS #: 74-97-5		
5.464	5.464 (1.000)	130	148095	25.0000		80.00- 120.00	100.00
5.464	5.464 (1.000)	128	116854			46.57- 106.57	78.90
5.464	5.464 (1.000)	49	161739			75.38- 135.38	109.21
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.381	6.381 (1.000)	114	620788	25.0000		80.00- 120.00	100.00
6.381	6.381 (1.000)	88	92231			0.00- 44.55	14.86
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	566937	25.0000		80.00- 120.00	100.00
8.866	8.866 (1.000)	82	280024			19.23- 79.23	49.39
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.022	6.022 (1.102)	65	182056	25.0000	24.954	80.00- 120.00	100.00
6.022	6.022 (1.102)	67	99319			27.41- 87.41	54.55

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.620	7.620 (1.194)	98	613648	25.0000	25.130	80.00- 120.00	100.00
7.620	7.620 (1.194)	70	60811			0.00- 39.72	9.91
7.620	7.620 (1.194)	100	405607			36.51- 96.51	66.10
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.862	9.862 (1.112)	174	346081	25.0000	24.600	80.00- 120.00	100.00
9.862	9.862 (1.112)	95	388183			82.23- 142.23	112.17
9.862	9.862 (1.112)	176	339540			67.41- 127.41	98.11
9 Propylene					CAS #: 115-07-1		
1.345	1.345 (0.246)	41	56893	20.0000	19.928	80.00- 120.00	100.00
1.345	1.345 (0.246)	42	37360			34.74- 94.74	65.67
1.345	1.345 (0.246)	39	40976			42.01- 102.01	72.02
11 Freon 12					CAS #: 75-71-8		
1.381	1.381 (0.253)	85	187511	20.0000	20.633	80.00- 120.00	100.00
1.381	1.381 (0.253)	87	63032			2.75- 62.75	33.62
15 Freon 114					CAS #: 76-14-2		
1.503	1.503 (0.275)	135	160373	20.0000	21.286	80.00- 120.00	100.00
1.503	1.503 (0.275)	137	50902			2.30- 62.30	31.74
17 Chloromethane					CAS #: 74-87-3		
1.581	1.581 (0.289)	50	58043	20.0000	20.971	80.00- 120.00	100.00
1.581	1.581 (0.289)	52	18918			2.93- 62.93	32.59
23 Butane					CAS #: 106-97-8		
1.667	1.667 (0.305)	58	12929	20.0000	20.571	80.00- 120.00	100.00
1.667	1.667 (0.305)	43	110025			790.29- 850.29	850.99
25 Vinyl Chloride					CAS #: 75-01-4		
1.703	1.703 (0.312)	62	65958	20.0000	21.118	80.00- 120.00	100.00
1.710	1.710 (0.313)	64	20772			1.64- 61.64	31.49
26 1,3-Butadiene					CAS #: 106-99-0		
1.732	1.732 (0.317)	54	51725	20.0000	20.654	80.00- 120.00	100.00
1.732	1.732 (0.317)	39	60826			88.19- 148.19	117.59
29 Bromomethane					CAS #: 74-83-9		
2.090	2.090 (0.382)	94	62671	20.0000	21.830	80.00- 120.00	100.00
2.090	2.090 (0.382)	96	59665			66.60- 126.60	95.20
30 Chloroethane					CAS #: 75-00-3		
2.205	2.205 (0.403)	64	33279	20.0000	20.762	80.00- 120.00	100.00
2.205	2.205 (0.403)	66	10943			1.66- 61.66	32.88

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.205	2.205 (0.403)	49	10100			2.43- 62.43	30.35
31 Isopentane					CAS #: 78-78-4		
2.233	2.233 (0.409)	43	89084	20.0000	20.521	80.00- 120.00	100.00
2.233	2.233 (0.409)	57	58023			33.38- 93.38	65.13
35 Freon 11					CAS #: 75-69-4		
2.470	2.470 (0.452)	101	225792	20.0000	21.793	80.00- 120.00	100.00
2.470	2.470 (0.452)	103	148758			35.05- 95.05	65.88
42 Ethanol					CAS #: 64-17-5		
2.799	2.799 (0.512)	45	31019	20.0000	19.955	80.00- 120.00	100.00
2.799	2.799 (0.512)	43	6005			0.00- 48.51	19.36
2.799	2.799 (0.512)	46	10985			6.94- 66.94	35.41
49 Freon 113					CAS #: 76-13-1		
3.143	3.143 (0.575)	151	166567	20.0000	22.571	80.00- 120.00	100.00
3.136	3.136 (0.574)	153	108154			33.28- 93.28	64.93
3.136	3.136 (0.574)	101	189507			84.64- 144.64	113.77
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.172	3.172 (0.580)	98	50562	20.0000	21.097	80.00- 120.00	100.00
3.164	3.164 (0.579)	96	78943			131.99- 191.99	156.13
3.164	3.164 (0.579)	61	117847			211.38- 271.38	233.07
52 Acetone					CAS #: 67-64-1		
3.329	3.329 (0.609)	58	34241	20.0000	21.425	80.00- 120.00	100.00
3.329	3.329 (0.609)	43	114468			323.78- 383.78	334.30
56 Carbon Disulfide					CAS #: 75-15-0		
3.408	3.408 (0.624)	76	214928	20.0000	20.351	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.508	3.508 (0.642)	45	130219	20.0000	20.837	80.00- 120.00	100.00
3.508	3.508 (0.642)	43	27273			0.00- 48.56	20.94
3.508	3.508 (0.642)	59	4866			0.00- 33.73	3.74
58 3-Chloropropene					CAS #: 107-05-1		
3.673	3.673 (0.672)	76	37527	20.0000	20.237	80.00- 120.00	100.00
3.673	3.673 (0.672)	41	99618			246.04- 306.04	265.46
66 Methylene Chloride					CAS #: 75-09-2		
3.859	3.859 (0.706)	49	89259	20.0000	20.481	80.00- 120.00	100.00
3.859	3.859 (0.706)	84	68102			48.40- 108.40	76.30
3.859	3.859 (0.706)	51	26580			0.91- 60.91	29.78

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
3.988	3.988 (0.730)	59	159488	20.0000	23.431	80.00- 120.00	100.00
3.988	3.988 (0.730)	41	35810			0.00- 52.50	22.45
3.988	3.988 (0.730)	57	16077			0.00- 40.56	10.08
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.088	4.088 (0.748)	73	220385	20.0000	21.158	80.00- 120.00	100.00
4.088	4.088 (0.748)	57	48251			0.00- 51.56	21.89
4.088	4.088 (0.748)	41	50461			0.00- 53.23	22.90
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.117	4.117 (0.754)	98	52972	20.0000	21.546	80.00- 120.00	100.00
4.117	4.117 (0.754)	61	108001			176.45- 236.45	203.88
4.117	4.117 (0.754)	96	84096			128.76- 188.76	158.76
78 Hexane					CAS #: 110-54-3		
4.332	4.332 (0.793)	57	125285	20.0000	21.169	80.00- 120.00	100.00
4.332	4.332 (0.793)	43	84148			38.99- 98.99	67.17
4.332	4.332 (0.793)	86	20778			0.00- 47.90	16.58
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.626	4.626 (0.847)	63	135577	20.0000	20.615	80.00- 120.00	100.00
4.626	4.626 (0.847)	65	42471			1.73- 61.73	31.33
83 Isopropyl ether					CAS #: 108-20-3		
4.619	4.619 (0.845)	45	286525	20.0000	22.001	80.00- 120.00	100.00
4.619	4.619 (0.845)	87	76352			0.00- 57.31	26.65
4.619	4.619 (0.845)	59	29816			0.00- 40.63	10.41
86 Vinyl Acetate					CAS #: 108-05-4		
4.676	4.676 (0.856)	86	22552	20.0000	21.841	80.00- 120.00	100.00
4.676	4.676 (0.856)	43	259644			1171.37-1231.37	1151.31
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.991	4.991 (0.913)	59	254169	20.0000	21.903	80.00- 120.00	100.00
4.991	4.991 (0.913)	87	109891			13.29- 73.29	43.24
4.991	4.991 (0.913)	41	49164			0.00- 49.66	19.34
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.227	5.227 (0.957)	98	55608	20.0000	20.384	80.00- 120.00	100.00
5.227	5.227 (0.957)	96	91107			125.14- 185.14	163.84
5.227	5.227 (0.957)	61	105143			152.76- 212.76	189.08
92 2-Butanone					CAS #: 78-93-3		
5.256	5.256 (0.962)	72	38615	20.0000	21.052	80.00- 120.00	100.00
5.256	5.256 (0.962)	43	170045			417.31- 477.31	440.36

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.256	5.256 (0.962)	57	13898			6.26- 66.26	35.99
99 Tetrahydrofuran					CAS #: 109-99-9		
5.457	5.457 (0.999)	42	94614	20.0000	19.970	80.00- 120.00	100.00
5.457	5.457 (0.999)	71	33923			6.28- 66.28	35.85
5.457	5.457 (0.999)	72	38217			7.91- 67.91	40.39
100 Chloroform					CAS #: 67-66-3		
5.528	5.528 (1.012)	83	176215	20.0000	20.717	80.00- 120.00	100.00
5.528	5.528 (1.012)	85	112067			33.64- 93.64	63.60
102 Cyclohexane					CAS #: 110-82-7		
5.636	5.636 (1.031)	84	114078	20.0000	21.635	80.00- 120.00	100.00
5.636	5.636 (1.031)	56	126046			81.39- 141.39	110.49
5.636	5.636 (1.031)	41	76463			37.15- 97.15	67.03
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.657	5.657 (1.035)	97	196870	20.0000	21.192	80.00- 120.00	100.00
5.657	5.657 (1.035)	99	129662			35.23- 95.23	65.86
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.772	5.772 (1.056)	119	223151	20.0000	21.850	80.00- 120.00	100.00
5.772	5.772 (1.056)	117	228150			72.15- 132.15	102.24
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.979	5.979 (1.094)	57	384728	20.0000	20.930	80.00- 120.00	100.00
5.979	5.979 (1.094)	56	115864			0.25- 60.25	30.12
5.979	5.979 (1.094)	41	108022			0.00- 57.25	28.08
116 Benzene					CAS #: 71-43-2		
5.994	5.994 (0.939)	78	247814	20.0000	20.614	80.00- 120.00	100.00
5.994	5.994 (0.939)	77	59446			0.00- 53.40	23.99
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.073	6.073 (1.111)	87	62971	20.0000	21.495	80.00- 120.00	100.00
6.065	6.065 (1.110)	73	242471			349.72- 409.72	385.05
6.065	6.065 (1.110)	55	60656			62.29- 122.29	96.32
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.087	6.087 (0.954)	62	110969	20.0000	20.496	80.00- 120.00	100.00
6.087	6.087 (0.954)	64	35942			2.46- 62.46	32.39
121 Heptane					CAS #: 142-82-5		
6.151	6.151 (0.964)	71	90516	20.0000	20.443	80.00- 120.00	100.00
6.151	6.151 (0.964)	43	168252			156.27- 216.27	185.88

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.151	6.151 (0.964)	57	89066			72.07- 132.07	98.40
125 Trichloroethene					CAS #: 79-01-6		
6.574	6.574 (1.030)	95	121838	20.0000	20.260	80.00- 120.00	100.00
6.581	6.581 (1.031)	130	140058			80.99- 140.99	114.95
6.574	6.574 (1.030)	97	82339			35.67- 95.67	67.58
127 Methylcyclohexane					CAS #: 108-87-2		
6.681	6.681 (1.223)	83	160920	20.0000	21.089	80.00- 120.00	100.00
6.681	6.681 (1.223)	98	75870			17.02- 77.02	47.15
6.681	6.681 (1.223)	55	121849			45.78- 105.78	75.72
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.818	6.818 (1.068)	63	96845	20.0000	21.784	80.00- 120.00	100.00
6.818	6.818 (1.068)	62	64547			39.44- 99.44	66.65
6.818	6.818 (1.068)	41	59478			29.63- 89.63	61.42
136 1,4-Dioxane					CAS #: 123-91-1		
6.911	6.911 (1.083)	88	64257	20.0000	22.453	80.00- 120.00	100.00
6.911	6.911 (1.083)	58	41161			35.98- 95.98	64.06
6.911	6.911 (1.083)	57	14934			0.00- 51.57	23.24
138 Bromodichloromethane					CAS #: 75-27-4		
7.054	7.054 (1.106)	83	202935	20.0000	21.118	80.00- 120.00	100.00
7.054	7.054 (1.106)	85	127425			33.11- 93.11	62.79
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.434	7.434 (1.165)	75	163610	20.0000	21.190	80.00- 120.00	100.00
7.434	7.434 (1.165)	77	53626			2.26- 62.26	32.78
7.434	7.434 (1.165)	39	94097			24.05- 84.05	57.51
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.548	7.548 (1.183)	58	77171	20.0000	22.433	80.00- 120.00	100.00
7.548	7.548 (1.183)	43	222379			255.05- 315.05	288.16
7.548	7.548 (1.183)	85	37460			16.86- 76.86	48.54
147 Toluene					CAS #: 108-88-3		
7.677	7.677 (1.203)	91	353825	20.0000	21.695	80.00- 120.00	100.00
7.677	7.677 (1.203)	92	206512			28.59- 88.59	58.37
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.921	7.921 (0.893)	75	146815	20.0000	21.674	80.00- 120.00	100.00
7.921	7.921 (0.893)	77	49050			2.75- 62.75	33.41
7.921	7.921 (0.893)	39	79143			22.39- 82.39	53.91

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.078	8.078 (0.911)	97	122876	20.0000	21.768	80.00- 120.00	100.00
8.078	8.078 (0.911)	99	79964			33.52- 93.52	65.08
8.078	8.078 (0.911)	83	104557			54.98- 114.98	85.09
156 Tetrachloroethene					CAS #: 127-18-4		
8.114	8.114 (0.915)	166	187565	20.0000	21.458	80.00- 120.00	100.00
8.114	8.114 (0.915)	129	143496			48.24- 108.24	76.50
8.114	8.114 (0.915)	131	140691			44.94- 104.94	75.01
158 2-Hexanone					CAS #: 591-78-6		
8.250	8.250 (0.931)	58	104674	20.0000	23.696	80.00- 120.00	100.00
8.250	8.250 (0.931)	43	215913			177.49- 237.49	206.27
8.250	8.250 (0.931)	100	22884			0.00- 53.07	21.86
160 Dibromochloromethane					CAS #: 124-48-1		
8.393	8.393 (0.947)	129	252210	20.0000	21.729	80.00- 120.00	100.00
8.393	8.393 (0.947)	127	195058			45.72- 105.72	77.34
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.508	8.508 (0.960)	107	204037	20.0000	22.082	80.00- 120.00	100.00
8.508	8.508 (0.960)	109	195543			67.26- 127.26	95.84
165 Chlorobenzene					CAS #: 108-90-7		
8.888	8.888 (1.002)	112	311806	20.0000	22.241	80.00- 120.00	100.00
8.888	8.888 (1.002)	114	98046			1.53- 61.53	31.44
8.888	8.888 (1.002)	77	160970			21.26- 81.26	51.63
167 Ethyl Benzene					CAS #: 100-41-4		
8.945	8.945 (1.009)	106	153305	20.0000	22.067	80.00- 120.00	100.00
8.945	8.945 (1.009)	91	459470			268.22- 328.22	299.71
169 m,p-Xylene					CAS #: 108-38-3		
9.038	9.038 (1.019)	106	191155	20.0000	22.526	80.00- 120.00	100.00
9.038	9.038 (1.019)	91	375243			164.61- 224.61	196.30
171 o-Xylene					CAS #: 95-47-6		
9.382	9.382 (1.058)	106	178715	20.0000	22.395	80.00- 120.00	100.00
9.382	9.382 (1.058)	91	360169			171.64- 231.64	201.53
172 Styrene					CAS #: 100-42-5		
9.403	9.403 (1.061)	104	291845	20.0000	22.893	80.00- 120.00	100.00
9.403	9.403 (1.061)	78	134085			16.00- 76.00	45.94
174 Bromoform					CAS #: 75-25-2		
9.604	9.604 (1.083)	173	252634	20.0000	22.080	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.604	9.604 (1.083)	171	129863			20.98- 80.98	51.40
175 Cumene					CAS #: 98-82-8		
9.676	9.676 (1.091)	105	552164	20.0000	22.342	80.00- 120.00	100.00
9.676	9.676 (1.091)	120	150806			0.00- 57.78	27.31
9.676	9.676 (1.091)	51	49516			0.00- 38.75	8.97
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.991	9.991 (1.127)	83	265547	20.0000	22.202	80.00- 120.00	100.00
9.991	9.991 (1.127)	85	165884			34.49- 94.49	62.47
182 Propylbenzene					CAS #: 103-65-1		
10.019	10.019 (1.130)	91	607295	20.0000	21.610	80.00- 120.00	100.00
10.019	10.019 (1.130)	120	155394			0.00- 55.48	25.59
10.019	10.019 (1.130)	105	23517			0.00- 33.87	3.87
188 4-Ethyltoluene					CAS #: 622-96-8		
10.120	10.120 (1.141)	120	168542	20.0000	21.336	80.00- 120.00	100.00
10.120	10.120 (1.141)	105	531552			281.42- 341.42	315.38
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.170	10.170 (1.147)	120	233482	20.0000	22.085	80.00- 120.00	100.00
10.170	10.170 (1.147)	105	477641			170.60- 230.60	204.57
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.492	10.492 (1.183)	120	203507	20.0000	21.488	80.00- 120.00	100.00
10.492	10.492 (1.183)	105	435692			180.85- 240.85	214.09
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.779	10.779 (1.216)	146	309270	20.0000	21.319	80.00- 120.00	100.00
10.779	10.779 (1.216)	148	197567			34.13- 94.13	63.88
10.779	10.779 (1.216)	111	119131			8.40- 68.40	38.52
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.865	10.865 (1.225)	146	303613	20.0000	20.670	80.00- 120.00	100.00
10.865	10.865 (1.225)	148	197358			35.82- 95.82	65.00
10.858	10.858 (1.225)	111	112409			7.65- 67.65	37.02
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.979	10.979 (1.238)	91	366396	20.0000	21.870	80.00- 120.00	100.00
10.979	10.979 (1.238)	126	88017			0.00- 54.31	24.02
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.194	11.194 (1.263)	146	278884	20.0000	20.511	80.00- 120.00	100.00
11.194	11.194 (1.263)	148	181443			34.29- 94.29	65.06

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.194	11.194 (1.263)	111	110365			9.37- 69.37	39.57
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.612	12.612 (1.423)	180	155197	20.0000	15.362	80.00- 120.00	100.00
12.612	12.612 (1.423)	182	148621			66.30- 126.30	95.76
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.706	12.706 (1.433)	225	136075	20.0000	16.075	80.00- 120.00	100.00
12.706	12.706 (1.433)	223	84877			32.59- 92.59	62.38

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a092108.d
Lab Smp Id: ICAL Level #5
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msda.i/21sep15.b/a15q0921a.m
Misc Info: 20ppbv (200ppbv)

Calibration Date: 21-SEP-2015
Calibration Time: 21:07
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	152172	91303	213041	148095	-2.68
123 1,4-Difluorobenze	627705	376623	878787	620788	-1.10
163 Chlorobenzene-d5	581049	348629	813469	566937	-2.43

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.47	5.14	5.80	5.46	-0.13
123 1,4-Difluorobenze	6.38	6.05	6.71	6.38	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msda.i/21sep15.b/a092108.d

Date : 21-SEP-2015 20:42

Client ID:

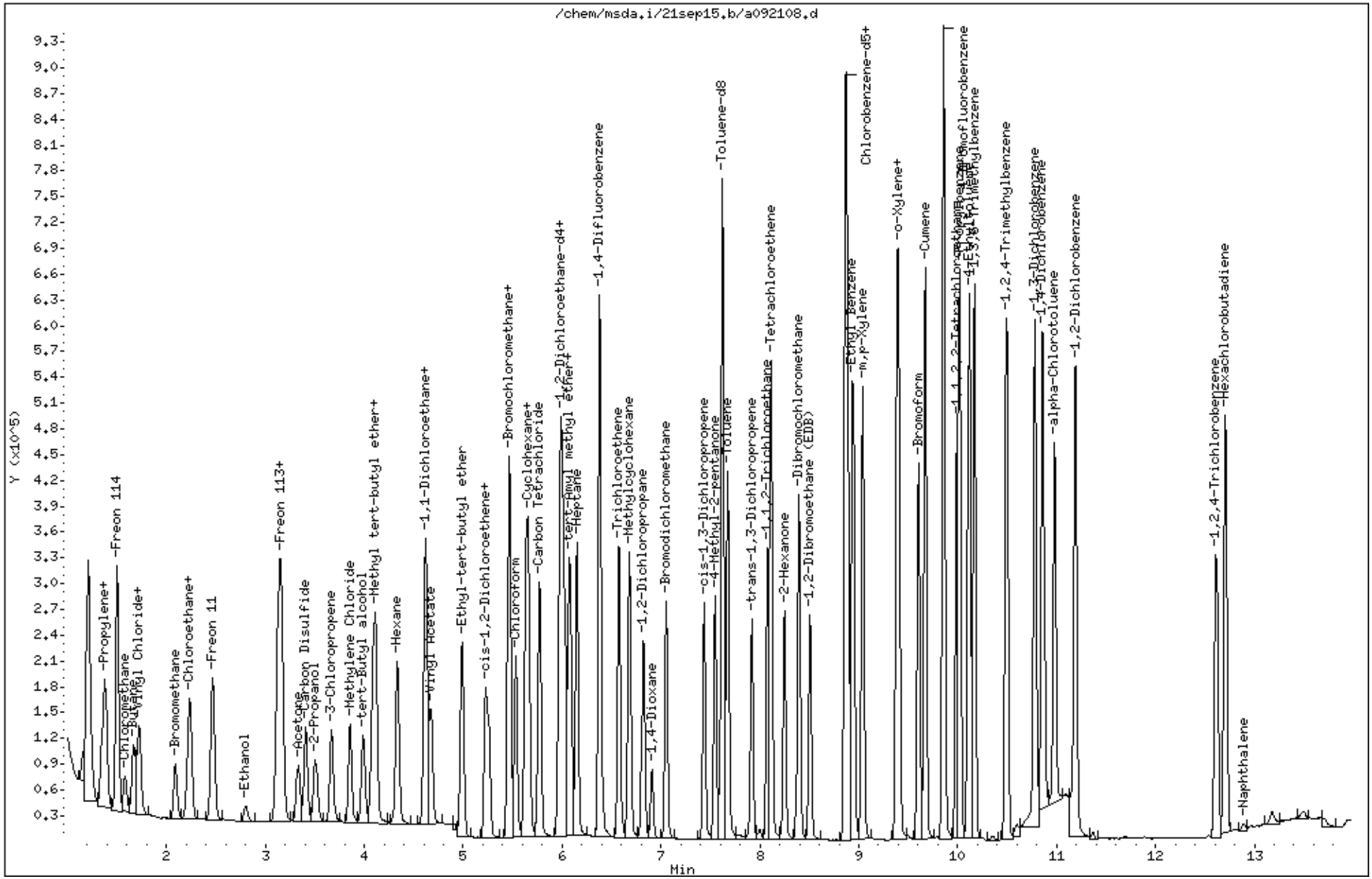
Sample Info: 20ml 2736-243

Column phase: RTX-624

Instrument: msda.i

Operator: js

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/21sep15.b/a092109.d
Lab Smp Id: ICAL Level #6
Inj Date : 21-SEP-2015 21:07
Operator : js Inst ID: msda.i
Smp Info : 50ml 2736-243
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/21sep15.b/a15q0921a.m
Meth Date : 22-Sep-2015 11:24 mskidmor Quant Type: ISTD
Cal Date : 21-SEP-2015 21:07 Cal File: a092109.d
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12noNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.471	5.471 (1.000)	130	152172	25.0000		80.00- 120.00	100.00
5.471	5.471 (1.000)	128	116524			46.57- 106.57	76.57
5.464	5.464 (1.000)	49	160361			75.38- 135.38	105.38
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.381	6.381 (1.000)	114	627705	25.0000		80.00- 120.00	100.00
6.381	6.381 (1.000)	88	91318			0.00- 44.55	14.55
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	581049	25.0000		80.00- 120.00	100.00
8.866	8.866 (1.000)	82	286062			19.23- 79.23	49.23
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.022	6.022 (1.101)	65	177670	25.0000	23.700	80.00- 120.00	100.00
6.022	6.022 (1.101)	67	102006			27.41- 87.41	57.41

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.620	7.620 (1.194)	98	610106	25.0000	24.709	80.00- 120.00	100.00
7.620	7.620 (1.194)	70	59300			0.00- 39.72	9.72
7.620	7.620 (1.194)	100	405758			36.51- 96.51	66.51
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.862	9.862 (1.112)	174	357302	25.0000	24.781	80.00- 120.00	100.00
9.862	9.862 (1.112)	95	401009			82.23- 142.23	112.23
9.862	9.862 (1.112)	176	348064			67.41- 127.41	97.41
9 Propylene					CAS #: 115-07-1		
1.345	1.345 (0.246)	41	130194	50.0000	44.381	80.00- 120.00	100.00
1.345	1.345 (0.246)	42	84283			34.74- 94.74	64.74
1.345	1.345 (0.246)	39	93753			42.01- 102.01	72.01
11 Freon 12					CAS #: 75-71-8		
1.381	1.381 (0.252)	85	439176	50.0000	47.030	80.00- 120.00	100.00
1.381	1.381 (0.252)	87	143811			2.75- 62.75	32.75
15 Freon 114					CAS #: 76-14-2		
1.503	1.503 (0.275)	135	358770	50.0000	46.344	80.00- 120.00	100.00
1.503	1.503 (0.275)	137	115866			2.30- 62.30	32.30
17 Chloromethane					CAS #: 74-87-3		
1.581	1.581 (0.289)	50	125172	50.0000	44.013	80.00- 120.00	100.00
1.581	1.581 (0.289)	52	41222			2.93- 62.93	32.93
23 Butane					CAS #: 106-97-8		
1.667	1.667 (0.305)	58	30663	50.0000	47.480	80.00- 120.00	100.00
1.667	1.667 (0.305)	43	251524			790.29- 850.29	820.29
25 Vinyl Chloride					CAS #: 75-01-4		
1.703	1.703 (0.311)	62	149400	50.0000	46.554	80.00- 120.00	100.00
1.703	1.703 (0.311)	64	47271			1.64- 61.64	31.64
26 1,3-Butadiene					CAS #: 106-99-0		
1.732	1.732 (0.317)	54	114923	50.0000	44.660	80.00- 120.00	100.00
1.732	1.732 (0.317)	39	135823			88.19- 148.19	118.19
29 Bromomethane					CAS #: 74-83-9		
2.090	2.090 (0.382)	94	147984	50.0000	50.166	80.00- 120.00	100.00
2.090	2.090 (0.382)	96	142957			66.60- 126.60	96.60
30 Chloroethane					CAS #: 75-00-3		
2.204	2.204 (0.403)	64	76133	50.0000	46.224	80.00- 120.00	100.00
2.204	2.204 (0.403)	66	24102			1.66- 61.66	31.66

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.204	2.204 (0.403)	49	24690			2.43- 62.43	32.43
31 Isopentane					CAS #: 78-78-4		
2.233	2.233 (0.408)	43	197164	50.0000	44.201	80.00- 120.00	100.00
2.233	2.233 (0.408)	57	124970			33.38- 93.38	63.38
35 Freon 11					CAS #: 75-69-4		
2.470	2.470 (0.451)	101	507841	50.0000	47.702	80.00- 120.00	100.00
2.470	2.470 (0.451)	103	330358			35.05- 95.05	65.05
42 Ethanol					CAS #: 64-17-5		
2.806	2.806 (0.513)	45	70248	50.0000	43.982	80.00- 120.00	100.00
2.799	2.799 (0.512)	43	13003			0.00- 48.51	18.51
2.806	2.806 (0.513)	46	25953			6.94- 66.94	36.94
49 Freon 113					CAS #: 76-13-1		
3.143	3.143 (0.574)	151	365539	50.0000	48.206	80.00- 120.00	100.00
3.143	3.143 (0.574)	153	231317			33.28- 93.28	63.28
3.136	3.136 (0.573)	101	419065			84.64- 144.64	114.64
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.164	3.164 (0.578)	98	114666	50.0000	46.563	80.00- 120.00	100.00
3.164	3.164 (0.578)	96	185750			131.99- 191.99	161.99
3.164	3.164 (0.578)	61	276777			211.38- 271.38	241.38
52 Acetone					CAS #: 67-64-1		
3.329	3.329 (0.608)	58	76485	50.0000	46.576	80.00- 120.00	100.00
3.329	3.329 (0.608)	43	270590			323.78- 383.78	353.78
56 Carbon Disulfide					CAS #: 75-15-0		
3.408	3.408 (0.623)	76	493716	50.0000	45.496	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.508	3.508 (0.641)	45	312100	50.0000	48.604	80.00- 120.00	100.00
3.508	3.508 (0.641)	43	57917			0.00- 48.56	18.56
3.508	3.508 (0.641)	59	11641			0.00- 33.73	3.73
58 3-Chloropropene					CAS #: 107-05-1		
3.673	3.673 (0.671)	76	85333	50.0000	44.784	80.00- 120.00	100.00
3.673	3.673 (0.671)	41	235552			246.04- 306.04	276.04
66 Methylene Chloride					CAS #: 75-09-2		
3.859	3.859 (0.705)	49	205142	50.0000	45.811	80.00- 120.00	100.00
3.859	3.859 (0.705)	84	160830			48.40- 108.40	78.40
3.859	3.859 (0.705)	51	63414			0.91- 60.91	30.91

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
3.988	3.988 (0.729)	59	361639	50.0000	51.706	80.00- 120.00	100.00
3.988	3.988 (0.729)	41	81375			0.00- 52.50	22.50
3.988	3.988 (0.729)	57	38180			0.00- 40.56	10.56
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.088	4.088 (0.747)	73	494966	50.0000	46.245	80.00- 120.00	100.00
4.088	4.088 (0.747)	57	106733			0.00- 51.56	21.56
4.088	4.088 (0.747)	41	115005			0.00- 53.23	23.23
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.117	4.117 (0.753)	98	123055	50.0000	48.710	80.00- 120.00	100.00
4.117	4.117 (0.753)	61	254047			176.45- 236.45	206.45
4.117	4.117 (0.753)	96	195365			128.76- 188.76	158.76
78 Hexane					CAS #: 110-54-3		
4.339	4.339 (0.793)	57	269979	50.0000	44.394	80.00- 120.00	100.00
4.332	4.332 (0.792)	43	186253			38.99- 98.99	68.99
4.332	4.332 (0.792)	86	48314			0.00- 47.90	17.90
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.626	4.626 (0.846)	63	325645	50.0000	48.188	80.00- 120.00	100.00
4.626	4.626 (0.846)	65	103341			1.73- 61.73	31.73
83 Isopropyl ether					CAS #: 108-20-3		
4.618	4.618 (0.844)	45	632439	50.0000	47.262	80.00- 120.00	100.00
4.618	4.618 (0.844)	87	172710			0.00- 57.31	27.31
4.618	4.618 (0.844)	59	67212			0.00- 40.63	10.63
86 Vinyl Acetate					CAS #: 108-05-4		
4.676	4.676 (0.855)	86	51296	50.0000	48.347	80.00- 120.00	100.00
4.676	4.676 (0.855)	43	616257			1171.37-1231.37	1201.37
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.991	4.991 (0.912)	59	574807	50.0000	48.207	80.00- 120.00	100.00
4.991	4.991 (0.912)	87	248853			13.29- 73.29	43.29
4.991	4.991 (0.912)	41	113003			0.00- 49.66	19.66
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.227	5.227 (0.955)	98	136747	50.0000	48.783	80.00- 120.00	100.00
5.227	5.227 (0.955)	96	212155			125.14- 185.14	155.14
5.227	5.227 (0.955)	61	249925			152.76- 212.76	182.76
92 2-Butanone					CAS #: 78-93-3		
5.256	5.256 (0.961)	72	89152	50.0000	47.301	80.00- 120.00	100.00
5.256	5.256 (0.961)	43	398787			417.31- 477.31	447.31

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.256	5.256 (0.961)	57	32325			6.26- 66.26	36.26
99 Tetrahydrofuran					CAS #: 109-99-9		
5.457	5.457 (0.997)	42	221276	50.0000	45.452	80.00- 120.00	100.00
5.457	5.457 (0.997)	71	80280			6.28- 66.28	36.28
5.457	5.457 (0.997)	72	83887			7.91- 67.91	37.91
100 Chloroform					CAS #: 67-66-3		
5.535	5.535 (1.012)	83	411839	50.0000	47.122	80.00- 120.00	100.00
5.535	5.535 (1.012)	85	262096			33.64- 93.64	63.64
102 Cyclohexane					CAS #: 110-82-7		
5.636	5.636 (1.030)	84	256442	50.0000	47.332	80.00- 120.00	100.00
5.636	5.636 (1.030)	56	285641			81.39- 141.39	111.39
5.636	5.636 (1.030)	41	172193			37.15- 97.15	67.15
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.657	5.657 (1.034)	97	456212	50.0000	47.792	80.00- 120.00	100.00
5.657	5.657 (1.034)	99	297573			35.23- 95.23	65.23
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.779	5.779 (1.056)	119	503540	50.0000	47.983	80.00- 120.00	100.00
5.772	5.772 (1.055)	117	514344			72.15- 132.15	102.15
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.979	5.979 (1.093)	57	879821	50.0000	46.582	80.00- 120.00	100.00
5.979	5.979 (1.093)	56	266181			0.25- 60.25	30.25
5.979	5.979 (1.093)	41	239784			0.00- 57.25	27.25
116 Benzene					CAS #: 71-43-2		
6.001	6.001 (0.940)	78	564334	50.0000	46.427	80.00- 120.00	100.00
6.001	6.001 (0.940)	77	132034			0.00- 53.40	23.40
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.073	6.073 (1.110)	87	148060	50.0000	49.187	80.00- 120.00	100.00
6.073	6.073 (1.110)	73	562207			349.72- 409.72	379.72
6.073	6.073 (1.110)	55	136648			62.29- 122.29	92.29
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.087	6.087 (0.954)	62	260692	50.0000	47.620	80.00- 120.00	100.00
6.087	6.087 (0.954)	64	84614			2.46- 62.46	32.46
121 Heptane					CAS #: 142-82-5		
6.151	6.151 (0.964)	71	206341	50.0000	46.089	80.00- 120.00	100.00
6.151	6.151 (0.964)	43	384360			156.27- 216.27	186.27

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.151	6.151 (0.964)	57	210607			72.07- 132.07	102.07
125 Trichloroethene					CAS #: 79-01-6		
6.581	6.581 (1.031)	95	290311	50.0000	47.744	80.00- 120.00	100.00
6.581	6.581 (1.031)	130	322228			80.99- 140.99	110.99
6.581	6.581 (1.031)	97	190641			35.67- 95.67	65.67
127 Methylcyclohexane					CAS #: 108-87-2		
6.681	6.681 (1.221)	83	365480	50.0000	46.613	80.00- 120.00	100.00
6.681	6.681 (1.221)	98	171866			17.02- 77.02	47.02
6.681	6.681 (1.221)	55	276948			45.78- 105.78	75.78
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.825	6.825 (1.070)	63	216969	50.0000	48.267	80.00- 120.00	100.00
6.825	6.825 (1.070)	62	150666			39.44- 99.44	69.44
6.825	6.825 (1.070)	41	129370			29.63- 89.63	59.63
136 1,4-Dioxane					CAS #: 123-91-1		
6.911	6.911 (1.083)	88	149233	50.0000	51.570	80.00- 120.00	100.00
6.911	6.911 (1.083)	58	98457			35.98- 95.98	65.98
6.911	6.911 (1.083)	57	32187			0.00- 51.57	21.57
138 Bromodichloromethane					CAS #: 75-27-4		
7.054	7.054 (1.106)	83	469237	50.0000	48.292	80.00- 120.00	100.00
7.054	7.054 (1.106)	85	296147			33.11- 93.11	63.11
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.434	7.434 (1.165)	75	377375	50.0000	48.337	80.00- 120.00	100.00
7.434	7.434 (1.165)	77	121725			2.26- 62.26	32.26
7.434	7.434 (1.165)	39	203975			24.05- 84.05	54.05
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.548	7.548 (1.183)	58	179746	50.0000	51.674	80.00- 120.00	100.00
7.548	7.548 (1.183)	43	512373			255.05- 315.05	285.05
7.548	7.548 (1.183)	85	84224			16.86- 76.86	46.86
147 Toluene					CAS #: 108-88-3		
7.677	7.677 (1.203)	91	780833	50.0000	47.350	80.00- 120.00	100.00
7.677	7.677 (1.203)	92	457470			28.59- 88.59	58.59
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.921	7.921 (0.893)	75	339522	50.0000	48.906	80.00- 120.00	100.00
7.921	7.921 (0.893)	77	111200			2.75- 62.75	32.75
7.921	7.921 (0.893)	39	177884			22.39- 82.39	52.39

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.078	8.078 (0.911)	97	281992	50.0000	48.742	80.00- 120.00	100.00
8.078	8.078 (0.911)	99	179114			33.52- 93.52	63.52
8.078	8.078 (0.911)	83	239628			54.98- 114.98	84.98
156 Tetrachloroethene					CAS #: 127-18-4		
8.114	8.114 (0.915)	166	419864	50.0000	46.867	80.00- 120.00	100.00
8.114	8.114 (0.915)	129	328522			48.24- 108.24	78.24
8.114	8.114 (0.915)	131	314659			44.94- 104.94	74.94
158 2-Hexanone					CAS #: 591-78-6		
8.250	8.250 (0.931)	58	240024	50.0000	53.016	80.00- 120.00	100.00
8.250	8.250 (0.931)	43	498019			177.49- 237.49	207.49
8.250	8.250 (0.931)	100	55363			0.00- 53.07	23.07
160 Dibromochloromethane					CAS #: 124-48-1		
8.393	8.393 (0.947)	129	586387	50.0000	49.294	80.00- 120.00	100.00
8.393	8.393 (0.947)	127	444018			45.72- 105.72	75.72
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.508	8.508 (0.960)	107	465954	50.0000	49.204	80.00- 120.00	100.00
8.508	8.508 (0.960)	109	453166			67.26- 127.26	97.26
165 Chlorobenzene					CAS #: 108-90-7		
8.895	8.895 (1.003)	112	703075	50.0000	48.932	80.00- 120.00	100.00
8.895	8.895 (1.003)	114	221674			1.53- 61.53	31.53
8.888	8.888 (1.002)	77	360399			21.26- 81.26	51.26
167 Ethyl Benzene					CAS #: 100-41-4		
8.945	8.945 (1.009)	106	347577	50.0000	48.816	80.00- 120.00	100.00
8.945	8.945 (1.009)	91	1036558			268.22- 328.22	298.22
169 m,p-Xylene					CAS #: 108-38-3		
9.038	9.038 (1.019)	106	435659	50.0000	50.093	80.00- 120.00	100.00
9.038	9.038 (1.019)	91	847840			164.61- 224.61	194.61
171 o-Xylene					CAS #: 95-47-6		
9.389	9.389 (1.059)	106	409900	50.0000	50.117	80.00- 120.00	100.00
9.382	9.382 (1.058)	91	826521			171.64- 231.64	201.64
172 Styrene					CAS #: 100-42-5		
9.403	9.403 (1.061)	104	679509	50.0000	52.007	80.00- 120.00	100.00
9.403	9.403 (1.061)	78	312574			16.00- 76.00	46.00
174 Bromoform					CAS #: 75-25-2		
9.604	9.604 (1.083)	173	588574	50.0000	50.192	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.604	9.604 (1.083)	171	300071			20.98- 80.98	50.98
175 Cumene					CAS #: 98-82-8		
9.676	9.676 (1.091)	105	1272881	50.0000	50.253	80.00- 120.00	100.00
9.676	9.676 (1.091)	120	353554			0.00- 57.78	27.78
9.676	9.676 (1.091)	51	111375			0.00- 38.75	8.75
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.991	9.991 (1.127)	83	603993	50.0000	49.272	80.00- 120.00	100.00
9.991	9.991 (1.127)	85	389497			34.49- 94.49	64.49
182 Propylbenzene					CAS #: 103-65-1		
10.027	10.027 (1.131)	91	1417741	50.0000	49.224	80.00- 120.00	100.00
10.027	10.027 (1.131)	120	361192			0.00- 55.48	25.48
10.027	10.027 (1.131)	105	54814			0.00- 33.87	3.87
188 4-Ethyltoluene					CAS #: 622-96-8		
10.120	10.120 (1.141)	120	417499	50.0000	51.569	80.00- 120.00	100.00
10.120	10.120 (1.141)	105	1300160			281.42- 341.42	311.42
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.177	10.177 (1.148)	120	548918	50.0000	50.660	80.00- 120.00	100.00
10.170	10.170 (1.147)	105	1101147			170.60- 230.60	200.60
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.499	10.499 (1.184)	120	497080	50.0000	51.210	80.00- 120.00	100.00
10.499	10.499 (1.184)	105	1048073			180.85- 240.85	210.85
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.786	10.786 (1.217)	146	761585	50.0000	51.223	80.00- 120.00	100.00
10.786	10.786 (1.217)	148	488372			34.13- 94.13	64.13
10.786	10.786 (1.217)	111	292485			8.40- 68.40	38.40
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.865	10.865 (1.225)	146	758555	50.0000	50.390	80.00- 120.00	100.00
10.865	10.865 (1.225)	148	499264			35.82- 95.82	65.82
10.865	10.865 (1.225)	111	285615			7.65- 67.65	37.65
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.986	10.986 (1.239)	91	929689	50.0000	54.144	80.00- 120.00	100.00
10.986	10.986 (1.239)	126	226048			0.00- 54.31	24.31
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.194	11.194 (1.263)	146	722611	50.0000	51.855	80.00- 120.00	100.00
11.194	11.194 (1.263)	148	464544			34.29- 94.29	64.29

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.194	11.194 (1.263)	111	284498			9.37- 69.37	39.37
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.620	12.620 (1.423)	180	543583	50.0000	52.500	80.00- 120.00	100.00
12.620	12.620 (1.423)	182	523484			66.30- 126.30	96.30
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.713	12.713 (1.434)	225	449292	50.0000	51.788	80.00- 120.00	100.00
12.713	12.713 (1.434)	223	281207			32.59- 92.59	62.59

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a092109.d
Lab Smp Id: ICAL Level #6
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msda.i/21sep15.b/a15q0921a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 21-SEP-2015
Calibration Time: 21:07
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	152172	91303	213041	152172	0.00
123 1,4-Difluorobenze	627705	376623	878787	627705	0.00
163 Chlorobenzene-d5	581049	348629	813469	581049	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.47	5.14	5.80	5.47	0.00
123 1,4-Difluorobenze	6.38	6.05	6.71	6.38	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msda.i/21sep15.b/a092109.d

Date : 21-SEP-2015 21:07

Client ID:

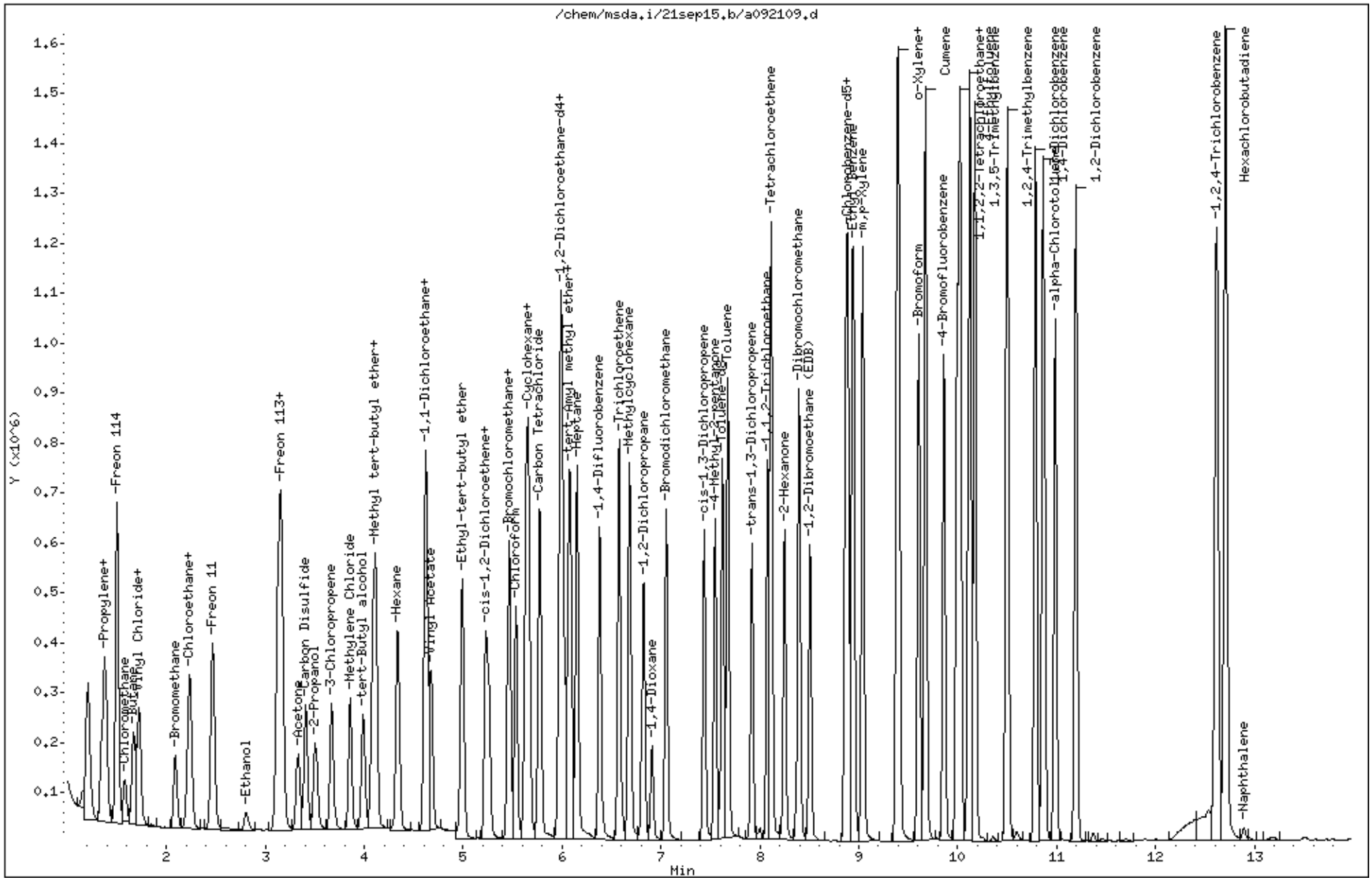
Sample Info: 50ml 2736-243

Column phase: RTX-624

Instrument: msda.i

Operator: js

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/21sep15.b/a092110.d
Lab Smp Id: ICAL Level #7
Inj Date : 21-SEP-2015 21:34
Operator : js Inst ID: msda.i
Smp Info : 100ml 2736-243
Misc Info : 100ppbv (200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/21sep15.b/a15q0921a.m
Meth Date : 22-Sep-2015 11:24 mskidmor Quant Type: ISTD
Cal Date : 21-SEP-2015 21:34 Cal File: a092110.d
Als bottle: 2 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12noNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.471	5.471 (1.000)	130	152787	25.0000		80.00- 120.00	100.00
5.471	5.471 (1.000)	128	119150			46.57- 106.57	77.98
5.464	5.464 (1.000)	49	163025			75.38- 135.38	106.70
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.380	6.380 (1.000)	114	638329	25.0000		80.00- 120.00	100.00
6.380	6.380 (1.000)	88	91035			0.00- 44.55	14.26
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.866	8.866 (1.000)	117	598509	25.0000		80.00- 120.00	100.00
8.866	8.866 (1.000)	82	295535			19.23- 79.23	49.38
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.022	6.022 (1.101)	65	183247	25.0000	24.346	80.00- 120.00	100.00
6.022	6.022 (1.101)	67	113199			27.41- 87.41	61.77

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.620	7.620 (1.194)	98	630632	25.0000	25.116	80.00- 120.00	100.00
7.620	7.620 (1.194)	70	63653			0.00- 39.72	10.09
7.620	7.620 (1.194)	100	426032			36.51- 96.51	67.56
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.862	9.862 (1.112)	174	378405	25.0000	25.479	80.00- 120.00	100.00
9.862	9.862 (1.112)	95	419772			82.23- 142.23	110.93
9.862	9.862 (1.112)	176	366477			67.41- 127.41	96.85
9 Propylene					CAS #: 115-07-1		
1.352	1.352 (0.247)	41	271299	100.000	92.109	80.00- 120.00	100.00
1.352	1.352 (0.247)	42	180486			34.74- 94.74	66.53
1.352	1.352 (0.247)	39	196248			42.01- 102.01	72.34
11 Freon 12					CAS #: 75-71-8		
1.388	1.388 (0.254)	85	889433	100.000	94.864	80.00- 120.00	100.00
1.388	1.388 (0.254)	87	295618			2.75- 62.75	33.24
15 Freon 114					CAS #: 76-14-2		
1.502	1.502 (0.275)	135	742424	100.000	95.516	80.00- 120.00	100.00
1.502	1.502 (0.275)	137	243140			2.30- 62.30	32.75
17 Chloromethane					CAS #: 74-87-3		
1.588	1.588 (0.290)	50	247951	100.000	86.833	80.00- 120.00	100.00
1.588	1.588 (0.290)	52	80376			2.93- 62.93	32.42
23 Butane					CAS #: 106-97-8		
1.667	1.667 (0.305)	58	61654	100.000	95.084	80.00- 120.00	100.00
1.667	1.667 (0.305)	43	509965			790.29- 850.29	827.14
25 Vinyl Chloride					CAS #: 75-01-4		
1.710	1.710 (0.313)	62	304523	100.000	94.508	80.00- 120.00	100.00
1.710	1.710 (0.313)	64	98334			1.64- 61.64	32.29
26 1,3-Butadiene					CAS #: 106-99-0		
1.732	1.732 (0.317)	54	244242	100.000	94.533	80.00- 120.00	100.00
1.732	1.732 (0.317)	39	280206			88.19- 148.19	114.72
29 Bromomethane					CAS #: 74-83-9		
2.097	2.097 (0.383)	94	292335	100.000	98.703	80.00- 120.00	100.00
2.097	2.097 (0.383)	96	280660			66.60- 126.60	96.01
30 Chloroethane					CAS #: 75-00-3		
2.219	2.219 (0.406)	64	160128	100.000	96.831	80.00- 120.00	100.00
2.219	2.219 (0.406)	66	50097			1.66- 61.66	31.29

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.219	2.219 (0.406)	49	48323			2.43- 62.43	30.18
31 Isopentane					CAS #: 78-78-4		
2.240	2.240 (0.409)	43	403974	100.000	90.199	80.00- 120.00	100.00
2.240	2.240 (0.409)	57	256852			33.38- 93.38	63.58
35 Freon 11					CAS #: 75-69-4		
2.469	2.469 (0.451)	101	1029293	100.000	96.294	80.00- 120.00	100.00
2.469	2.469 (0.451)	103	683359			35.05- 95.05	66.39
42 Ethanol					CAS #: 64-17-5		
2.806	2.806 (0.513)	45	135370	100.000	84.413	80.00- 120.00	100.00
2.806	2.806 (0.513)	43	27241			0.00- 48.51	20.12
2.806	2.806 (0.513)	46	51438			6.94- 66.94	38.00
49 Freon 113					CAS #: 76-13-1		
3.143	3.143 (0.574)	151	730754	100.000	95.981	80.00- 120.00	100.00
3.143	3.143 (0.574)	153	474620			33.28- 93.28	64.95
3.143	3.143 (0.574)	101	838641			84.64- 144.64	114.76
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.171	3.171 (0.580)	98	232883	100.000	94.188	80.00- 120.00	100.00
3.171	3.171 (0.580)	96	372189			131.99- 191.99	159.82
3.171	3.171 (0.580)	61	567366			211.38- 271.38	243.63
52 Acetone					CAS #: 67-64-1		
3.336	3.336 (0.610)	58	154427	100.000	93.661	80.00- 120.00	100.00
3.329	3.329 (0.608)	43	556050			323.78- 383.78	360.07
56 Carbon Disulfide					CAS #: 75-15-0		
3.408	3.408 (0.623)	76	1026108	100.000	94.177	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.508	3.508 (0.641)	45	654304	100.000	101.48	80.00- 120.00	100.00
3.508	3.508 (0.641)	43	127640			0.00- 48.56	19.51
3.508	3.508 (0.641)	59	24562			0.00- 33.73	3.75
58 3-Chloropropene					CAS #: 107-05-1		
3.673	3.673 (0.671)	76	184751	100.000	96.570	80.00- 120.00	100.00
3.673	3.673 (0.671)	41	481369			246.04- 306.04	260.55
66 Methylene Chloride					CAS #: 75-09-2		
3.859	3.859 (0.705)	49	414700	100.000	92.235	80.00- 120.00	100.00
3.866	3.866 (0.707)	84	326020			48.40- 108.40	78.62
3.859	3.859 (0.705)	51	127178			0.91- 60.91	30.67

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
3.988	3.988 (0.729)	59	733391	100.000	104.44	80.00- 120.00	100.00
3.988	3.988 (0.729)	41	162933			0.00- 52.50	22.22
3.988	3.988 (0.729)	57	77188			0.00- 40.56	10.52
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.088	4.088 (0.747)	73	1012684	100.000	94.235	80.00- 120.00	100.00
4.088	4.088 (0.747)	57	225261			0.00- 51.56	22.24
4.088	4.088 (0.747)	41	234174			0.00- 53.23	23.12
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.117	4.117 (0.753)	98	254982	100.000	100.52	80.00- 120.00	100.00
4.117	4.117 (0.753)	61	513107			176.45- 236.45	201.23
4.117	4.117 (0.753)	96	398757			128.76- 188.76	156.39
78 Hexane					CAS #: 110-54-3		
4.339	4.339 (0.793)	57	563502	100.000	92.288	80.00- 120.00	100.00
4.339	4.339 (0.793)	43	380390			38.99- 98.99	67.50
4.339	4.339 (0.793)	86	93084			0.00- 47.90	16.52
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.633	4.633 (0.847)	63	660176	100.000	97.298	80.00- 120.00	100.00
4.633	4.633 (0.847)	65	203201			1.73- 61.73	30.78
83 Isopropyl ether					CAS #: 108-20-3		
4.618	4.618 (0.844)	45	1276272	100.000	94.991	80.00- 120.00	100.00
4.626	4.626 (0.846)	87	342429			0.00- 57.31	26.83
4.618	4.618 (0.844)	59	135065			0.00- 40.63	10.58
86 Vinyl Acetate					CAS #: 108-05-4		
4.676	4.676 (0.855)	86	106874	100.000	100.32	80.00- 120.00	100.00
4.676	4.676 (0.855)	43	1189882			1171.37-1231.37	1113.35
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.991	4.991 (0.912)	59	1183160	100.000	98.827	80.00- 120.00	100.00
4.991	4.991 (0.912)	87	511437			13.29- 73.29	43.23
4.991	4.991 (0.912)	41	228579			0.00- 49.66	19.32
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.227	5.227 (0.955)	98	281385	100.000	99.978	80.00- 120.00	100.00
5.234	5.234 (0.957)	96	439679			125.14- 185.14	156.26
5.227	5.227 (0.955)	61	524805			152.76- 212.76	186.51
92 2-Butanone					CAS #: 78-93-3		
5.256	5.256 (0.961)	72	182925	100.000	96.663	80.00- 120.00	100.00
5.256	5.256 (0.961)	43	815661			417.31- 477.31	445.90

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.256	5.256 (0.961)	57	61006			6.26- 66.26	33.35
99 Tetrahydrofuran					CAS #: 109-99-9		
5.456	5.456 (0.997)	42	454280	100.000	92.938	80.00- 120.00	100.00
5.456	5.456 (0.997)	71	162548			6.28- 66.28	35.78
5.456	5.456 (0.997)	72	170757			7.91- 67.91	37.59
100 Chloroform					CAS #: 67-66-3		
5.535	5.535 (1.012)	83	846909	100.000	96.512	80.00- 120.00	100.00
5.535	5.535 (1.012)	85	532799			33.64- 93.64	62.91
102 Cyclohexane					CAS #: 110-82-7		
5.636	5.636 (1.030)	84	516027	100.000	94.861	80.00- 120.00	100.00
5.636	5.636 (1.030)	56	588817			81.39- 141.39	114.11
5.636	5.636 (1.030)	41	351603			37.15- 97.15	68.14
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.657	5.657 (1.034)	97	914678	100.000	95.435	80.00- 120.00	100.00
5.657	5.657 (1.034)	99	600229			35.23- 95.23	65.62
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.779	5.779 (1.056)	119	1016946	100.000	96.515	80.00- 120.00	100.00
5.779	5.779 (1.056)	117	1058510			72.15- 132.15	104.09
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.979	5.979 (1.093)	57	1793564	100.000	94.577	80.00- 120.00	100.00
5.979	5.979 (1.093)	56	538775			0.25- 60.25	30.04
5.979	5.979 (1.093)	41	492207			0.00- 57.25	27.44
116 Benzene					CAS #: 71-43-2		
6.001	6.001 (0.940)	78	1158164	100.000	93.695	80.00- 120.00	100.00
6.001	6.001 (0.940)	77	270416			0.00- 53.40	23.35
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.072	6.072 (1.110)	87	295567	100.000	97.795	80.00- 120.00	100.00
6.072	6.072 (1.110)	73	1150074			349.72- 409.72	389.11
6.072	6.072 (1.110)	55	281005			62.29- 122.29	95.07
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.094	6.094 (0.955)	62	532531	100.000	95.657	80.00- 120.00	100.00
6.094	6.094 (0.955)	64	169588			2.46- 62.46	31.85
121 Heptane					CAS #: 142-82-5		
6.151	6.151 (0.964)	71	403479	100.000	88.623	80.00- 120.00	100.00
6.151	6.151 (0.964)	43	755817			156.27- 216.27	187.32

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.151	6.151 (0.964)	57	423361			72.07- 132.07	104.93
125 Trichloroethene					CAS #: 79-01-6		
6.581	6.581 (1.031)	95	601435	100.000	97.264	80.00- 120.00	100.00
6.581	6.581 (1.031)	130	665986			80.99- 140.99	110.73
6.581	6.581 (1.031)	97	384598			35.67- 95.67	63.95
127 Methylcyclohexane					CAS #: 108-87-2		
6.681	6.681 (1.221)	83	740197	100.000	94.025	80.00- 120.00	100.00
6.681	6.681 (1.221)	98	349431			17.02- 77.02	47.21
6.681	6.681 (1.221)	55	561008			45.78- 105.78	75.79
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.825	6.825 (1.070)	63	440663	100.000	96.398	80.00- 120.00	100.00
6.825	6.825 (1.070)	62	302575			39.44- 99.44	68.66
6.825	6.825 (1.070)	41	264661			29.63- 89.63	60.06
136 1,4-Dioxane					CAS #: 123-91-1		
6.911	6.911 (1.083)	88	304379	100.000	103.43	80.00- 120.00	100.00
6.911	6.911 (1.083)	58	194581			35.98- 95.98	63.93
6.911	6.911 (1.083)	57	64352			0.00- 51.57	21.14
138 Bromodichloromethane					CAS #: 75-27-4		
7.054	7.054 (1.106)	83	961562	100.000	97.313	80.00- 120.00	100.00
7.054	7.054 (1.106)	85	612545			33.11- 93.11	63.70
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.433	7.433 (1.165)	75	776450	100.000	97.798	80.00- 120.00	100.00
7.433	7.433 (1.165)	77	247641			2.26- 62.26	31.89
7.433	7.433 (1.165)	39	429304			24.05- 84.05	55.29
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.548	7.548 (1.183)	58	364738	100.000	103.11	80.00- 120.00	100.00
7.548	7.548 (1.183)	43	1034062			255.05- 315.05	283.51
7.548	7.548 (1.183)	85	166512			16.86- 76.86	45.65
147 Toluene					CAS #: 108-88-3		
7.677	7.677 (1.203)	91	1596241	100.000	95.186	80.00- 120.00	100.00
7.677	7.677 (1.203)	92	935138			28.59- 88.59	58.58
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.921	7.921 (0.893)	75	706808	100.000	98.842	80.00- 120.00	100.00
7.921	7.921 (0.893)	77	224471			2.75- 62.75	31.76
7.921	7.921 (0.893)	39	366872			22.39- 82.39	51.91

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.078	8.078 (0.911)	97	577862	100.000	96.969	80.00- 120.00	100.00
8.078	8.078 (0.911)	99	360597			33.52- 93.52	62.40
8.078	8.078 (0.911)	83	491976			54.98- 114.98	85.14
156 Tetrachloroethene					CAS #: 127-18-4		
8.114	8.114 (0.915)	166	851174	100.000	92.240	80.00- 120.00	100.00
8.114	8.114 (0.915)	129	658810			48.24- 108.24	77.40
8.114	8.114 (0.915)	131	638594			44.94- 104.94	75.03
158 2-Hexanone					CAS #: 591-78-6		
8.250	8.250 (0.931)	58	494214	100.000	105.98	80.00- 120.00	100.00
8.250	8.250 (0.931)	43	1028211			177.49- 237.49	208.05
8.250	8.250 (0.931)	100	113971			0.00- 53.07	23.06
160 Dibromochloromethane					CAS #: 124-48-1		
8.393	8.393 (0.947)	129	1200595	100.000	97.982	80.00- 120.00	100.00
8.393	8.393 (0.947)	127	923715			45.72- 105.72	76.94
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.508	8.508 (0.960)	107	953752	100.000	97.776	80.00- 120.00	100.00
8.508	8.508 (0.960)	109	924574			67.26- 127.26	96.94
165 Chlorobenzene					CAS #: 108-90-7		
8.888	8.888 (1.002)	112	1416657	100.000	95.718	80.00- 120.00	100.00
8.895	8.895 (1.003)	114	454973			1.53- 61.53	32.12
8.888	8.888 (1.002)	77	724814			21.26- 81.26	51.16
167 Ethyl Benzene					CAS #: 100-41-4		
8.945	8.945 (1.009)	106	707850	100.000	96.516	80.00- 120.00	100.00
8.945	8.945 (1.009)	91	2091292			268.22- 328.22	295.44
169 m,p-Xylene					CAS #: 108-38-3		
9.038	9.038 (1.019)	106	891907	100.000	99.562	80.00- 120.00	100.00
9.038	9.038 (1.019)	91	1703491			164.61- 224.61	190.99
171 o-Xylene					CAS #: 95-47-6		
9.382	9.382 (1.058)	106	844729	100.000	100.27	80.00- 120.00	100.00
9.382	9.382 (1.058)	91	1687616			171.64- 231.64	199.78
172 Styrene					CAS #: 100-42-5		
9.403	9.403 (1.061)	104	1395638	100.000	103.70	80.00- 120.00	100.00
9.403	9.403 (1.061)	78	642301			16.00- 76.00	46.02
174 Bromoform					CAS #: 75-25-2		
9.604	9.604 (1.083)	173	1236003	100.000	102.33	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.604	9.604 (1.083)	171	635724			20.98- 80.98	51.43
175 Cumene					CAS #: 98-82-8		
9.675	9.675 (1.091)	105	2613187	100.000	100.16	80.00- 120.00	100.00
9.675	9.675 (1.091)	120	722795			0.00- 57.78	27.66
9.675	9.675 (1.091)	51	229524			0.00- 38.75	8.78
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.991	9.991 (1.127)	83	1247894	100.000	98.829	80.00- 120.00	100.00
9.991	9.991 (1.127)	85	802017			34.49- 94.49	64.27
182 Propylbenzene					CAS #: 103-65-1		
10.026	10.026 (1.131)	91	2915316	100.000	98.267	80.00- 120.00	100.00
10.026	10.026 (1.131)	120	753626			0.00- 55.48	25.85
10.026	10.026 (1.131)	105	113939			0.00- 33.87	3.91
188 4-Ethyltoluene					CAS #: 622-96-8		
10.120	10.120 (1.141)	120	864663	100.000	103.69	80.00- 120.00	100.00
10.120	10.120 (1.141)	105	2666980			281.42- 341.42	308.44
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.177	10.177 (1.148)	120	1138025	100.000	101.96	80.00- 120.00	100.00
10.170	10.170 (1.147)	105	2282433			170.60- 230.60	200.56
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.499	10.499 (1.184)	120	1053394	100.000	105.36	80.00- 120.00	100.00
10.499	10.499 (1.184)	105	2211980			180.85- 240.85	209.99
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.786	10.786 (1.217)	146	1596979	100.000	104.28	80.00- 120.00	100.00
10.786	10.786 (1.217)	148	1030756			34.13- 94.13	64.54
10.786	10.786 (1.217)	111	608933			8.40- 68.40	38.13
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.872	10.872 (1.226)	146	1598086	100.000	103.06	80.00- 120.00	100.00
10.872	10.872 (1.226)	148	1035523			35.82- 95.82	64.80
10.872	10.872 (1.226)	111	594694			7.65- 67.65	37.21
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.986	10.986 (1.239)	91	2000122	100.000	113.09	80.00- 120.00	100.00
10.986	10.986 (1.239)	126	479711			0.00- 54.31	23.98
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.201	11.201 (1.263)	146	1514540	100.000	105.51	80.00- 120.00	100.00
11.201	11.201 (1.263)	148	982011			34.29- 94.29	64.84

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.201	11.201 (1.263)	111	603112			9.37- 69.37	39.82
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.627	12.627 (1.424)	180	1327419	100.000	124.46	80.00- 120.00	100.00
12.627	12.627 (1.424)	182	1284838			66.30- 126.30	96.79
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.720	12.720 (1.435)	225	1050942	100.000	117.60	80.00- 120.00	100.00
12.720	12.720 (1.435)	223	654772			32.59- 92.59	62.30

Report Date: 22-Sep-2015 11:24

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a092110.d
Lab Smp Id: ICAL Level #7
Analysis Type: VOA
Quant Type: ISTD
Operator: js
Method File: /chem/msda.i/21sep15.b/a15q0921a.m
Misc Info: 100ppbv (200ppbv)

Calibration Date: 21-SEP-2015
Calibration Time: 21:07
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	152172	91303	213041	152787	0.40
123 1,4-Difluorobenze	627705	376623	878787	638329	1.69
163 Chlorobenzene-d5	581049	348629	813469	598509	3.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.47	5.14	5.80	5.47	0.00
123 1,4-Difluorobenze	6.38	6.05	6.71	6.38	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msda.i/21sep15.b/a092110.d

Date : 21-SEP-2015 21:34

Client ID:

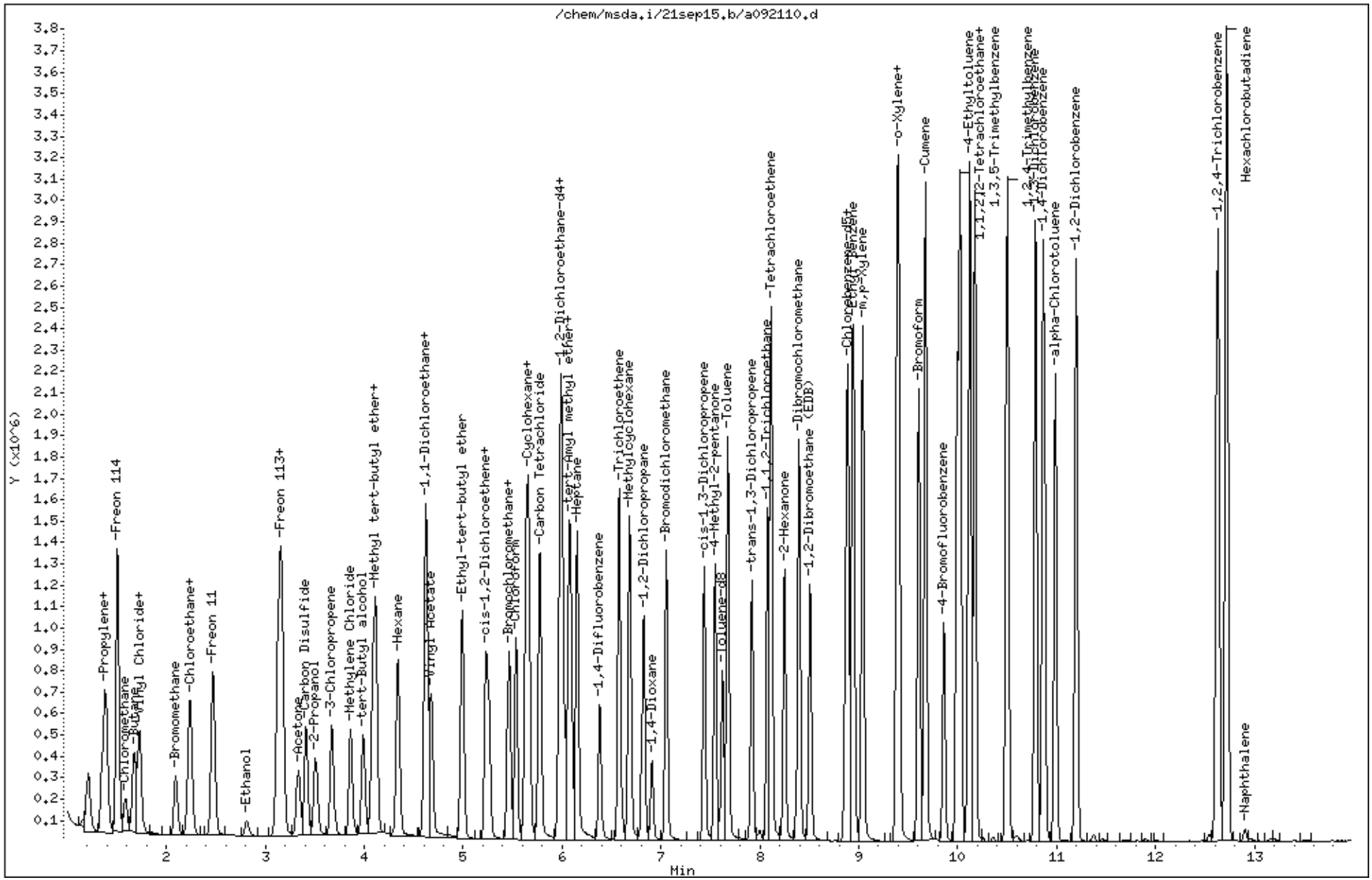
Sample Info: 100ml 2736-243

Column phase: RTX-624

Instrument: msda.i

Operator: js

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/21sep15.b/a092114.d
Lab Smp Id: ICAL Level #8
Inj Date : 22-SEP-2015 07:19
Operator : mjs Inst ID: msda.i
Smp Info : 200ml 2736-243
Misc Info : 200ppbv (200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/21sep15.b/a15q0921a.m
Meth Date : 22-Sep-2015 11:24 mskidmor Quant Type: ISTD
Cal Date : 22-SEP-2015 07:19 Cal File: a092114.d
Als bottle: 2 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12noNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.471	5.471 (1.000)	130	143431	25.0000		80.00- 120.00	100.00
5.471	5.471 (1.000)	128	113539			46.57- 106.57	79.16
5.471	5.471 (1.000)	49	154231			75.38- 135.38	107.53
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.388	6.388 (1.000)	114	593254	25.0000		80.00- 120.00	100.00
6.388	6.388 (1.000)	88	87593			0.00- 44.55	14.76
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	565942	25.0000		80.00- 120.00	100.00
8.866	8.866 (1.000)	82	283382			19.23- 79.23	50.07
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.030	6.030 (1.102)	65	177227	25.0000	25.082	80.00- 120.00	100.00
6.030	6.030 (1.102)	67	106915			27.41- 87.41	60.33

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.620	7.620 (1.193)	98	597095	25.0000	25.587	80.00- 120.00	100.00
7.620	7.620 (1.193)	70	60552			0.00- 39.72	10.14
7.620	7.620 (1.193)	100	408146			36.51- 96.51	68.36
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.862	9.862 (1.112)	174	366864	25.0000	26.124	80.00- 120.00	100.00
9.862	9.862 (1.112)	95	403748			82.23- 142.23	110.05
9.862	9.862 (1.112)	176	352955			67.41- 127.41	96.21
9 Propylene					CAS #: 115-07-1		
1.359	1.359 (0.248)	41	544947	200.000	197.08	80.00- 120.00	100.00
1.359	1.359 (0.248)	42	359396			34.74- 94.74	65.95
1.359	1.359 (0.248)	39	396302			42.01- 102.01	72.72
11 Freon 12					CAS #: 75-71-8		
1.395	1.395 (0.255)	85	1790481	200.000	203.42	80.00- 120.00	100.00(A)
1.395	1.395 (0.255)	87	588301			2.75- 62.75	32.86
15 Freon 114					CAS #: 76-14-2		
1.517	1.517 (0.277)	135	1433248	200.000	196.42	80.00- 120.00	100.00
1.517	1.517 (0.277)	137	462560			2.30- 62.30	32.27
17 Chloromethane					CAS #: 74-87-3		
1.603	1.603 (0.293)	50	499287	200.000	186.26	80.00- 120.00	100.00
1.603	1.603 (0.293)	52	155848			2.93- 62.93	31.21
23 Butane					CAS #: 106-97-8		
1.682	1.682 (0.307)	58	118249	200.000	194.26	80.00- 120.00	100.00
1.682	1.682 (0.307)	43	1010225			790.29- 850.29	854.32
25 Vinyl Chloride					CAS #: 75-01-4		
1.725	1.725 (0.315)	62	620642	200.000	205.18	80.00- 120.00	100.00(A)
1.725	1.725 (0.315)	64	194480			1.64- 61.64	31.34
26 1,3-Butadiene					CAS #: 106-99-0		
1.746	1.746 (0.319)	54	492257	200.000	202.96	80.00- 120.00	100.00(A)
1.746	1.746 (0.319)	39	557574			88.19- 148.19	113.27
29 Bromomethane					CAS #: 74-83-9		
2.104	2.104 (0.385)	94	581641	200.000	209.19	80.00- 120.00	100.00(A)
2.104	2.104 (0.385)	96	566756			66.60- 126.60	97.44
30 Chloroethane					CAS #: 75-00-3		
2.233	2.233 (0.408)	64	309544	200.000	199.39	80.00- 120.00	100.00
2.233	2.233 (0.408)	66	98759			1.66- 61.66	31.90

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.226	2.226 (0.407)	49	94719			2.43- 62.43	30.60
31 Isopentane					CAS #: 78-78-4		
2.255	2.255 (0.412)	43	807937	200.000	192.16	80.00- 120.00	100.00
2.255	2.255 (0.412)	57	505566			33.38- 93.38	62.57
35 Freon 11					CAS #: 75-69-4		
2.484	2.484 (0.454)	101	2053475	200.000	204.64	80.00- 120.00	100.00(A)
2.484	2.484 (0.454)	103	1339133			35.05- 95.05	65.21
42 Ethanol					CAS #: 64-17-5		
2.820	2.820 (0.516)	45	261189	200.000	173.49	80.00- 120.00	100.00
2.820	2.820 (0.516)	43	54968			0.00- 48.51	21.05
2.820	2.820 (0.516)	46	99936			6.94- 66.94	38.26
49 Freon 113					CAS #: 76-13-1		
3.150	3.150 (0.576)	151	1435420	200.000	200.83	80.00- 120.00	100.00(A)
3.150	3.150 (0.576)	153	918772			33.28- 93.28	64.01
3.150	3.150 (0.576)	101	1641235			84.64- 144.64	114.34
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.186	3.186 (0.582)	98	468224	200.000	201.72	80.00- 120.00	100.00(A)
3.179	3.179 (0.581)	96	740685			131.99- 191.99	158.19
3.179	3.179 (0.581)	61	1110068			211.38- 271.38	237.08
52 Acetone					CAS #: 67-64-1		
3.343	3.343 (0.611)	58	307706	200.000	198.80	80.00- 120.00	100.00
3.343	3.343 (0.611)	43	1073281			323.78- 383.78	348.80
56 Carbon Disulfide					CAS #: 75-15-0		
3.422	3.422 (0.626)	76	2022854	200.000	197.77	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.515	3.515 (0.643)	45	1272920	200.000	210.31	80.00- 120.00	100.00(A)
3.515	3.515 (0.643)	43	252627			0.00- 48.56	19.85
3.515	3.515 (0.643)	59	46419			0.00- 33.73	3.65
58 3-Chloropropene					CAS #: 107-05-1		
3.687	3.687 (0.674)	76	371462	200.000	206.83	80.00- 120.00	100.00(A)
3.687	3.687 (0.674)	41	960520			246.04- 306.04	258.58
66 Methylene Chloride					CAS #: 75-09-2		
3.873	3.873 (0.708)	49	829157	200.000	196.44	80.00- 120.00	100.00
3.873	3.873 (0.708)	84	644036			48.40- 108.40	77.67
3.873	3.873 (0.708)	51	243846			0.91- 60.91	29.41

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
3.995	3.995 (0.730)	59	1446551	200.000	219.43	80.00- 120.00	100.00(A)
3.995	3.995 (0.730)	41	322982			0.00- 52.50	22.33
3.995	3.995 (0.730)	57	154254			0.00- 40.56	10.66
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.096	4.096 (0.749)	73	2020071	200.000	200.24	80.00- 120.00	100.00(A)
4.096	4.096 (0.749)	57	435066			0.00- 51.56	21.54
4.096	4.096 (0.749)	41	456022			0.00- 53.23	22.57
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.124	4.124 (0.754)	98	503627	200.000	211.50	80.00- 120.00	100.00(A)
4.124	4.124 (0.754)	61	1019735			176.45- 236.45	202.48
4.124	4.124 (0.754)	96	780695			128.76- 188.76	155.01
78 Hexane					CAS #: 110-54-3		
4.346	4.346 (0.794)	57	1116314	200.000	194.75	80.00- 120.00	100.00
4.346	4.346 (0.794)	43	753940			38.99- 98.99	67.54
4.346	4.346 (0.794)	86	181458			0.00- 47.90	16.26
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.640	4.640 (0.848)	63	1297800	200.000	203.75	80.00- 120.00	100.00(A)
4.640	4.640 (0.848)	65	401098			1.73- 61.73	30.91
83 Isopropyl ether					CAS #: 108-20-3		
4.626	4.626 (0.846)	45	2534164	200.000	200.92	80.00- 120.00	100.00(A)
4.626	4.626 (0.846)	87	683662			0.00- 57.31	26.98
4.626	4.626 (0.846)	59	265779			0.00- 40.63	10.49
86 Vinyl Acetate					CAS #: 108-05-4		
4.683	4.683 (0.856)	86	209899	200.000	209.89	80.00- 120.00	100.00(A)
4.683	4.683 (0.856)	43	2360350			1171.37-1231.37	1124.52
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
4.998	4.998 (0.914)	59	2317970	200.000	206.24	80.00- 120.00	100.00(A)
4.998	4.998 (0.914)	87	1010518			13.29- 73.29	43.59
4.991	4.991 (0.912)	41	448606			0.00- 49.66	19.35
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.234	5.234 (0.957)	98	541819	200.000	205.07	80.00- 120.00	100.00(A)
5.234	5.234 (0.957)	96	869669			125.14- 185.14	160.51
5.234	5.234 (0.957)	61	1028533			152.76- 212.76	189.83
92 2-Butanone					CAS #: 78-93-3		
5.263	5.263 (0.962)	72	362301	200.000	203.94	80.00- 120.00	100.00(A)
5.263	5.263 (0.962)	43	1598108			417.31- 477.31	441.10

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.263	5.263 (0.962)	57	122456			6.26- 66.26	33.80
99 Tetrahydrofuran					CAS #: 109-99-9		
5.464	5.464 (0.999)	42	886172	200.000	193.12	80.00- 120.00	100.00
5.464	5.464 (0.999)	71	320045			6.28- 66.28	36.12
5.464	5.464 (0.999)	72	328230			7.91- 67.91	37.04
100 Chloroform					CAS #: 67-66-3		
5.535	5.535 (1.012)	83	1648889	200.000	200.16	80.00- 120.00	100.00(A)
5.535	5.535 (1.012)	85	1047790			33.64- 93.64	63.55
102 Cyclohexane					CAS #: 110-82-7		
5.643	5.643 (1.031)	84	1010884	200.000	197.95	80.00- 120.00	100.00
5.643	5.643 (1.031)	56	1169448			81.39- 141.39	115.69
5.643	5.643 (1.031)	41	689136			37.15- 97.15	68.17
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.664	5.664 (1.035)	97	1791518	200.000	199.11	80.00- 120.00	100.00
5.664	5.664 (1.035)	99	1176414			35.23- 95.23	65.67
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.779	5.779 (1.056)	119	2015258	200.000	203.74	80.00- 120.00	100.00(A)
5.779	5.779 (1.056)	117	2065981			72.15- 132.15	102.52
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
5.987	5.987 (1.094)	57	3560970	200.000	200.02	80.00- 120.00	100.00(A)
5.987	5.987 (1.094)	56	1058978			0.25- 60.25	29.74
5.987	5.987 (1.094)	41	976202			0.00- 57.25	27.41
116 Benzene					CAS #: 71-43-2		
6.001	6.001 (0.939)	78	2253910	200.000	196.19	80.00- 120.00	100.00
6.001	6.001 (0.939)	77	528069			0.00- 53.40	23.43
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.072	6.072 (1.110)	87	583342	200.000	205.60	80.00- 120.00	100.00(A)
6.072	6.072 (1.110)	73	2269071			349.72- 409.72	388.98
6.072	6.072 (1.110)	55	551066			62.29- 122.29	94.47
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.094	6.094 (0.954)	62	1023384	200.000	197.79	80.00- 120.00	100.00
6.094	6.094 (0.954)	64	334977			2.46- 62.46	32.73
121 Heptane					CAS #: 142-82-5		
6.158	6.158 (0.964)	71	800919	200.000	189.29	80.00- 120.00	100.00
6.158	6.158 (0.964)	43	1498770			156.27- 216.27	187.13

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.158	6.158 (0.964)	57	829679			72.07- 132.07	103.59
125 Trichloroethene					CAS #: 79-01-6		
6.581	6.581 (1.030)	95	1167917	200.000	203.22	80.00- 120.00	100.00(A)
6.581	6.581 (1.030)	130	1308104			80.99- 140.99	112.00
6.581	6.581 (1.030)	97	757522			35.67- 95.67	64.86
127 Methylcyclohexane					CAS #: 108-87-2		
6.681	6.681 (1.221)	83	1455487	200.000	196.95	80.00- 120.00	100.00
6.681	6.681 (1.221)	98	692642			17.02- 77.02	47.59
6.681	6.681 (1.221)	55	1112762			45.78- 105.78	76.45
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.825	6.825 (1.068)	63	866287	200.000	203.90	80.00- 120.00	100.00(A)
6.825	6.825 (1.068)	62	593719			39.44- 99.44	68.54
6.825	6.825 (1.068)	41	514923			29.63- 89.63	59.44
136 1,4-Dioxane					CAS #: 123-91-1		
6.911	6.911 (1.082)	88	599101	200.000	219.05	80.00- 120.00	100.00(A)
6.911	6.911 (1.082)	58	383894			35.98- 95.98	64.08
6.911	6.911 (1.082)	57	130244			0.00- 51.57	21.74
138 Bromodichloromethane					CAS #: 75-27-4		
7.054	7.054 (1.104)	83	1897675	200.000	206.64	80.00- 120.00	100.00(A)
7.054	7.054 (1.104)	85	1208831			33.11- 93.11	63.70
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.441	7.441 (1.165)	75	1548644	200.000	209.88	80.00- 120.00	100.00(A)
7.441	7.441 (1.165)	77	500172			2.26- 62.26	32.30
7.433	7.433 (1.164)	39	846598			24.05- 84.05	54.67
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.548	7.548 (1.182)	58	723934	200.000	220.20	80.00- 120.00	100.00(A)
7.548	7.548 (1.182)	43	2043443			255.05- 315.05	282.27
7.548	7.548 (1.182)	85	338284			16.86- 76.86	46.73
147 Toluene					CAS #: 108-88-3		
7.677	7.677 (1.202)	91	3135279	200.000	201.17	80.00- 120.00	100.00(A)
7.677	7.677 (1.202)	92	1843734			28.59- 88.59	58.81
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.921	7.921 (0.893)	75	1389835	200.000	205.54	80.00- 120.00	100.00(A)
7.921	7.921 (0.893)	77	454502			2.75- 62.75	32.70
7.921	7.921 (0.893)	39	726234			22.39- 82.39	52.25

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.078	8.078 (0.911)	97	1129765	200.000	200.49	80.00- 120.00	100.00(A)
8.078	8.078 (0.911)	99	716203			33.52- 93.52	63.39
8.078	8.078 (0.911)	83	963456			54.98- 114.98	85.28
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.916)	166	1672539	200.000	191.68	80.00- 120.00	100.00
8.114	8.114 (0.915)	129	1297889			48.24- 108.24	77.60
8.114	8.114 (0.915)	131	1246510			44.94- 104.94	74.53
158 2-Hexanone					CAS #: 591-78-6		
8.250	8.250 (0.931)	58	998985	200.000	226.54	80.00- 120.00	100.00(A)
8.250	8.250 (0.931)	43	2040731			177.49- 237.49	204.28
8.250	8.250 (0.931)	100	224582			0.00- 53.07	22.48
160 Dibromochloromethane					CAS #: 124-48-1		
8.393	8.393 (0.947)	129	2380379	200.000	205.44	80.00- 120.00	100.00(A)
8.393	8.393 (0.947)	127	1808677			45.72- 105.72	75.98
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.515	8.515 (0.960)	107	1884562	200.000	204.32	80.00- 120.00	100.00(A)
8.515	8.515 (0.960)	109	1809135			67.26- 127.26	96.00
165 Chlorobenzene					CAS #: 108-90-7		
8.895	8.895 (1.003)	112	2829659	200.000	202.19	80.00- 120.00	100.00(A)
8.895	8.895 (1.003)	114	902328			1.53- 61.53	31.89
8.895	8.895 (1.003)	77	1412178			21.26- 81.26	49.91
167 Ethyl Benzene					CAS #: 100-41-4		
8.945	8.945 (1.009)	106	1392545	200.000	200.80	80.00- 120.00	100.00(A)
8.945	8.945 (1.009)	91	4108192			268.22- 328.22	295.01
169 m,p-Xylene					CAS #: 108-38-3		
9.045	9.045 (1.020)	106	1755963	200.000	207.29	80.00- 120.00	100.00(A)
9.045	9.045 (1.020)	91	3359648			164.61- 224.61	191.33
171 o-Xylene					CAS #: 95-47-6		
9.382	9.382 (1.058)	106	1657287	200.000	208.04	80.00- 120.00	100.00(A)
9.382	9.382 (1.058)	91	3297587			171.64- 231.64	198.98
172 Styrene					CAS #: 100-42-5		
9.403	9.403 (1.061)	104	2748755	200.000	216.00	80.00- 120.00	100.00(A)
9.403	9.403 (1.061)	78	1258504			16.00- 76.00	45.78
174 Bromoform					CAS #: 75-25-2		
9.604	9.604 (1.083)	173	2438691	200.000	213.52	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.604	9.604 (1.083)	171	1265414			20.98- 80.98	51.89
175 Cumene					CAS #: 98-82-8		
9.675	9.675 (1.091)	105	5070379	200.000	205.52	80.00- 120.00	100.00(A)
9.675	9.675 (1.091)	120	1419199			0.00- 57.78	27.99
9.675	9.675 (1.091)	51	442466			0.00- 38.75	8.73
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.991	9.991 (1.127)	83	2477718	200.000	207.52	80.00- 120.00	100.00(A)
9.991	9.991 (1.127)	85	1589108			34.49- 94.49	64.14
182 Propylbenzene					CAS #: 103-65-1		
10.019	10.019 (1.130)	91	5716229	200.000	203.76	80.00- 120.00	100.00(A)
10.019	10.019 (1.130)	120	1477338			0.00- 55.48	25.84
10.019	10.019 (1.130)	105	223572			0.00- 33.87	3.91
188 4-Ethyltoluene					CAS #: 622-96-8		
10.120	10.120 (1.141)	120	1637045	200.000	207.60	80.00- 120.00	100.00(A)
10.120	10.120 (1.141)	105	5150279			281.42- 341.42	314.61
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.170	10.170 (1.147)	120	2253924	200.000	213.57	80.00- 120.00	100.00(A)
10.170	10.170 (1.147)	105	4586541			170.60- 230.60	203.49
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.492	10.492 (1.183)	120	2084598	200.000	220.49	80.00- 120.00	100.00(A)
10.492	10.492 (1.183)	105	4401058			180.85- 240.85	211.12
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.779	10.779 (1.216)	146	3145494	200.000	217.21	80.00- 120.00	100.00(A)
10.779	10.779 (1.216)	148	2049126			34.13- 94.13	65.14
10.779	10.779 (1.216)	111	1223171			8.40- 68.40	38.89
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.865	10.865 (1.225)	146	3162285	200.000	215.67	80.00- 120.00	100.00(A)
10.865	10.865 (1.225)	148	2060747			35.82- 95.82	65.17
10.857	10.857 (1.225)	111	1177468			7.65- 67.65	37.23
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.979	10.979 (1.238)	91	4040352	200.000	241.59	80.00- 120.00	100.00(A)
10.979	10.979 (1.238)	126	975313			0.00- 54.31	24.14
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.194	11.194 (1.263)	146	3023702	200.000	222.78	80.00- 120.00	100.00(A)
11.194	11.194 (1.263)	148	1964640			34.29- 94.29	64.97

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.194	11.194 (1.263)	111	1212201			9.37- 69.37	40.09
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.620	12.620 (1.423)	180	2664883	200.000	264.25	80.00- 120.00	100.00(A)
12.620	12.620 (1.423)	182	2559001			66.30- 126.30	96.03
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.705	12.705 (1.433)	225	2114940	200.000	250.29	80.00- 120.00	100.00(A)
12.705	12.705 (1.433)	223	1320705			32.59- 92.59	62.45

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a092114.d
Lab Smp Id: ICAL Level #8
Analysis Type: VOA
Quant Type: ISTD
Operator: mjs
Method File: /chem/msda.i/21sep15.b/a15q0921a.m
Misc Info: 200ppbv (200ppbv)

Calibration Date: 21-SEP-2015
Calibration Time: 21:07
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	152172	91303	213041	143431	-5.74
123 1,4-Difluorobenze	627705	376623	878787	593254	-5.49
163 Chlorobenzene-d5	581049	348629	813469	565942	-2.60

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.47	5.14	5.80	5.47	0.00
123 1,4-Difluorobenze	6.38	6.05	6.71	6.39	0.11
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msda.i/21sep15.b/a092114.d

Date : 22-SEP-2015 07:19

Client ID:

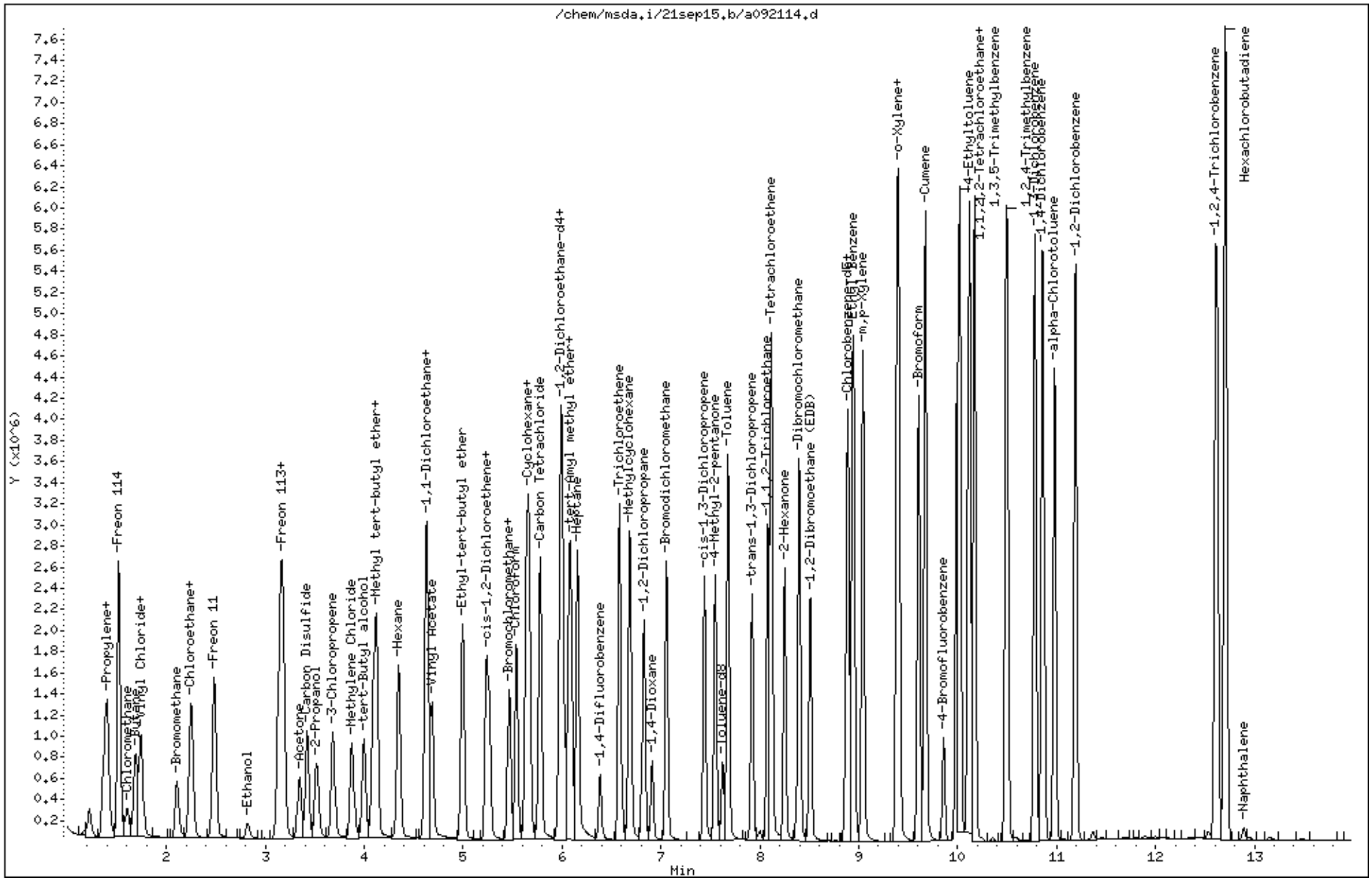
Sample Info: 200ml 2736-243

Column phase: RTX-624

Instrument: msda.i

Operator: mjs

Column diameter: 0.25



eurofins | Air Toxics

Client Sample ID: CCV

Lab ID#: 1509345-11A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092513**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/15 05:53 PM**	

Compound	%Recovery
Vinyl Chloride	94
1,1-Dichloroethene	98
Methylene Chloride	98
trans-1,2-Dichloroethene	100
cis-1,2-Dichloroethene	103
Chloroform	100
Benzene	97
1,2-Dichloroethane	100
Trichloroethene	105
Toluene	102
1,1,2-Trichloroethane	121
Tetrachloroethene	114
Ethyl Benzene	101
m,p-Xylene	104
o-Xylene	102
1,2,4-Trimethylbenzene	137 Q

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	122	70-130

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msda.i Injection Date: 25-SEP-2015 17:53
Lab File ID: a092513.d Init. Cal. Date(s): 21-SEP-2015 22-SEP-2015
Analysis Type: AIR Init. Cal. Times: 18:47 07:19
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msda.i/25sep15.b/a15q0921a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 117 1,2-Dichloroethane-d4	1.23157	1.21642	0.010	1.23037	30.00000	Averaged
$ 146 Toluene-d8	0.98339	0.99362	0.010	-1.04016	30.00000	Averaged
$ 177 4-Bromofluorobenzene	0.62035	0.75572	0.010	-21.82120	30.00000	Averaged
9 Propylene	0.48195	0.43274	0.010	10.21065	40.00000	Averaged
11 Freon 12	1.53413	1.44790	0.010	5.62088	30.00000	Averaged
15 Freon 114	1.27183	1.14629	0.010	9.87087	30.00000	Averaged
17 Chloromethane	0.46723	0.45359	0.010	2.92042	30.00000	Averaged
23 Butane	0.10610	0.09919	0.010	6.51245	40.00000	Averaged
25 Vinyl Chloride	0.52723	0.49679	0.010	5.77384	30.00000	Averaged
26 1,3-Butadiene	0.42275	0.40873	0.010	3.31775	30.00000	Averaged
29 Bromomethane	0.48462	0.51956	0.010	-7.20868	30.00000	Averaged
30 Chloroethane	0.27059	0.27293	0.010	-0.86724	30.00000	Averaged
31 Isopentane	0.73283	0.71298	0.010	2.70842	40.00000	Averaged
35 Freon 11	1.74901	1.76504	0.010	-0.91645	30.00000	Averaged
42 Ethanol	0.26240	0.23537	0.010	10.30007	30.00000	Averaged
49 Freon 113	1.24578	1.26787	0.010	-1.77351	30.00000	Averaged
50 1,1-Dichloroethene	0.40457	0.39544	0.010	2.25643	30.00000	Averaged
52 Acetone	0.26979	0.26301	0.010	2.51166	30.00000	Averaged
56 Carbon Disulfide	1.78280	1.70687	0.010	4.25947	30.00000	Averaged
57 2-Propanol	1.05494	1.06955	0.010	-1.38445	30.00000	Averaged
58 3-Chloropropene	0.31304	0.29833	0.010	4.69728	30.00000	Averaged
66 Methylene Chloride	0.73569	0.71864	0.010	2.31732	30.00000	Averaged
71 tert-Butyl alcohol	1.14905	1.25203	0.010	-8.96180	40.00000	Averaged
72 Methyl tert-butyl ether	1.75840	1.74856	0.010	0.55963	30.00000	Averaged
73 trans-1,2-Dichloroethene	0.41504	0.41698	0.010	-0.46744	30.00000	Averaged
78 Hexane	0.99909	0.97445	0.010	2.46608	30.00000	Averaged
82 1,1-Dichloroethane	1.11022	1.09234	0.010	1.61073	30.00000	Averaged
83 Isopropyl ether	2.19844	2.20526	0.010	-0.31044	40.00000	Averaged
86 Vinyl Acetate	0.17431	0.17270	0.010	0.92351	30.00000	Averaged
88 Ethyl-tert-butyl ether	1.95894	1.98636	0.010	-1.39979	40.00000	Averaged
91 cis-1,2-Dichloroethene	0.46052	0.47252	0.010	-2.60468	30.00000	Averaged
92 2-Butanone	0.30965	0.31299	0.010	-1.08047	30.00000	Averaged
99 Tetrahydrofuran	0.79980	0.77735	0.010	2.80741	30.00000	Averaged
100 Chloroform	1.43585	1.43571	0.010	0.00948	30.00000	Averaged
102 Cyclohexane	0.89010	0.91065	0.010	-2.30932	30.00000	Averaged
103 1,1,1-Trichloroethane	1.56825	1.62519	0.010	-3.63109	30.00000	Averaged

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msda.i Injection Date: 25-SEP-2015 17:53
Lab File ID: a092513.d Init. Cal. Date(s): 21-SEP-2015 22-SEP-2015
Analysis Type: AIR Init. Cal. Times: 18:47 07:19
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msda.i/25sep15.b/a15q0921a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
106 Carbon Tetrachloride	1.72407	1.80740	0.010	-4.83315	30.00000	Averaged	
113 2,2,4-Trimethylpentane	3.10303	3.13404	0.010	-0.99939	30.00000	Averaged	
116 Benzene	0.48412	0.46830	0.010	3.26691	30.00000	Averaged	
119 tert-Amyl methyl ether	0.49453	0.50859	0.010	-2.84281	40.00000	Averaged	
120 1,2-Dichloroethane	0.21803	0.21893	0.010	-0.41299	30.00000	Averaged	
121 Heptane	0.17831	0.17313	0.010	2.90307	30.00000	Averaged	
125 Trichloroethene	0.24218	0.25443	0.010	-5.05903	30.00000	Averaged	
127 Methylcyclohexane	1.28812	1.30725	0.010	-1.48451	30.00000	Averaged	
132 1,2-Dichloropropane	0.17903	0.18211	0.010	-1.72025	30.00000	Averaged	
136 1,4-Dioxane	0.11525	0.12466	0.010	-8.16457	30.00000	Averaged	
138 Bromodichloromethane	0.38699	0.39650	0.010	-2.45660	30.00000	Averaged	
144 cis-1,3-Dichloropropene	0.31094	0.31939	0.010	-2.71683	30.00000	Averaged	
145 4-Methyl-2-pentanone	0.13854	0.15369	0.010	-10.93931	30.00000	Averaged	
147 Toluene	0.65678	0.67081	0.010	-2.13648	30.00000	Averaged	
150 trans-1,3-Dichloropropene	0.29870	0.37155	0.010	-24.39030	30.00000	Averaged	
155 1,1,2-Trichloroethane	0.24892	0.30122	0.010	-21.00944	30.00000	Averaged	
156 Tetrachloroethene	0.38545	0.43906	0.010	-13.90666	30.00000	Averaged	
158 2-Hexanone	0.19479	0.24938	0.010	-28.02093	30.00000	Averaged	
160 Dibromochloromethane	0.51182	0.57763	0.010	-12.85683	30.00000	Averaged	
161 1,2-Dibromoethane (EDB)	0.40745	0.41695	0.010	-2.33096	30.00000	Averaged	
165 Chlorobenzene	0.61822	0.68014	0.010	-10.01666	30.00000	Averaged	
167 Ethyl Benzene	0.30635	0.31032	0.010	-1.29820	30.00000	Averaged	
169 m,p-Xylene	0.37419	0.38829	0.010	-3.76656	30.00000	Averaged	
171 o-Xylene	0.35190	0.35922	0.010	-2.08160	30.00000	Averaged	
172 Styrene	0.56216	0.59940	0.010	-6.62478	30.00000	Averaged	
174 Bromoform	0.50454	0.61018	0.010	-20.93837	30.00000	Averaged	
175 Cumene	1.08982	1.38345	0.010	-26.94294	30.00000	Averaged	
181 1,1,2,2-Tetrachloroethane	0.52743	0.67712	0.010	-28.38168	30.00000	Averaged	
182 Propylbenzene	1.23922	1.64498	0.010	-32.74347	30.00000	Averaged	<-
188 4-Ethyltoluene	0.34833	0.47567	0.010	-36.55892	30.00000	Averaged	<-
190 1,3,5-Trimethylbenzene	0.46620	0.62818	0.010	-34.74605	30.00000	Averaged	<-
196 1,2,4-Trimethylbenzene	0.41763	0.57086	0.010	-36.68816	30.00000	Averaged	<-
208 1,3-Dichlorobenzene	0.63971	0.87789	0.010	-37.23315	30.00000	Averaged	<-
209 1,4-Dichlorobenzene	0.64770	0.87973	0.010	-35.82400	30.00000	Averaged	<-
212 alpha-Chlorotoluene	0.73878	0.99397	0.010	-34.54348	30.00000	Averaged	<-

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msda.i Injection Date: 25-SEP-2015 17:53
Lab File ID: a092513.d Init. Cal. Date(s): 21-SEP-2015 22-SEP-2015
Analysis Type: AIR Init. Cal. Times: 18:47 07:19
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msda.i/25sep15.b/a15q0921a.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
214 1,2-Dichlorobenzene	0.59957	0.66761	0.010	-11.34860	30.00000	Averaged	
226 1,2,4-Trichlorobenzene	0.44548	0.70905	0.010	-59.16446	30.00000	Averaged	<-
227 Hexachlorobutadiene	0.37327	0.57325	0.010	-53.57525	30.00000	Averaged	<-

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/25sep15.b/a092513.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 25-SEP-2015 17:53
Operator : ea Inst ID: msda.i
Smp Info : 50ml 2736-244
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/25sep15.b/a15q0921a.m
Meth Date : 25-Sep-2015 20:42 ealcan Quant Type: ISTD
Cal Date : 22-SEP-2015 07:19 Cal File: a092114.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12noNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

				AMOUNTS			
RT	EXP RT (REL RT)	MASS	RESPONSE	CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.535	5.535 (1.000)	130	129526	25.0000		80.00- 120.00	100.00
5.535	5.535 (1.000)	128	103037			46.57- 106.57	79.55
5.535	5.535 (1.000)	49	142380			75.38- 135.38	109.92
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.424	6.424 (1.000)	114	544288	25.0000		80.00- 120.00	100.00
6.424	6.424 (1.000)	88	78194			0.00- 44.55	14.37
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.880	8.880 (1.000)	117	415368	25.0000		80.00- 120.00	100.00
8.880	8.880 (1.000)	82	201402			19.23- 79.23	48.49
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.073	6.073 (1.097)	65	157558	25.0000	24.692	80.00- 120.00	100.00
6.073	6.073 (1.097)	67	89651			27.41- 87.41	56.90

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.641	7.641 (1.190)	98	540815	25.0000	25.260	80.00- 120.00	100.00
7.641	7.641 (1.190)	70	53957			0.00- 39.72	9.98
7.641	7.641 (1.190)	100	356270			36.51- 96.51	65.88
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.869	9.869 (1.111)	174	313903	25.0000	30.455	80.00- 120.00	100.00
9.869	9.869 (1.111)	95	355731			82.23- 142.23	113.33
9.869	9.869 (1.111)	176	306778			67.41- 127.41	97.73
9 Propylene					CAS #: 115-07-1		
1.524	1.524 (0.275)	41	112101	50.0000	44.895	80.00- 120.00	100.00
1.524	1.524 (0.275)	42	73060			34.74- 94.74	65.17
1.524	1.524 (0.275)	39	87418			42.01- 102.01	77.98
11 Freon 12					CAS #: 75-71-8		
1.560	1.560 (0.282)	85	375082	50.0000	47.190	80.00- 120.00	100.00
1.560	1.560 (0.282)	87	126932			2.75- 62.75	33.84
15 Freon 114					CAS #: 76-14-2		
1.682	1.682 (0.304)	135	296949	50.0000	45.064	80.00- 120.00	100.00
1.682	1.682 (0.304)	137	96297			2.30- 62.30	32.43
17 Chloromethane					CAS #: 74-87-3		
1.760	1.760 (0.318)	50	117503	50.0000	48.540	80.00- 120.00	100.00
1.760	1.760 (0.318)	52	38108			2.93- 62.93	32.43
23 Butane					CAS #: 106-97-8		
1.846	1.846 (0.334)	58	25695	50.0000	46.744	80.00- 120.00	100.00
1.846	1.846 (0.334)	43	221983			790.29- 850.29	863.92
25 Vinyl Chloride					CAS #: 75-01-4		
1.882	1.882 (0.340)	62	128695	50.0000	47.113	80.00- 120.00	100.00
1.882	1.882 (0.340)	64	42442			1.64- 61.64	32.98
26 1,3-Butadiene					CAS #: 106-99-0		
1.911	1.911 (0.345)	54	105882	50.0000	48.341	80.00- 120.00	100.00
1.911	1.911 (0.345)	39	127304			88.19- 148.19	120.23
29 Bromomethane					CAS #: 74-83-9		
2.269	2.269 (0.410)	94	134593	50.0000	53.604	80.00- 120.00	100.00
2.269	2.269 (0.410)	96	129678			66.60- 126.60	96.35
30 Chloroethane					CAS #: 75-00-3		
2.384	2.384 (0.431)	64	70704	50.0000	50.434	80.00- 120.00	100.00
2.384	2.384 (0.431)	66	22052			1.66- 61.66	31.19

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.391	2.391 (0.432)	49	22101			2.43- 62.43	31.26
31 Isopentane					CAS #: 78-78-4		
2.412	2.412 (0.436)	43	184700	50.0000	48.646	80.00- 120.00	100.00
2.419	2.419 (0.437)	57	114321			33.38- 93.38	61.90
35 Freon 11					CAS #: 75-69-4		
2.649	2.649 (0.478)	101	457238	50.0000	50.458	80.00- 120.00	100.00
2.649	2.649 (0.478)	103	300111			35.05- 95.05	65.64
42 Ethanol					CAS #: 64-17-5		
2.978	2.978 (0.538)	45	60974	50.0000	44.850	80.00- 120.00	100.00
2.978	2.978 (0.538)	43	13913			0.00- 48.51	22.82
2.978	2.978 (0.538)	46	23971			6.94- 66.94	39.31
49 Freon 113					CAS #: 76-13-1		
3.300	3.300 (0.596)	151	328445	50.0000	50.887	80.00- 120.00	100.00
3.300	3.300 (0.596)	153	211126			33.28- 93.28	64.28
3.300	3.300 (0.596)	101	381571			84.64- 144.64	116.18
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.329	3.329 (0.601)	98	102440	50.0000	48.872	80.00- 120.00	100.00
3.329	3.329 (0.601)	96	164289			131.99- 191.99	160.38
3.329	3.329 (0.601)	61	244982			211.38- 271.38	239.15
52 Acetone					CAS #: 67-64-1		
3.480	3.480 (0.629)	58	68133	50.0000	48.744	80.00- 120.00	100.00
3.480	3.480 (0.629)	43	248468			323.78- 383.78	364.68
56 Carbon Disulfide					CAS #: 75-15-0		
3.558	3.558 (0.643)	76	442167	50.0000	47.870	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.644	3.644 (0.658)	45	277069	50.0000	50.692	80.00- 120.00	100.00
3.644	3.644 (0.658)	43	55515			0.00- 48.56	20.04
3.644	3.644 (0.658)	59	10258			0.00- 33.73	3.70
58 3-Chloropropene					CAS #: 107-05-1		
3.809	3.809 (0.688)	76	77284	50.0000	47.651	80.00- 120.00	100.00
3.809	3.809 (0.688)	41	211360			246.04- 306.04	273.48
66 Methylene Chloride					CAS #: 75-09-2		
3.988	3.988 (0.720)	49	186165	50.0000	48.841	80.00- 120.00	100.00
3.988	3.988 (0.720)	84	139939			48.40- 108.40	75.17
3.988	3.988 (0.720)	51	56043			0.91- 60.91	30.10

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.103	4.103 (0.741)	59	324340	50.0000	54.481	80.00- 120.00	100.00
4.103	4.103 (0.741)	41	73126			0.00- 52.50	22.55
4.110	4.110 (0.742)	57	33966			0.00- 40.56	10.47
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.203	4.203 (0.759)	73	452967	50.0000	49.720	80.00- 120.00	100.00
4.203	4.203 (0.759)	57	99800			0.00- 51.56	22.03
4.203	4.203 (0.759)	41	106214			0.00- 53.23	23.45
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.232	4.232 (0.764)	98	108019	50.0000	50.234	80.00- 120.00	100.00
4.232	4.232 (0.764)	61	223458			176.45- 236.45	206.87
4.232	4.232 (0.764)	96	173192			128.76- 188.76	160.33
78 Hexane					CAS #: 110-54-3		
4.439	4.439 (0.802)	57	252434	50.0000	48.767	80.00- 120.00	100.00
4.439	4.439 (0.802)	43	163666			38.99- 98.99	64.84
4.439	4.439 (0.802)	86	43034			0.00- 47.90	17.05
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.726	4.726 (0.854)	63	282972	50.0000	49.195	80.00- 120.00	100.00
4.726	4.726 (0.854)	65	87408			1.73- 61.73	30.89
83 Isopropyl ether					CAS #: 108-20-3		
4.712	4.712 (0.851)	45	571277	50.0000	50.155	80.00- 120.00	100.00
4.712	4.712 (0.851)	87	149815			0.00- 57.31	26.22
4.712	4.712 (0.851)	59	58624			0.00- 40.63	10.26
86 Vinyl Acetate					CAS #: 108-05-4		
4.769	4.769 (0.862)	86	44738	50.0000	49.538	80.00- 120.00	100.00
4.762	4.762 (0.860)	43	520658			1171.37-1231.37	1163.79
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.070	5.070 (0.916)	59	514570	50.0000	50.700	80.00- 120.00	100.00
5.070	5.070 (0.916)	87	223819			13.29- 73.29	43.50
5.070	5.070 (0.916)	41	106562			0.00- 49.66	20.71
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.306	5.306 (0.959)	98	122407	50.0000	51.302	80.00- 120.00	100.00
5.306	5.306 (0.959)	96	194846			125.14- 185.14	159.18
5.299	5.299 (0.957)	61	231319			152.76- 212.76	188.98
92 2-Butanone					CAS #: 78-93-3		
5.328	5.328 (0.962)	72	81081	50.0000	50.540	80.00- 120.00	100.00
5.328	5.328 (0.962)	43	361968			417.31- 477.31	446.43

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.328	5.328 (0.962)	57	28211			6.26- 66.26	34.79
99 Tetrahydrofuran					CAS #: 109-99-9		
5.528	5.528 (0.999)	42	201373	50.0000	48.596	80.00- 120.00	100.00
5.528	5.528 (0.999)	71	72182			6.28- 66.28	35.84
5.528	5.528 (0.999)	72	76492			7.91- 67.91	37.99
100 Chloroform					CAS #: 67-66-3		
5.593	5.593 (1.010)	83	371924	50.0000	49.995	80.00- 120.00	100.00
5.593	5.593 (1.010)	85	236797			33.64- 93.64	63.67
102 Cyclohexane					CAS #: 110-82-7		
5.700	5.700 (1.030)	84	235906	50.0000	51.155	80.00- 120.00	100.00
5.700	5.700 (1.030)	56	264712			81.39- 141.39	112.21
5.700	5.700 (1.030)	41	162588			37.15- 97.15	68.92
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.722	5.722 (1.034)	97	421009	50.0000	51.816	80.00- 120.00	100.00
5.722	5.722 (1.034)	99	275474			35.23- 95.23	65.43
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.836	5.836 (1.054)	119	468210	50.0000	52.416	80.00- 120.00	100.00
5.836	5.836 (1.054)	117	477893			72.15- 132.15	102.07
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.030	6.030 (1.089)	57	811879	50.0000	50.500	80.00- 120.00	100.00
6.030	6.030 (1.089)	56	247867			0.25- 60.25	30.53
6.030	6.030 (1.089)	41	229672			0.00- 57.25	28.29
116 Benzene					CAS #: 71-43-2		
6.051	6.051 (0.942)	78	509781	50.0000	48.366	80.00- 120.00	100.00
6.051	6.051 (0.942)	77	123408			0.00- 53.40	24.21
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.116	6.116 (1.105)	87	131751	50.0000	51.421	80.00- 120.00	100.00
6.116	6.116 (1.105)	73	514100			349.72- 409.72	390.21
6.116	6.116 (1.105)	55	126073			62.29- 122.29	95.69
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.137	6.137 (0.955)	62	238327	50.0000	50.206	80.00- 120.00	100.00
6.144	6.144 (0.956)	64	78732			2.46- 62.46	33.04
121 Heptane					CAS #: 142-82-5		
6.202	6.202 (0.965)	71	188466	50.0000	48.548	80.00- 120.00	100.00
6.194	6.194 (0.964)	43	350314			156.27- 216.27	185.88

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.202	6.202 (0.965)	57	193118			72.07- 132.07	102.47
125 Trichloroethene					CAS #: 79-01-6		
6.617	6.617 (1.030)	95	276965	50.0000	52.530	80.00- 120.00	100.00
6.617	6.617 (1.030)	130	298074			80.99- 140.99	107.62
6.617	6.617 (1.030)	97	176270			35.67- 95.67	63.64
127 Methylcyclohexane					CAS #: 108-87-2		
6.717	6.717 (1.214)	83	338645	50.0000	50.742	80.00- 120.00	100.00
6.717	6.717 (1.214)	98	162498			17.02- 77.02	47.98
6.717	6.717 (1.214)	55	251882			45.78- 105.78	74.38
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.853	6.853 (1.067)	63	198243	50.0000	50.860	80.00- 120.00	100.00
6.853	6.853 (1.067)	62	134659			39.44- 99.44	67.93
6.853	6.853 (1.067)	41	120578			29.63- 89.63	60.82
136 1,4-Dioxane					CAS #: 123-91-1		
6.939	6.939 (1.080)	88	135704	50.0000	54.082	80.00- 120.00	100.00
6.939	6.939 (1.080)	58	87965			35.98- 95.98	64.82
6.939	6.939 (1.080)	57	29988			0.00- 51.57	22.10
138 Bromodichloromethane					CAS #: 75-27-4		
7.083	7.083 (1.103)	83	431620	50.0000	51.228	80.00- 120.00	100.00
7.083	7.083 (1.103)	85	267594			33.11- 93.11	62.00
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.462	7.462 (1.162)	75	347678	50.0000	51.358	80.00- 120.00	100.00
7.462	7.462 (1.162)	77	114143			2.26- 62.26	32.83
7.462	7.462 (1.162)	39	193630			24.05- 84.05	55.69
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.570	7.570 (1.178)	58	167307	50.0000	55.470	80.00- 120.00	100.00
7.570	7.570 (1.178)	43	478076			255.05- 315.05	285.75
7.570	7.570 (1.178)	85	78003			16.86- 76.86	46.62
147 Toluene					CAS #: 108-88-3		
7.699	7.699 (1.198)	91	730228	50.0000	51.068	80.00- 120.00	100.00
7.699	7.699 (1.198)	92	427473			28.59- 88.59	58.54
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.942	7.942 (0.894)	75	308659	50.0000	62.195	80.00- 120.00	100.00
7.942	7.942 (0.894)	77	102319			2.75- 62.75	33.15
7.935	7.935 (0.894)	39	164837			22.39- 82.39	53.40

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.093	8.093 (0.911)	97	250232	50.0000	60.505	80.00- 120.00	100.00
8.093	8.093 (0.911)	99	158912			33.52- 93.52	63.51
8.093	8.093 (0.911)	83	209512			54.98- 114.98	83.73
156 Tetrachloroethene					CAS #: 127-18-4		
8.136	8.136 (0.916)	166	364739	50.0000	56.953	80.00- 120.00	100.00
8.136	8.136 (0.916)	129	284197			48.24- 108.24	77.92
8.136	8.136 (0.916)	131	273269			44.94- 104.94	74.92
158 2-Hexanone					CAS #: 591-78-6		
8.264	8.264 (0.931)	58	207165	50.0000	64.010	80.00- 120.00	100.00
8.264	8.264 (0.931)	43	437087			177.49- 237.49	210.98
8.264	8.264 (0.931)	100	47900			0.00- 53.07	23.12
160 Dibromochloromethane					CAS #: 124-48-1		
8.408	8.408 (0.947)	129	479855	50.0000	56.428	80.00- 120.00	100.00
8.408	8.408 (0.947)	127	368647			45.72- 105.72	76.82
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.522	8.522 (0.960)	107	346373	50.0000	51.165	80.00- 120.00	100.00
8.522	8.522 (0.960)	109	338951			67.26- 127.26	97.86
165 Chlorobenzene					CAS #: 108-90-7		
8.902	8.902 (1.002)	112	565017	50.0000	55.008	80.00- 120.00	100.00
8.902	8.902 (1.002)	114	181780			1.53- 61.53	32.17
8.902	8.902 (1.002)	77	290298			21.26- 81.26	51.38
167 Ethyl Benzene					CAS #: 100-41-4		
8.952	8.952 (1.008)	106	257797	50.0000	50.649	80.00- 120.00	100.00
8.952	8.952 (1.008)	91	762985			268.22- 328.22	295.96
169 m,p-Xylene					CAS #: 108-38-3		
9.052	9.052 (1.019)	106	322564	50.0000	51.883	80.00- 120.00	100.00
9.052	9.052 (1.019)	91	606881			164.61- 224.61	188.14
171 o-Xylene					CAS #: 95-47-6		
9.389	9.389 (1.057)	106	298421	50.0000	51.041	80.00- 120.00	100.00
9.389	9.389 (1.057)	91	609507			171.64- 231.64	204.24
172 Styrene					CAS #: 100-42-5		
9.411	9.411 (1.060)	104	497945	50.0000	53.312	80.00- 120.00	100.00
9.411	9.411 (1.060)	78	230510			16.00- 76.00	46.29
174 Bromoform					CAS #: 75-25-2		
9.611	9.611 (1.082)	173	506898	50.0000	60.469	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.611	9.611 (1.082)	171	260390			20.98- 80.98	51.37
175 Cumene					CAS #: 98-82-8		
9.683	9.683 (1.090)	105	1149281	50.0000	63.471	80.00- 120.00	100.00
9.683	9.683 (1.090)	120	319703			0.00- 57.78	27.82
9.683	9.683 (1.090)	51	105049			0.00- 38.75	9.14
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.991	9.991 (1.125)	83	562508	50.0000	64.191	80.00- 120.00	100.00
9.991	9.991 (1.125)	85	365717			34.49- 94.49	65.02
182 Propylbenzene					CAS #: 103-65-1		
10.027	10.027 (1.129)	91	1366544	50.0000	66.372	80.00- 120.00	100.00
10.027	10.027 (1.129)	120	350972			0.00- 55.48	25.68
10.027	10.027 (1.129)	105	50135			0.00- 33.87	3.67
188 4-Ethyltoluene					CAS #: 622-96-8		
10.120	10.120 (1.140)	120	395160	50.0000	68.279	80.00- 120.00	100.00
10.120	10.120 (1.140)	105	1246429			281.42- 341.42	315.42
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.177	10.177 (1.146)	120	521852	50.0000	67.373	80.00- 120.00	100.00
10.170	10.170 (1.145)	105	1049268			170.60- 230.60	201.07
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.499	10.499 (1.182)	120	474230	50.0000	68.344	80.00- 120.00	100.00
10.499	10.499 (1.182)	105	1012669			180.85- 240.85	213.54
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.786	10.786 (1.215)	146	729295	50.0000	68.616	80.00- 120.00	100.00
10.786	10.786 (1.215)	148	472524			34.13- 94.13	64.79
10.786	10.786 (1.215)	111	281859			8.40- 68.40	38.65
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.865	10.865 (1.223)	146	730824	50.0000	67.912	80.00- 120.00	100.00
10.865	10.865 (1.223)	148	469641			35.82- 95.82	64.26
10.865	10.865 (1.223)	111	269106			7.65- 67.65	36.82
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.986	10.986 (1.237)	91	825730	50.0000	67.272	80.00- 120.00	100.00
10.986	10.986 (1.237)	126	196689			0.00- 54.31	23.82
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.194	11.194 (1.261)	146	554609	50.0000	55.674	80.00- 120.00	100.00
11.194	11.194 (1.261)	148	356543			34.29- 94.29	64.29

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.194	11.194 (1.261)	111	216389			9.37- 69.37	39.02
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.620	12.620 (1.421)	180	589032	50.0000	79.582	80.00- 120.00	100.00
12.620	12.620 (1.421)	182	559733			66.30- 126.30	95.03
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.706	12.706 (1.431)	225	476222	50.0000	76.788	80.00- 120.00	100.00
12.706	12.706 (1.431)	223	300659			32.59- 92.59	63.13

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a092513.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msda.i/25sep15.b/a15q0921a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 25-SEP-2015
Calibration Time: 14:45
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	132662	79597	185727	129526	-2.36
123 1,4-Difluorobenze	549281	329569	768993	544288	-0.91
163 Chlorobenzene-d5	511844	307106	716582	415368	-18.85

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.54	5.21	5.87	5.54	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.88	8.55	9.21	8.88	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msda.i/25sep15.b/a092513.d

Date : 25-SEP-2015 17:53

Client ID: CCV

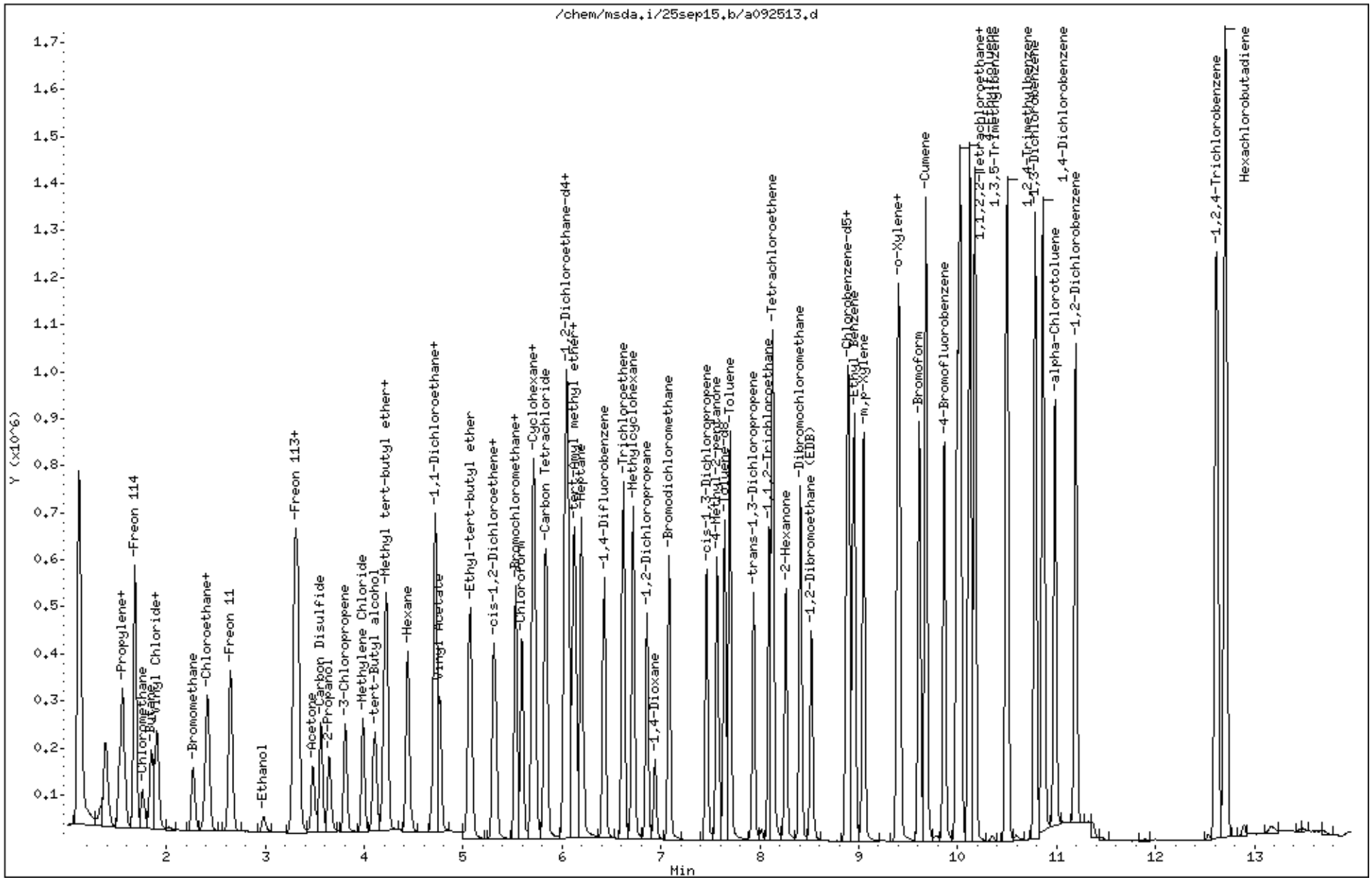
Sample Info: 50ml 2736-244

Column phase: RTX-624

Instrument: msda.i

Operator: ea

Column diameter: 0.25



eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1509345-12A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092514**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/15 06:18 PM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	97	70-130
1,1-Dichloroethene	96	70-130
Methylene Chloride	98	70-130
trans-1,2-Dichloroethene	91	70-130
cis-1,2-Dichloroethene	114	70-130
Chloroform	100	70-130
Benzene	101	70-130
1,2-Dichloroethane	104	70-130
Trichloroethene	103	70-130
Toluene	102	70-130
1,1,2-Trichloroethane	104	70-130
Tetrachloroethene	98	70-130
Ethyl Benzene	103	70-130
m,p-Xylene	108	70-130
o-Xylene	113	70-130
1,2,4-Trimethylbenzene	114	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	104	70-130

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 25sep15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCS Client Smp ID: LCS
Level: LOW Operator: ea
Data Type: MS DATA SampleType: LCS
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: AT12noNaph.sub
Method File: /chem/msda.i/25sep15.b/a15q0921a.m
Misc Info: 50ppbv (200ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9 Propylene	50.000	42.319	84.64	70-130
11 Freon 12	50.000	47.438	94.88	70-130
15 Freon 114	50.000	46.944	93.89	70-130
17 Chloromethane	50.000	49.661	99.32	70-130
23 Butane	50.000	49.640	99.28	70-130
25 Vinyl Chloride	50.000	48.513	97.03	70-130
26 1,3-Butadiene	50.000	45.796	91.59	70-130
29 Bromomethane	50.000	51.557	103.11	70-130
30 Chloroethane	50.000	49.875	99.75	70-130
31 Isopentane	50.000	46.785	93.57	70-130
35 Freon 11	50.000	49.768	99.54	70-130
42 Ethanol	50.000	45.405	90.81	70-130
49 Freon 113	50.000	50.892	101.78	70-130
50 1,1-Dichloroethene	50.000	48.236	96.47	70-130
52 Acetone	50.000	50.200	100.40	70-130
56 Carbon Disulfide	50.000	41.625	83.25	70-130
57 2-Propanol	50.000	51.883	103.77	70-130
58 3-Chloropropene	50.000	44.826	89.65	70-130
66 Methylene Chloride	50.000	49.202	98.40	70-130
72 Methyl tert-butyl	50.000	49.173	98.35	70-130
73 trans-1,2-Dichloro	50.000	45.359	90.72	70-130
78 Hexane	50.000	47.293	94.59	70-130
82 1,1-Dichloroethane	50.000	49.546	99.09	70-130
86 Vinyl Acetate	50.000	48.462	96.92	70-130
91 cis-1,2-Dichloroet	50.000	57.288	114.58	70-130
92 2-Butanone	50.000	49.810	99.62	70-130
99 Tetrahydrofuran	50.000	47.777	95.55	70-130
100 Chloroform	50.000	50.010	100.02	70-130
103 1,1,1-Trichloroeth	50.000	51.792	103.58	70-130
106 Carbon Tetrachlori	50.000	52.195	104.39	70-130
102 Cyclohexane	50.000	51.398	102.80	70-130
113 2,2,4-Trimethylpen	50.000	50.564	101.13	70-130
116 Benzene	50.000	50.410	100.82	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120	1,2-Dichloroethane	50.000	51.861	103.72	70-130
121	Heptane	50.000	48.382	96.76	70-130
125	Trichloroethene	50.000	51.332	102.66	70-130
127	Methylcyclohexane	50.000	50.147	100.29	70-130
132	1,2-Dichloropropan	50.000	52.062	104.12	70-130
136	1,4-Dioxane	50.000	53.663	107.33	70-130
138	Bromodichlorometha	50.000	53.133	106.27	70-130
144	cis-1,3-Dichloropr	50.000	48.738	97.48	70-130
145	4-Methyl-2-pentano	50.000	55.137	110.27	70-130
147	Toluene	50.000	51.068	102.14	70-130
150	trans-1,3-Dichloro	50.000	53.628	107.26	70-130
155	1,1,2-Trichloroeth	50.000	51.801	103.60	70-130
156	Tetrachloroethene	50.000	49.211	98.42	70-130
158	2-Hexanone	50.000	56.023	112.05	70-130
160	Dibromochlorometha	50.000	52.370	104.74	70-130
161	1,2-Dibromoethane	50.000	51.795	103.59	70-130
165	Chlorobenzene	50.000	52.346	104.69	70-130
167	Ethyl Benzene	50.000	51.493	102.99	70-130
169	m,p-Xylene	50.000	53.951	107.90	70-130
171	o-Xylene	50.000	56.746	113.49	70-130
172	Styrene	50.000	55.373	110.75	70-130
174	Bromoform	50.000	56.421	112.84	70-130
175	Cumene	50.000	56.293	112.59	70-130
181	1,1,2,2-Tetrachlor	50.000	57.115	114.23	70-130
182	Propylbenzene	50.000	56.884	113.77	70-130
188	4-Ethyltoluene	50.000	54.870	109.74	70-130
190	1,3,5-Trimethylben	50.000	57.280	114.56	70-130
196	1,2,4-Trimethylben	50.000	57.104	114.21	70-130
208	1,3-Dichlorobenzen	50.000	58.567	117.13	70-130
209	1,4-Dichlorobenzen	50.000	58.362	116.73	70-130
212	alpha-Chlorotoluen	50.000	62.352	124.70	70-130
214	1,2-Dichlorobenzen	50.000	59.351	118.70	70-130
226	1,2,4-Trichloroben	50.000	61.130	122.26	70-130
227	Hexachlorobutadien	50.000	60.755	121.51	70-130
228	Naphthalene	5.000	0.000	*	60-140

	SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117	1,2-Dichloroethane	25.000	24.435	97.74	70-130
$ 146	Toluene-d8	25.000	25.469	101.88	70-130
$ 177	4-Bromofluorobenze	25.000	26.050	104.20	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/25sep15.b/a092514.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 25-SEP-2015 18:18
Operator : ea Inst ID: msda.i
Smp Info : 50ml 2736-186
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/25sep15.b/a15q0921a.m
Meth Date : 25-Sep-2015 18:37 ealcan Quant Type: ISTD
Cal Date : 22-SEP-2015 07:19 Cal File: a092114.d
Als bottle: 11 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12noNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.535	5.535 (1.000)	130	132431	25.0000		80.00- 120.00	100.00
5.535	5.535 (1.000)	128	104220			46.57- 106.57	78.70
5.535	5.535 (1.000)	49	142855			75.38- 135.38	107.87
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.423	6.424 (1.000)	114	543679	25.0000		80.00- 120.00	100.00
6.423	6.424 (1.000)	88	78198			0.00- 44.55	14.38
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.880	8.880 (1.000)	117	495523	25.0000		80.00- 120.00	100.00
8.880	8.880 (1.000)	82	242690			19.23- 79.23	48.98
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.073	6.073 (1.097)	65	159414	24.4352	24.435	80.00- 120.00	100.00
6.073	6.073 (1.097)	67	88552			27.41- 87.41	55.55

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.641	7.641 (1.190)	98	544687	25.4694	25.469	80.00- 120.00	100.00
7.641	7.641 (1.190)	70	53802			0.00- 39.72	9.88
7.641	7.641 (1.190)	100	361105			36.51- 96.51	66.30
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.869	9.869 (1.111)	174	320312	26.0501	26.050	80.00- 120.00	100.00
9.869	9.869 (1.111)	95	362172			82.23- 142.23	113.07
9.869	9.869 (1.111)	176	314662			67.41- 127.41	98.24
9 Propylene					CAS #: 115-07-1		
1.524	1.524 (0.275)	41	108039	42.3188	42.319	80.00- 120.00	100.00
1.524	1.524 (0.275)	42	71487			34.74- 94.74	66.17
1.524	1.524 (0.275)	39	82981			42.01- 102.01	76.81
11 Freon 12					CAS #: 75-71-8		
1.560	1.560 (0.282)	85	385514	47.4381	47.438	80.00- 120.00	100.00
1.560	1.560 (0.282)	87	127957			2.75- 62.75	33.19
15 Freon 114					CAS #: 76-14-2		
1.682	1.682 (0.304)	135	316268	46.9435	46.944	80.00- 120.00	100.00
1.682	1.682 (0.304)	137	98664			2.30- 62.30	31.20
17 Chloromethane					CAS #: 74-87-3		
1.760	1.760 (0.318)	50	122913	49.6608	49.661	80.00- 120.00	100.00
1.760	1.760 (0.318)	52	39335			2.93- 62.93	32.00
23 Butane					CAS #: 106-97-8		
1.846	1.846 (0.334)	58	27899	49.6399	49.640	80.00- 120.00	100.00
1.846	1.846 (0.334)	43	232402			790.29- 850.29	833.01
25 Vinyl Chloride					CAS #: 75-01-4		
1.882	1.882 (0.340)	62	135492	48.5133	48.513	80.00- 120.00	100.00
1.889	1.882 (0.341)	64	41482			1.64- 61.64	30.62
26 1,3-Butadiene					CAS #: 106-99-0		
1.911	1.911 (0.345)	54	102557	45.7960	45.796	80.00- 120.00	100.00
1.911	1.911 (0.345)	39	126466			88.19- 148.19	123.31
29 Bromomethane					CAS #: 74-83-9		
2.269	2.269 (0.410)	94	132357	51.5575	51.557	80.00- 120.00	100.00
2.269	2.269 (0.410)	96	129499			66.60- 126.60	97.84
30 Chloroethane					CAS #: 75-00-3		
2.391	2.384 (0.432)	64	71489	49.8750	49.875	80.00- 120.00	100.00
2.391	2.384 (0.432)	66	22424			1.66- 61.66	31.37

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.391	2.391 (0.432)	49	23048			2.43- 62.43	32.24
31 Isopentane					CAS #: 78-78-4		
2.419	2.412 (0.437)	43	181618	46.7848	46.785	80.00- 120.00	100.00
2.419	2.419 (0.437)	57	113228			33.38- 93.38	62.34
35 Freon 11					CAS #: 75-69-4		
2.649	2.649 (0.478)	101	461103	49.7685	49.768	80.00- 120.00	100.00
2.649	2.649 (0.478)	103	303353			35.05- 95.05	65.79
42 Ethanol					CAS #: 64-17-5		
2.985	2.978 (0.539)	45	63113	45.4050	45.405	80.00- 120.00	100.00
2.985	2.978 (0.539)	43	12874			0.00- 48.51	20.40
2.985	2.978 (0.539)	46	23764			6.94- 66.94	37.65
49 Freon 113					CAS #: 76-13-1		
3.308	3.300 (0.598)	151	335846	50.8920	50.892	80.00- 120.00	100.00
3.308	3.300 (0.598)	153	217448			33.28- 93.28	64.75
3.308	3.300 (0.598)	101	381702			84.64- 144.64	113.65
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.329	3.329 (0.601)	98	103376	48.2365	48.236	80.00- 120.00	100.00
3.329	3.329 (0.601)	96	164544			131.99- 191.99	159.17
3.329	3.329 (0.601)	61	245391			211.38- 271.38	237.38
52 Acetone					CAS #: 67-64-1		
3.487	3.480 (0.630)	58	71742	50.2003	50.200	80.00- 120.00	100.00
3.487	3.480 (0.630)	43	252577			323.78- 383.78	352.06
56 Carbon Disulfide					CAS #: 75-15-0		
3.565	3.558 (0.644)	76	393107	41.6253	41.625	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.651	3.644 (0.660)	45	289940	51.8834	51.883	80.00- 120.00	100.00
3.651	3.644 (0.660)	43	60543			0.00- 48.56	20.88
3.651	3.644 (0.660)	59	10555			0.00- 33.73	3.64
58 3-Chloropropene					CAS #: 107-05-1		
3.809	3.809 (0.688)	76	74333	44.8265	44.826	80.00- 120.00	100.00
3.809	3.809 (0.688)	41	201727			246.04- 306.04	271.38
66 Methylene Chloride					CAS #: 75-09-2		
3.988	3.988 (0.720)	49	191747	49.2023	49.202	80.00- 120.00	100.00
3.988	3.988 (0.720)	84	146488			48.40- 108.40	76.40
3.988	3.988 (0.720)	51	58058			0.91- 60.91	30.28

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.210	4.203 (0.761)	73	458032	49.1733	49.173	80.00- 120.00	100.00
4.210	4.203 (0.761)	57	101357			0.00- 51.56	22.13
4.210	4.203 (0.761)	41	103861			0.00- 53.23	22.68
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.232	4.232 (0.764)	98	99724	45.3589	45.359	80.00- 120.00	100.00
4.232	4.232 (0.764)	61	201666			176.45- 236.45	202.22
4.232	4.232 (0.764)	96	153469			128.76- 188.76	153.89
78 Hexane					CAS #: 110-54-3		
4.447	4.439 (0.803)	57	250293	47.2927	47.293	80.00- 120.00	100.00
4.447	4.439 (0.803)	43	172192			38.99- 98.99	68.80
4.447	4.439 (0.803)	86	44000			0.00- 47.90	17.58
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.726	4.726 (0.854)	63	291382	49.5455	49.546	80.00- 120.00	100.00
4.726	4.726 (0.854)	65	90380			1.73- 61.73	31.02
83 Isopropyl ether					CAS #: 108-20-3		
4.210	4.712 (0.761)	45	26156	2.24599	2.246	80.00- 120.00	100.00
4.439	4.712 (0.802)	87	3040			0.00- 57.31	11.62
4.232	4.712 (0.764)	59	7533			0.00- 40.63	28.80
86 Vinyl Acetate					CAS #: 108-05-4		
4.769	4.769 (0.862)	86	44748	48.4624	48.462	80.00- 120.00	100.00
4.769	4.762 (0.862)	43	498889			1171.37-1231.37	1114.89
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.306	5.306 (0.959)	98	139755	57.2883	57.288	80.00- 120.00	100.00
5.306	5.306 (0.959)	96	216352			125.14- 185.14	154.81
5.306	5.299 (0.959)	61	258721			152.76- 212.76	185.12
92 2-Butanone					CAS #: 78-93-3		
5.335	5.328 (0.964)	72	81701	49.8096	49.810	80.00- 120.00	100.00
5.328	5.328 (0.962)	43	363469			417.31- 477.31	444.88
5.335	5.328 (0.964)	57	26891			6.26- 66.26	32.91
99 Tetrahydrofuran					CAS #: 109-99-9		
5.528	5.528 (0.999)	42	202418	47.7769	47.777	80.00- 120.00	100.00
5.528	5.528 (0.999)	71	72902			6.28- 66.28	36.02
5.528	5.528 (0.999)	72	75514			7.91- 67.91	37.31
100 Chloroform					CAS #: 67-66-3		
5.600	5.593 (1.012)	83	380374	50.0095	50.010	80.00- 120.00	100.00
5.600	5.593 (1.012)	85	241576			33.64- 93.64	63.51

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
102 Cyclohexane					CAS #: 110-82-7		
5.700	5.700 (1.030)	84	242347	51.3986	51.398	80.00- 120.00	100.00
5.700	5.700 (1.030)	56	277934			81.39- 141.39	114.68
5.700	5.700 (1.030)	41	164875			37.15- 97.15	68.03
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.722	5.722 (1.034)	97	430259	51.7924	51.792	80.00- 120.00	100.00
5.722	5.722 (1.034)	99	280103			35.23- 95.23	65.10
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.836	5.836 (1.054)	119	476689	52.1952	52.195	80.00- 120.00	100.00
5.836	5.836 (1.054)	117	484676			72.15- 132.15	101.68
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.037	6.030 (1.091)	57	831147	50.5641	50.564	80.00- 120.00	100.00
6.037	6.030 (1.091)	56	261414			0.25- 60.25	31.45
6.037	6.030 (1.091)	41	244114			0.00- 57.25	29.37
116 Benzene					CAS #: 71-43-2		
6.051	6.051 (0.942)	78	530720	50.4096	50.410	80.00- 120.00	100.00
6.051	6.051 (0.942)	77	124335			0.00- 53.40	23.43
119 tert-Amyl methyl ether					CAS #: 994-05-8		
5.600	6.116 (1.012)	87	40723	15.5452	15.545	80.00- 120.00	100.00
5.679	6.116 (1.026)	73	203			349.72- 409.72	0.50
5.700	6.116 (1.030)	55	101254			62.29- 122.29	248.64
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.144	6.137 (0.956)	62	245907	51.8613	51.861	80.00- 120.00	100.00
6.144	6.144 (0.956)	64	77990			2.46- 62.46	31.72
121 Heptane					CAS #: 142-82-5		
6.201	6.202 (0.965)	71	187609	48.3818	48.382	80.00- 120.00	100.00
6.201	6.194 (0.965)	43	349533			156.27- 216.27	186.31
6.201	6.202 (0.965)	57	193084			72.07- 132.07	102.92
125 Trichloroethene					CAS #: 79-01-6		
6.617	6.617 (1.030)	95	270350	51.3323	51.332	80.00- 120.00	100.00
6.617	6.617 (1.030)	130	303893			80.99- 140.99	112.41
6.617	6.617 (1.030)	97	174722			35.67- 95.67	64.63
127 Methylcyclohexane					CAS #: 108-87-2		
6.724	6.717 (1.215)	83	342180	50.1472	50.147	80.00- 120.00	100.00
6.724	6.717 (1.215)	98	160445			17.02- 77.02	46.89
6.717	6.717 (1.214)	55	262682			45.78- 105.78	76.77

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.860	6.853 (1.068)	63	202699	52.0616	52.062	80.00- 120.00	100.00
6.860	6.853 (1.068)	62	139137			39.44- 99.44	68.64
6.860	6.853 (1.068)	41	124624			29.63- 89.63	61.48
136 1,4-Dioxane					CAS #: 123-91-1		
6.939	6.939 (1.080)	88	134502	53.6633	53.663	80.00- 120.00	100.00
6.939	6.939 (1.080)	58	88197			35.98- 95.98	65.57
6.939	6.939 (1.080)	57	30367			0.00- 51.57	22.58
138 Bromodichloromethane					CAS #: 75-27-4		
7.082	7.083 (1.103)	83	447168	53.1331	53.133	80.00- 120.00	100.00
7.082	7.083 (1.103)	85	284958			33.11- 93.11	63.73
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.462	7.462 (1.162)	75	329570	48.7381	48.738	80.00- 120.00	100.00
7.462	7.462 (1.162)	77	107731			2.26- 62.26	32.69
7.462	7.462 (1.162)	39	182750			24.05- 84.05	55.45
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.570	7.570 (1.178)	58	166117	55.1368	55.137	80.00- 120.00	100.00
7.570	7.570 (1.178)	43	484952			255.05- 315.05	291.93
7.570	7.570 (1.178)	85	79225			16.86- 76.86	47.69
147 Toluene					CAS #: 108-88-3		
7.699	7.699 (1.198)	91	729406	51.0679	51.068	80.00- 120.00	100.00
7.699	7.699 (1.198)	92	433060			28.59- 88.59	59.37
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.942	7.942 (0.894)	75	317503	53.6284	53.628	80.00- 120.00	100.00
7.942	7.942 (0.894)	77	102799			2.75- 62.75	32.38
7.942	7.935 (0.894)	39	168915			22.39- 82.39	53.20
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.092	8.093 (0.911)	97	255578	51.8011	51.801	80.00- 120.00	100.00
8.092	8.093 (0.911)	99	160930			33.52- 93.52	62.97
8.092	8.093 (0.911)	83	220972			54.98- 114.98	86.46
156 Tetrachloroethene					CAS #: 127-18-4		
8.135	8.136 (0.916)	166	375973	49.2111	49.211	80.00- 120.00	100.00
8.135	8.136 (0.916)	129	292087			48.24- 108.24	77.69
8.135	8.136 (0.916)	131	283151			44.94- 104.94	75.31
158 2-Hexanone					CAS #: 591-78-6		
8.264	8.264 (0.931)	58	216303	56.0230	56.023	80.00- 120.00	100.00
8.264	8.264 (0.931)	43	450858			177.49- 237.49	208.44

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
158 2-Hexanone (continued)							
8.264	8.264 (0.931)	100	49294			0.00- 53.07	22.79
160 Dibromochloromethane					CAS #: 124-48-1		
8.408	8.408 (0.947)	129	531282	52.3699	52.370	80.00- 120.00	100.00
8.408	8.408 (0.947)	127	401644			45.72- 105.72	75.60
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.522	8.522 (0.960)	107	418298	51.7950	51.795	80.00- 120.00	100.00
8.522	8.522 (0.960)	109	399990			67.26- 127.26	95.62
165 Chlorobenzene					CAS #: 108-90-7		
8.902	8.902 (1.002)	112	641433	52.3465	52.346	80.00- 120.00	100.00
8.902	8.902 (1.002)	114	203862			1.53- 61.53	31.78
8.902	8.902 (1.002)	77	317367			21.26- 81.26	49.48
167 Ethyl Benzene					CAS #: 100-41-4		
8.952	8.952 (1.008)	106	312667	51.4926	51.493	80.00- 120.00	100.00
8.952	8.952 (1.008)	91	942311			268.22- 328.22	301.38
169 m,p-Xylene					CAS #: 108-38-3		
9.052	9.052 (1.019)	106	400148	53.9512	53.951	80.00- 120.00	100.00
9.052	9.052 (1.019)	91	777499			164.61- 224.61	194.30
171 o-Xylene					CAS #: 95-47-6		
9.389	9.389 (1.057)	106	395801	56.7459	56.746	80.00- 120.00	100.00
9.389	9.389 (1.057)	91	801535			171.64- 231.64	202.51
172 Styrene					CAS #: 100-42-5		
9.411	9.411 (1.060)	104	616998	55.3732	55.373	80.00- 120.00	100.00
9.411	9.411 (1.060)	78	285958			16.00- 76.00	46.35
174 Bromoform					CAS #: 75-25-2		
9.611	9.611 (1.082)	173	564237	56.4215	56.421	80.00- 120.00	100.00
9.611	9.611 (1.082)	171	291065			20.98- 80.98	51.59
175 Cumene					CAS #: 98-82-8		
9.683	9.683 (1.090)	105	1215998	56.2930	56.293	80.00- 120.00	100.00
9.683	9.683 (1.090)	120	331856			0.00- 57.78	27.29
9.683	9.683 (1.090)	51	105035			0.00- 38.75	8.64
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.998	9.991 (1.126)	83	597086	57.1150	57.115	80.00- 120.00	100.00
9.998	9.991 (1.126)	85	381021			34.49- 94.49	63.81
182 Propylbenzene					CAS #: 103-65-1		
10.027	10.027 (1.129)	91	1397198	56.8836	56.884	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
182 Propylbenzene (continued)							
10.034	10.027 (1.130)	120	355992			0.00- 55.48	25.48
10.027	10.027 (1.129)	105	54742			0.00- 33.87	3.92
188 4-Ethyltoluene					CAS #: 622-96-8		
10.127	10.120 (1.140)	120	378837	54.8705	54.870	80.00- 120.00	100.00
10.127	10.120 (1.140)	105	1194999			281.42- 341.42	315.44
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.177	10.177 (1.146)	120	529289	57.2797	57.280	80.00- 120.00	100.00
10.177	10.170 (1.146)	105	1013387			170.60- 230.60	191.46
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.506	10.499 (1.183)	120	472702	57.1043	57.104	80.00- 120.00	100.00
10.506	10.499 (1.183)	105	999465			180.85- 240.85	211.44
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.793	10.786 (1.215)	146	742601	58.5667	58.567	80.00- 120.00	100.00
10.793	10.786 (1.215)	148	474912			34.13- 94.13	63.95
10.793	10.786 (1.215)	111	284722			8.40- 68.40	38.34
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.872	10.865 (1.224)	146	749258	58.3626	58.362	80.00- 120.00	100.00
10.872	10.865 (1.224)	148	484741			35.82- 95.82	64.70
10.872	10.865 (1.224)	111	275431			7.65- 67.65	36.76
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.994	10.986 (1.238)	91	913037	62.3523	62.352	80.00- 120.00	100.00
10.994	10.986 (1.238)	126	214914			0.00- 54.31	23.54
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.201	11.194 (1.261)	146	705326	59.3509	59.351	80.00- 120.00	100.00
11.201	11.194 (1.261)	148	454925			34.29- 94.29	64.50
11.201	11.194 (1.261)	111	276034			9.37- 69.37	39.14
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.627	12.620 (1.422)	180	539768	61.1299	61.130	80.00- 120.00	100.00
12.627	12.620 (1.422)	182	520279			66.30- 126.30	96.39
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.720	12.706 (1.432)	225	449504	60.7554	60.755	80.00- 120.00	100.00
12.720	12.706 (1.432)	223	281726			32.59- 92.59	62.67

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a092514.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msda.i/25sep15.b/a15q0921a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 25-SEP-2015
Calibration Time: 17:53
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	129526	77716	181336	132431	2.24
123 1,4-Difluorobenze	544288	326573	762003	543679	-0.11
163 Chlorobenzene-d5	415368	249221	581515	495523	19.30

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.54	5.21	5.87	5.54	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.88	8.55	9.21	8.88	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msda.i/25sep15.b/a092514.d

Date : 25-SEP-2015 18:18

Client ID: LCS

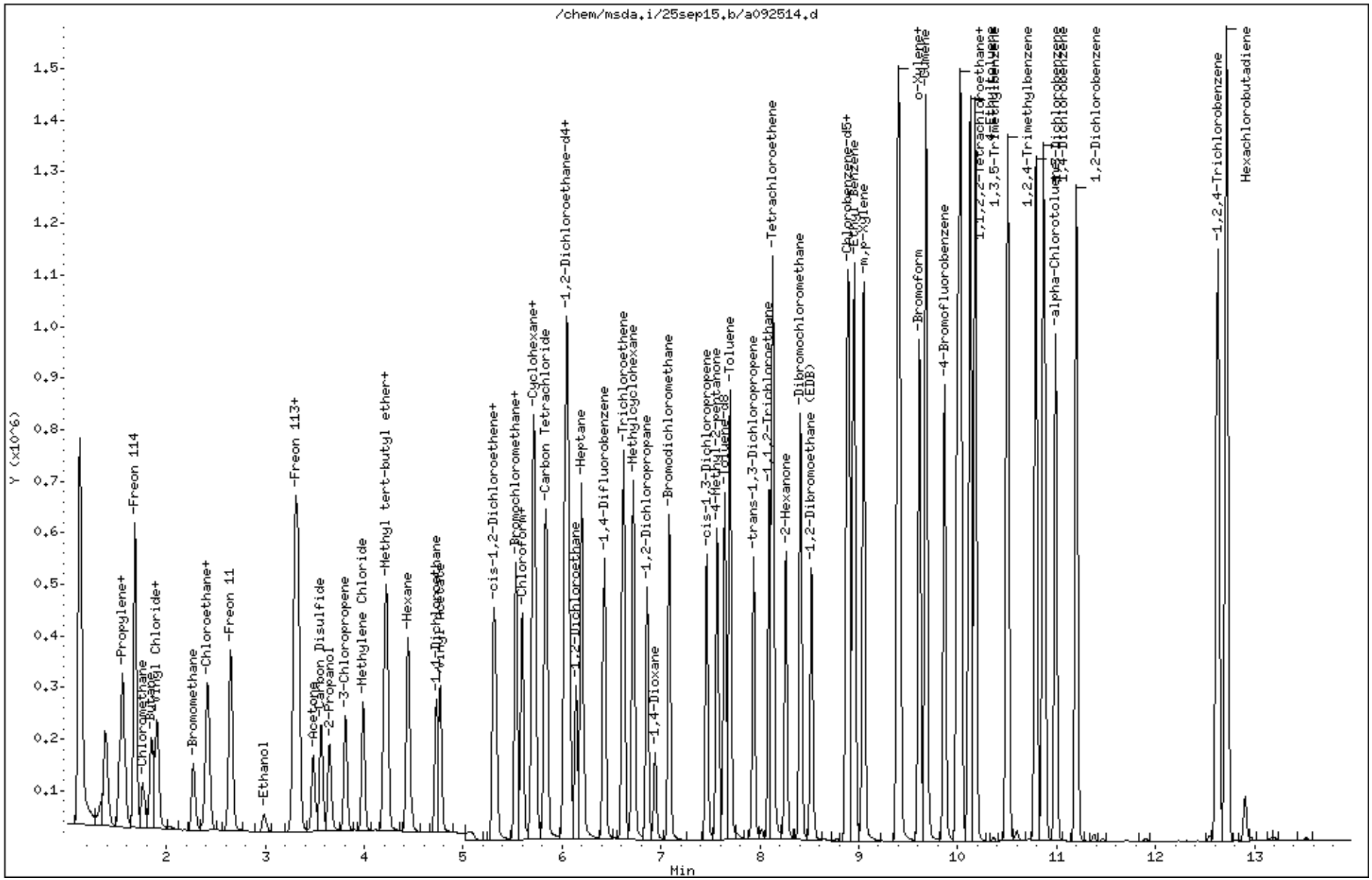
Sample Info: 50ml 2736-186

Column phase: RTX-624

Instrument: msda.i

Operator: ea

Column diameter: 0.25



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Client Sample ID: LCSD

Lab ID#: 1509345-12AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a092515**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/15 06:47 PM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	102	70-130
1,1-Dichloroethene	99	70-130
Methylene Chloride	100	70-130
trans-1,2-Dichloroethene	89	70-130
cis-1,2-Dichloroethene	112	70-130
Chloroform	100	70-130
Benzene	98	70-130
1,2-Dichloroethane	101	70-130
Trichloroethene	102	70-130
Toluene	82	70-130
1,1,2-Trichloroethane	94	70-130
Tetrachloroethene	84	70-130
Ethyl Benzene	104	70-130
m,p-Xylene	106	70-130
o-Xylene	108	70-130
1,2,4-Trimethylbenzene	100	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	80	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	101	70-130

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 25sep15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCSD Client Smp ID: LCSD
Level: LOW Operator: ea
Data Type: MS DATA SampleType: LCSD
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: AT12noNaph.sub
Method File: /chem/msda.i/25sep15.b/a15q0921a.m
Misc Info: 50ppbv (200ppbv)

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9	Propylene	50.000	45.132	90.26	70-130
11	Freon 12	50.000	49.231	98.46	70-130
15	Freon 114	50.000	47.906	95.81	70-130
17	Chloromethane	50.000	48.708	97.42	70-130
23	Butane	50.000	49.669	99.34	70-130
25	Vinyl Chloride	50.000	50.802	101.60	70-130
26	1,3-Butadiene	50.000	47.208	94.42	70-130
29	Bromomethane	50.000	52.157	104.31	70-130
30	Chloroethane	50.000	50.388	100.78	70-130
31	Isopentane	50.000	48.058	96.12	70-130
35	Freon 11	50.000	52.230	104.46	70-130
42	Ethanol	50.000	46.523	93.05	70-130
49	Freon 113	50.000	51.090	102.18	70-130
50	1,1-Dichloroethene	50.000	49.709	99.42	70-130
52	Acetone	50.000	49.879	99.76	70-130
56	Carbon Disulfide	50.000	43.256	86.51	70-130
57	2-Propanol	50.000	53.127	106.25	70-130
58	3-Chloropropene	50.000	45.712	91.42	70-130
66	Methylene Chloride	50.000	50.270	100.54	70-130
72	Methyl tert-butyl	50.000	49.899	99.80	70-130
73	trans-1,2-Dichloro	50.000	44.730	89.46	70-130
78	Hexane	50.000	47.348	94.70	70-130
82	1,1-Dichloroethane	50.000	50.710	101.42	70-130
86	Vinyl Acetate	50.000	51.506	103.01	70-130
91	cis-1,2-Dichloroet	50.000	56.246	112.49	70-130
92	2-Butanone	50.000	50.605	101.21	70-130
99	Tetrahydrofuran	50.000	48.061	96.12	70-130
100	Chloroform	50.000	50.072	100.15	70-130
103	1,1,1-Trichloroeth	50.000	51.858	103.72	70-130
106	Carbon Tetrachlori	50.000	52.706	105.41	70-130
102	Cyclohexane	50.000	51.811	103.62	70-130
113	2,2,4-Trimethylpen	50.000	51.145	102.29	70-130
116	Benzene	50.000	49.002	98.01	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	50.000	50.642	101.28	70-130
121 Heptane	50.000	47.443	94.89	70-130
125 Trichloroethene	50.000	51.193	102.39	70-130
127 Methylcyclohexane	50.000	49.745	99.49	70-130
132 1,2-Dichloropropan	50.000	52.537	105.07	70-130
136 1,4-Dioxane	50.000	53.147	106.29	70-130
138 Bromodichlorometha	50.000	51.890	103.78	70-130
144 cis-1,3-Dichloropr	50.000	43.018	86.04	70-130
145 4-Methyl-2-pentano	50.000	43.886	87.77	70-130
147 Toluene	50.000	41.250	82.50	70-130
150 trans-1,3-Dichloro	50.000	42.230	84.46	70-130
155 1,1,2-Trichloroeth	50.000	47.106	94.21	70-130
156 Tetrachloroethene	50.000	41.850	83.70	70-130
158 2-Hexanone	50.000	49.881	99.76	70-130
160 Dibromochlorometha	50.000	50.806	101.61	70-130
161 1,2-Dibromoethane	50.000	51.115	102.23	70-130
165 Chlorobenzene	50.000	51.822	103.64	70-130
167 Ethyl Benzene	50.000	51.869	103.74	70-130
169 m,p-Xylene	50.000	53.111	106.22	70-130
171 o-Xylene	50.000	54.246	108.49	70-130
172 Styrene	50.000	53.592	107.18	70-130
174 Bromoform	50.000	53.836	107.67	70-130
175 Cumene	50.000	53.888	107.78	70-130
181 1,1,2,2-Tetrachlor	50.000	52.563	105.13	70-130
182 Propylbenzene	50.000	51.838	103.68	70-130
188 4-Ethyltoluene	50.000	51.713	103.43	70-130
190 1,3,5-Trimethylben	50.000	52.588	105.18	70-130
196 1,2,4-Trimethylben	50.000	49.935	99.87	70-130
208 1,3-Dichlorobenzen	50.000	52.885	105.77	70-130
209 1,4-Dichlorobenzen	50.000	53.006	106.01	70-130
212 alpha-Chlorotoluen	50.000	53.499	107.00	70-130
214 1,2-Dichlorobenzen	50.000	55.062	110.12	70-130
226 1,2,4-Trichloroben	50.000	59.658	119.32	70-130
227 Hexachlorobutadien	50.000	59.528	119.06	70-130
228 Naphthalene	5.000	0.000	*	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	24.419	97.67	70-130
$ 146 Toluene-d8	25.000	20.013	80.05	70-130
$ 177 4-Bromofluorobenze	25.000	25.335	101.34	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msda.i/25sep15.b/a092515.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 25-SEP-2015 18:47
Operator : ea Inst ID: msda.i
Smp Info : 50ml 2736-186
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msda.i/25sep15.b/a15q0921a.m
Meth Date : 25-Sep-2015 18:37 ealcan Quant Type: ISTD
Cal Date : 22-SEP-2015 07:19 Cal File: a092114.d
Als bottle: 11 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12noNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.535	5.535 (1.000)	130	131897	25.0000		80.00- 120.00	100.00
5.535	5.535 (1.000)	128	104022			46.57- 106.57	78.87
5.535	5.535 (1.000)	49	143544			75.38- 135.38	108.83
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.424	6.424 (1.000)	114	552661	25.0000		80.00- 120.00	100.00
6.424	6.424 (1.000)	88	76385			0.00- 44.55	13.82
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.880	8.880 (1.000)	117	519125	25.0000		80.00- 120.00	100.00
8.880	8.880 (1.000)	82	256801			19.23- 79.23	49.47
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.073	6.073 (1.097)	65	158664	24.4187	24.419	80.00- 120.00	100.00
6.073	6.073 (1.097)	67	87609			27.41- 87.41	55.22

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.641	7.641 (1.190)	98	435063	20.0128	20.013	80.00- 120.00	100.00
7.641	7.641 (1.190)	70	44738			0.00- 39.72	10.28
7.641	7.641 (1.190)	100	284311			36.51- 96.51	65.35
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.869	9.869 (1.111)	174	326363	25.3355	25.335	80.00- 120.00	100.00
9.869	9.869 (1.111)	95	364961			82.23- 142.23	111.83
9.869	9.869 (1.111)	176	312641			67.41- 127.41	95.80
9 Propylene					CAS #: 115-07-1		
1.524	1.524 (0.275)	41	114757	45.1322	45.132	80.00- 120.00	100.00
1.524	1.524 (0.275)	42	74338			34.74- 94.74	64.78
1.524	1.524 (0.275)	39	85867			42.01- 102.01	74.83
11 Freon 12					CAS #: 75-71-8		
1.560	1.560 (0.282)	85	398469	49.2307	49.231	80.00- 120.00	100.00
1.560	1.560 (0.282)	87	132706			2.75- 62.75	33.30
15 Freon 114					CAS #: 76-14-2		
1.682	1.682 (0.304)	135	321452	47.9062	47.906	80.00- 120.00	100.00
1.682	1.682 (0.304)	137	104529			2.30- 62.30	32.52
17 Chloromethane					CAS #: 74-87-3		
1.760	1.760 (0.318)	50	120070	48.7086	48.708	80.00- 120.00	100.00
1.760	1.760 (0.318)	52	39137			2.93- 62.93	32.60
23 Butane					CAS #: 106-97-8		
1.846	1.846 (0.334)	58	27803	49.6694	49.669	80.00- 120.00	100.00
1.846	1.846 (0.334)	43	241497			790.29- 850.29	868.60
25 Vinyl Chloride					CAS #: 75-01-4		
1.882	1.882 (0.340)	62	141312	50.8020	50.802	80.00- 120.00	100.00
1.889	1.882 (0.341)	64	45796			1.64- 61.64	32.41
26 1,3-Butadiene					CAS #: 106-99-0		
1.911	1.911 (0.345)	54	105294	47.2085	47.208	80.00- 120.00	100.00
1.911	1.911 (0.345)	39	131780			88.19- 148.19	125.15
29 Bromomethane					CAS #: 74-83-9		
2.269	2.269 (0.410)	94	133356	52.1569	52.157	80.00- 120.00	100.00
2.269	2.269 (0.410)	96	128348			66.60- 126.60	96.24
30 Chloroethane					CAS #: 75-00-3		
2.391	2.384 (0.432)	64	71933	50.3879	50.388	80.00- 120.00	100.00
2.391	2.384 (0.432)	66	22444			1.66- 61.66	31.20

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.391	2.391 (0.432)	49	21777			2.43- 62.43	30.27
31 Isopentane					CAS #: 78-78-4		
2.412	2.412 (0.436)	43	185808	48.0579	48.058	80.00- 120.00	100.00
2.412	2.419 (0.436)	57	114415			33.38- 93.38	61.58
35 Freon 11					CAS #: 75-69-4		
2.649	2.649 (0.478)	101	481954	52.2297	52.230	80.00- 120.00	100.00
2.649	2.649 (0.478)	103	321621			35.05- 95.05	66.73
42 Ethanol					CAS #: 64-17-5		
2.985	2.978 (0.539)	45	64406	46.5228	46.523	80.00- 120.00	100.00
2.985	2.978 (0.539)	43	13250			0.00- 48.51	20.57
2.985	2.978 (0.539)	46	25401			6.94- 66.94	39.44
49 Freon 113					CAS #: 76-13-1		
3.300	3.300 (0.596)	151	335796	51.0904	51.090	80.00- 120.00	100.00
3.300	3.300 (0.596)	153	213574			33.28- 93.28	63.60
3.300	3.300 (0.596)	101	381353			84.64- 144.64	113.57
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.329	3.329 (0.601)	98	106102	49.7089	49.709	80.00- 120.00	100.00
3.329	3.329 (0.601)	96	166593			131.99- 191.99	157.01
3.329	3.329 (0.601)	61	250139			211.38- 271.38	235.75
52 Acetone					CAS #: 67-64-1		
3.480	3.480 (0.629)	58	70996	49.8794	49.879	80.00- 120.00	100.00
3.487	3.480 (0.630)	43	255635			323.78- 383.78	360.07
56 Carbon Disulfide					CAS #: 75-15-0		
3.558	3.558 (0.643)	76	406860	43.2560	43.256	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.651	3.644 (0.660)	45	295694	53.1273	53.127	80.00- 120.00	100.00
3.644	3.644 (0.658)	43	62342			0.00- 48.56	21.08
3.644	3.644 (0.658)	59	11209			0.00- 33.73	3.79
58 3-Chloropropene					CAS #: 107-05-1		
3.809	3.809 (0.688)	76	75496	45.7122	45.712	80.00- 120.00	100.00
3.809	3.809 (0.688)	41	205587			246.04- 306.04	272.32
66 Methylene Chloride					CAS #: 75-09-2		
3.988	3.988 (0.720)	49	195120	50.2705	50.270	80.00- 120.00	100.00
3.988	3.988 (0.720)	84	145881			48.40- 108.40	74.76
3.988	3.988 (0.720)	51	57803			0.91- 60.91	29.62

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.210	4.203 (0.761)	73	462921	49.8994	49.899	80.00- 120.00	100.00
4.203	4.203 (0.759)	57	101032			0.00- 51.56	21.82
4.210	4.203 (0.761)	41	105456			0.00- 53.23	22.78
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.232	4.232 (0.764)	98	97944	44.7296	44.730	80.00- 120.00	100.00
4.232	4.232 (0.764)	61	200674			176.45- 236.45	204.89
4.232	4.232 (0.764)	96	159225			128.76- 188.76	162.57
78 Hexane					CAS #: 110-54-3		
4.439	4.439 (0.802)	57	249575	47.3479	47.348	80.00- 120.00	100.00
4.439	4.439 (0.802)	43	172594			38.99- 98.99	69.16
4.447	4.439 (0.803)	86	42647			0.00- 47.90	17.09
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.726	4.726 (0.854)	63	297031	50.7105	50.710	80.00- 120.00	100.00
4.726	4.726 (0.854)	65	92779			1.73- 61.73	31.24
83 Isopropyl ether					CAS #: 108-20-3		
4.210	4.712 (0.761)	45	27935	2.40846	2.408	80.00- 120.00	100.00
4.447	4.712 (0.803)	87	2867			0.00- 57.31	10.26
4.232	4.712 (0.764)	59	8255			0.00- 40.63	29.55
86 Vinyl Acetate					CAS #: 108-05-4		
4.769	4.769 (0.862)	86	47367	51.5065	51.506	80.00- 120.00	100.00
4.769	4.762 (0.862)	43	508149			1171.37-1231.37	1072.79
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.306	5.306 (0.959)	98	136660	56.2464	56.246	80.00- 120.00	100.00
5.306	5.306 (0.959)	96	220142			125.14- 185.14	161.09
5.306	5.299 (0.959)	61	260060			152.76- 212.76	190.30
92 2-Butanone					CAS #: 78-93-3		
5.328	5.328 (0.962)	72	82671	50.6050	50.605	80.00- 120.00	100.00
5.328	5.328 (0.962)	43	363617			417.31- 477.31	439.84
5.328	5.328 (0.962)	57	27210			6.26- 66.26	32.91
99 Tetrahydrofuran					CAS #: 109-99-9		
5.528	5.528 (0.999)	42	202799	48.0607	48.061	80.00- 120.00	100.00
5.528	5.528 (0.999)	71	72452			6.28- 66.28	35.73
5.528	5.528 (0.999)	72	77144			7.91- 67.91	38.04
100 Chloroform					CAS #: 67-66-3		
5.600	5.593 (1.012)	83	379318	50.0726	50.072	80.00- 120.00	100.00
5.600	5.593 (1.012)	85	242794			33.64- 93.64	64.01

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
102 Cyclohexane					CAS #: 110-82-7		
5.700	5.700 (1.030)	84	243306	51.8109	51.811	80.00- 120.00	100.00
5.700	5.700 (1.030)	56	274110			81.39- 141.39	112.66
5.700	5.700 (1.030)	41	163658			37.15- 97.15	67.26
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.722	5.722 (1.034)	97	429066	51.8579	51.858	80.00- 120.00	100.00
5.722	5.722 (1.034)	99	275257			35.23- 95.23	64.15
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.836	5.836 (1.054)	119	479409	52.7055	52.706	80.00- 120.00	100.00
5.836	5.836 (1.054)	117	494126			72.15- 132.15	103.07
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.037	6.030 (1.091)	57	837306	51.1451	51.145	80.00- 120.00	100.00
6.037	6.030 (1.091)	56	260283			0.25- 60.25	31.09
6.037	6.030 (1.091)	41	246406			0.00- 57.25	29.43
116 Benzene					CAS #: 71-43-2		
6.051	6.051 (0.942)	78	524430	49.0026	49.002	80.00- 120.00	100.00
6.051	6.051 (0.942)	77	123761			0.00- 53.40	23.60
119 tert-Amyl methyl ether					CAS #: 994-05-8		
5.600	6.116 (1.012)	87	39827	15.2647	15.265	80.00- 120.00	100.00
5.707	6.116 (1.031)	73	611			349.72- 409.72	1.53
5.700	6.116 (1.030)	55	99594			62.29- 122.29	250.07
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.144	6.137 (0.956)	62	244092	50.6419	50.642	80.00- 120.00	100.00
6.144	6.144 (0.956)	64	78514			2.46- 62.46	32.17
121 Heptane					CAS #: 142-82-5		
6.202	6.202 (0.965)	71	187008	47.4431	47.443	80.00- 120.00	100.00
6.202	6.194 (0.965)	43	351963			156.27- 216.27	188.21
6.202	6.202 (0.965)	57	195686			72.07- 132.07	104.64
125 Trichloroethene					CAS #: 79-01-6		
6.617	6.617 (1.030)	95	274069	51.1927	51.193	80.00- 120.00	100.00
6.617	6.617 (1.030)	130	299659			80.99- 140.99	109.34
6.617	6.617 (1.030)	97	177234			35.67- 95.67	64.67
127 Methylcyclohexane					CAS #: 108-87-2		
6.717	6.717 (1.214)	83	338067	49.7451	49.745	80.00- 120.00	100.00
6.717	6.717 (1.214)	98	161914			17.02- 77.02	47.89
6.717	6.717 (1.214)	55	257197			45.78- 105.78	76.08

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.860	6.853 (1.068)	63	207929	52.5369	52.537	80.00- 120.00	100.00
6.860	6.853 (1.068)	62	140809			39.44- 99.44	67.72
6.853	6.853 (1.067)	41	126018			29.63- 89.63	60.61
136 1,4-Dioxane					CAS #: 123-91-1		
6.939	6.939 (1.080)	88	135409	53.1471	53.147	80.00- 120.00	100.00
6.939	6.939 (1.080)	58	89113			35.98- 95.98	65.81
6.939	6.939 (1.080)	57	30495			0.00- 51.57	22.52
138 Bromodichloromethane					CAS #: 75-27-4		
7.083	7.083 (1.103)	83	443918	51.8897	51.890	80.00- 120.00	100.00
7.083	7.083 (1.103)	85	282405			33.11- 93.11	63.62
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.462	7.462 (1.162)	75	295698	43.0182	43.018	80.00- 120.00	100.00
7.462	7.462 (1.162)	77	96809			2.26- 62.26	32.74
7.462	7.462 (1.162)	39	170877			24.05- 84.05	57.79
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.570	7.570 (1.178)	58	134404	43.8857	43.886	80.00- 120.00	100.00
7.570	7.570 (1.178)	43	399941			255.05- 315.05	297.57
7.570	7.570 (1.178)	85	64281			16.86- 76.86	47.83
147 Toluene					CAS #: 108-88-3		
7.699	7.699 (1.198)	91	598905	41.2497	41.250	80.00- 120.00	100.00
7.699	7.699 (1.198)	92	348558			28.59- 88.59	58.20
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.942	7.942 (0.894)	75	261926	42.2296	42.230	80.00- 120.00	100.00
7.942	7.942 (0.894)	77	83494			2.75- 62.75	31.88
7.935	7.935 (0.894)	39	149864			22.39- 82.39	57.22
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.093	8.093 (0.911)	97	243482	47.1058	47.106	80.00- 120.00	100.00
8.093	8.093 (0.911)	99	151633			33.52- 93.52	62.28
8.093	8.093 (0.911)	83	202358			54.98- 114.98	83.11
156 Tetrachloroethene					CAS #: 127-18-4		
8.136	8.136 (0.916)	166	334966	41.8503	41.850	80.00- 120.00	100.00
8.136	8.136 (0.916)	129	253155			48.24- 108.24	75.58
8.136	8.136 (0.916)	131	243234			44.94- 104.94	72.61
158 2-Hexanone					CAS #: 591-78-6		
8.264	8.264 (0.931)	58	201764	49.8815	49.881	80.00- 120.00	100.00
8.264	8.264 (0.931)	43	419762			177.49- 237.49	208.05

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
158 2-Hexanone (continued)							
8.264	8.264 (0.931)	100	44386			0.00- 53.07	22.00
160 Dibromochloromethane					CAS #: 124-48-1		
8.408	8.408 (0.947)	129	539971	50.8065	50.806	80.00- 120.00	100.00
8.408	8.408 (0.947)	127	413831			45.72- 105.72	76.64
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.522	8.522 (0.960)	107	432465	51.1146	51.115	80.00- 120.00	100.00
8.522	8.522 (0.960)	109	421526			67.26- 127.26	97.47
165 Chlorobenzene					CAS #: 108-90-7		
8.902	8.902 (1.002)	112	665247	51.8216	51.822	80.00- 120.00	100.00
8.902	8.902 (1.002)	114	214215			1.53- 61.53	32.20
8.902	8.902 (1.002)	77	338983			21.26- 81.26	50.96
167 Ethyl Benzene					CAS #: 100-41-4		
8.952	8.952 (1.008)	106	329952	51.8687	51.869	80.00- 120.00	100.00
8.952	8.952 (1.008)	91	988884			268.22- 328.22	299.71
169 m,p-Xylene					CAS #: 108-38-3		
9.052	9.052 (1.019)	106	412677	53.1108	53.111	80.00- 120.00	100.00
9.052	9.052 (1.019)	91	803588			164.61- 224.61	194.73
171 o-Xylene					CAS #: 95-47-6		
9.389	9.389 (1.057)	106	396386	54.2460	54.246	80.00- 120.00	100.00
9.389	9.389 (1.057)	91	807421			171.64- 231.64	203.70
172 Styrene					CAS #: 100-42-5		
9.411	9.411 (1.060)	104	625591	53.5918	53.592	80.00- 120.00	100.00
9.411	9.411 (1.060)	78	291892			16.00- 76.00	46.66
174 Bromoform					CAS #: 75-25-2		
9.611	9.611 (1.082)	173	564023	53.8358	53.836	80.00- 120.00	100.00
9.611	9.611 (1.082)	171	292603			20.98- 80.98	51.88
175 Cumene					CAS #: 98-82-8		
9.683	9.683 (1.090)	105	1219490	53.8880	53.888	80.00- 120.00	100.00
9.683	9.683 (1.090)	120	336079			0.00- 57.78	27.56
9.683	9.683 (1.090)	51	109196			0.00- 38.75	8.95
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.998	9.991 (1.126)	83	575674	52.5632	52.563	80.00- 120.00	100.00
9.998	9.991 (1.126)	85	370720			34.49- 94.49	64.40
182 Propylbenzene					CAS #: 103-65-1		
10.027	10.027 (1.129)	91	1333902	51.8376	51.838	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
182 Propylbenzene (continued)							
10.034	10.027 (1.130)	120	339895			0.00- 55.48	25.48
10.034	10.027 (1.130)	105	52405			0.00- 33.87	3.93
188 4-Ethyltoluene					CAS #: 622-96-8		
10.127	10.120 (1.140)	120	374046	51.7134	51.713	80.00- 120.00	100.00
10.127	10.120 (1.140)	105	1225618			281.42- 341.42	327.67
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.177	10.177 (1.146)	120	509078	52.5877	52.588	80.00- 120.00	100.00
10.177	10.170 (1.146)	105	974658			170.60- 230.60	191.46
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.506	10.499 (1.183)	120	433043	49.9349	49.935	80.00- 120.00	100.00
10.506	10.499 (1.183)	105	909770			180.85- 240.85	210.09
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.793	10.786 (1.215)	146	702501	52.8852	52.885	80.00- 120.00	100.00
10.793	10.786 (1.215)	148	455201			34.13- 94.13	64.80
10.793	10.786 (1.215)	111	270593			8.40- 68.40	38.52
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.872	10.865 (1.224)	146	712901	53.0059	53.006	80.00- 120.00	100.00
10.872	10.865 (1.224)	148	459225			35.82- 95.82	64.42
10.872	10.865 (1.224)	111	262390			7.65- 67.65	36.81
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.994	10.986 (1.238)	91	820712	53.4991	53.499	80.00- 120.00	100.00
10.994	10.986 (1.238)	126	194708			0.00- 54.31	23.72
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.201	11.194 (1.261)	146	685530	55.0624	55.062	80.00- 120.00	100.00
11.201	11.194 (1.261)	148	439448			34.29- 94.29	64.10
11.201	11.194 (1.261)	111	267251			9.37- 69.37	38.98
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.627	12.620 (1.422)	180	551862	59.6580	59.658	80.00- 120.00	100.00
12.627	12.620 (1.422)	182	529759			66.30- 126.30	95.99
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.720	12.706 (1.432)	225	461405	59.5285	59.528	80.00- 120.00	100.00
12.720	12.706 (1.432)	223	284815			32.59- 92.59	61.73

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msda.i
Lab File ID: a092515.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: ea
Method File: /chem/msda.i/25sep15.b/a15q0921a.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 25-SEP-2015
Calibration Time: 17:53
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	129526	77716	181336	131897	1.83
123 1,4-Difluorobenze	544288	326573	762003	552661	1.54
163 Chlorobenzene-d5	415368	249221	581515	519125	24.98

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.54	5.21	5.87	5.54	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.88	8.55	9.21	8.88	0.00

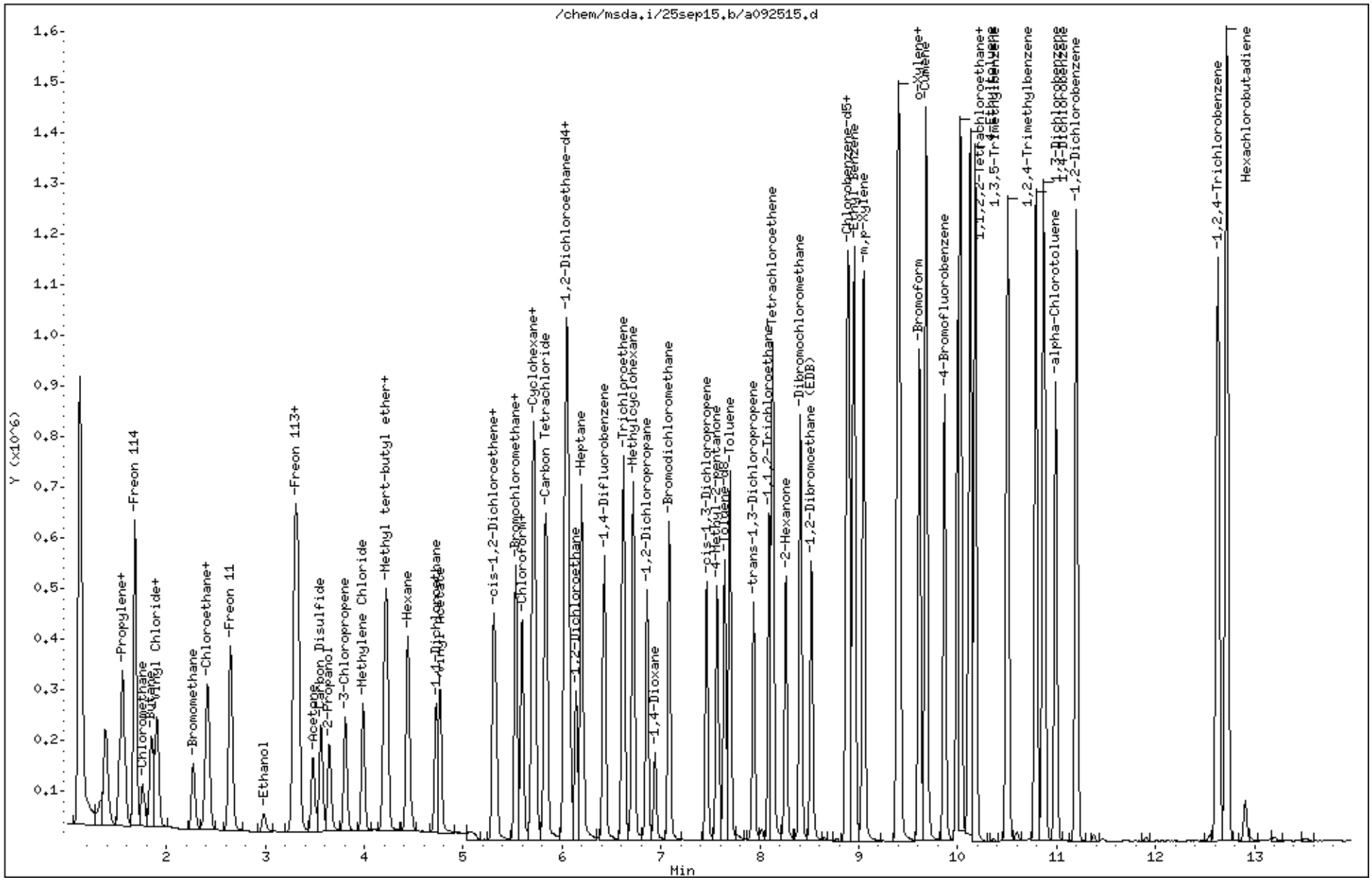
AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msda.i/25sep15.b/a092515.d
Date : 25-SEP-2015 18:47
Client ID: LCSD
Sample Info: 50ml 2736-186

Instrument: msda.i

Operator: ea

Column phase: RTX-624
Column diameter: 0.25



MSDA

ARC 20635
- 5.535 -
5.593

BFB verification of 176/174 ratio: (139232/144165) * 100 = 96.58%			
IS/S Std.#:	2736-128	Exp. Date:	10/22/2015
BCM			129,526
1,4-DFB			544,288
CB-d5			415,368

Method TO-15/TO-14
SOP# 6
Vacuum: NA
Please check all standards

Surrogate# 2736-128	Exp. Date:	10/22/2015
Surrogate# NA	Exp. Date:	NA

sabVerified CCV vs ICAL mid-point (-40%): ea

Method: A15Q0921A.m

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	Amount	DF	Verify Load	Loaded Init	Date Analyzed	Time Analyzed	Review Init	Comments
√	A092512	BFB Tune Check	#2736-128	12	36ng	1.0mL	1.00	ea	ea	09/25/15	1712	ea	
√	A092513	CCV	2736-244	13	50ppbv (200ppbv)	50ml	1.00	ea	ea	09/25/15	1753	ea	exp. 11/20/15; 9 out - short list only
√	A092514	LCS	2736-186	11	50ppbv (200ppbv)	50ml	1.00	ea	ea	09/25/15	1818	ea	exp 10/30/15;
√	A092515	LCSD	2736-186	11	50ppbv (200ppbv)	50ml	1.00	ea	ea	09/25/15	1847	ea	exp 10/30/15.
√	A092516	CCVsp	2736-195	1	500ppbv(2500ppbv)	40ml	1.00	ea	ea	09/25/15	1925	ea	exp. 11/27/15; TPHg
√	A092517	Lab Blank	403	12	Humid	200ml	1.00	ea	ea	09/25/15	1952	ea	
√	A092518	1509377B-01A	PMG-PREGAC302	1	1L TEDLAR BAG	120ml	1.67	ea	ea	09/25/15	2140	ea	Dil TC
√	A092519	1509377B-02A	PMG-MIDGAC304	2	1L TEDLAR BAG	200ml	1.00	ea	ea	09/25/15	2207	cb	
√	A092520	1509379-01A	EFFLUENT	3	1L TEDLAR BAG	20ml	10.0	cb	ea	09/25/15	2244	cb	Dil NTC
√	A092521	1509379-02A	INFLUENT	4	1L TEDLAR BAG	100ml	100	cb	ea	09/25/15	2309	cb	50x bag dil df=100; Dil TC, hits for all compounds
√	A092522	1509345-01A	31765	5	3.5 Hg->14.9 psi	200ml	2.28	cb	ea	09/25/15	2349	cb	
√	A092523	1509345-02A	35559	6	5.7 Hg->14.8 psi	200ml	2.48	cb	ea	09/26/15	0016	cb	
√	A092524	1509345-03A	37382	7	4.3 Hg->14.8 psi	200ml	2.34	cb	ea	09/26/15	0057	cb	
√	A092525	1509345-04A	1L2717	8	6.5 Hg->15.1 psi	200ml	2.59	cb	ea	09/26/15	0123	cb	IS out
√	A092526	1509345-05A	33388	9	7.1 Hg->14.8 psi	200ml	2.63	cb	ea	09/26/15	0205	cb	IS out
√	A092527	1509345-06A	1006	10	5.9 Hg->14.6 psi	200ml	2.48	cb	ea	09/26/15	0231	cb	IS out

cb 9/26/15

Eurofins Air Toxics Inc.

Data file : /var/chem/msda.i/21sep15.b/a092104.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 21-SEP-2015 18:00
Operator : js Inst ID: msda.i
Smp Info : 1.0mL# 2736-128; BFB Tune Check
Misc Info : 36ng
Comment :
Method : /var/chem/msda.i/21sep15.b/bfb60.m
Meth Date : 21-Sep-2015 17:34 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.753	9.775	-0.022	95	210538			100.00- 100.00	100.00
9.753	9.775	-0.022	50	38792			8.00- 40.00	18.43
9.753	9.775	-0.022	75	97365			30.00- 66.00	46.25
9.753	9.775	-0.022	96	14757			5.00- 9.00	7.01
9.753	9.775	-0.022	173	1728			0.00- 1.99	0.93
9.753	9.775	-0.022	174	186496			50.01- 120.00	88.58
9.753	9.775	-0.022	175	13977			4.00- 9.00	7.49
9.753	9.775	-0.022	176	182634			93.01- 100.99	97.93
9.753	9.775	-0.022	177	11671			5.00- 9.00	6.39

Data File: /chem/msda.i/21sep15.b/a092104.d

Date : 21-SEP-2015 18:00

Client ID: BFB

Instrument: msda.i

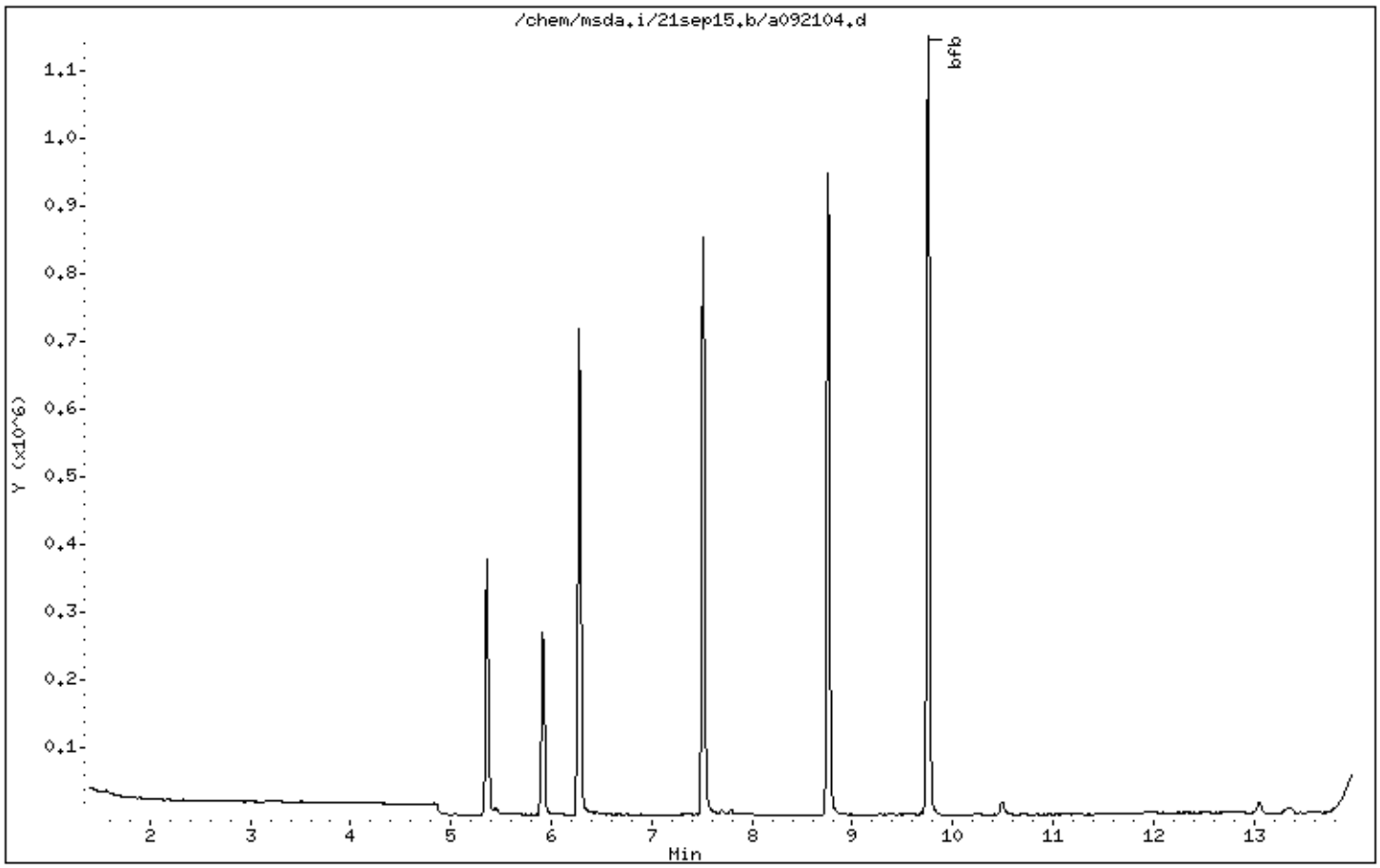
Sample Info: 1.0mL# 2736-128; BFB Tune Check

Volume Injected (uL): 1.0

Operator: js

Column phase:

Column diameter: 2.00



Data File: /chem/msda.i/21sep15.b/a092104.d

Date : 21-SEP-2015 18:00

Client ID: BFB

Instrument: msda.i

Sample Info: 1.0mL# 2736-128; BFB Tune Check

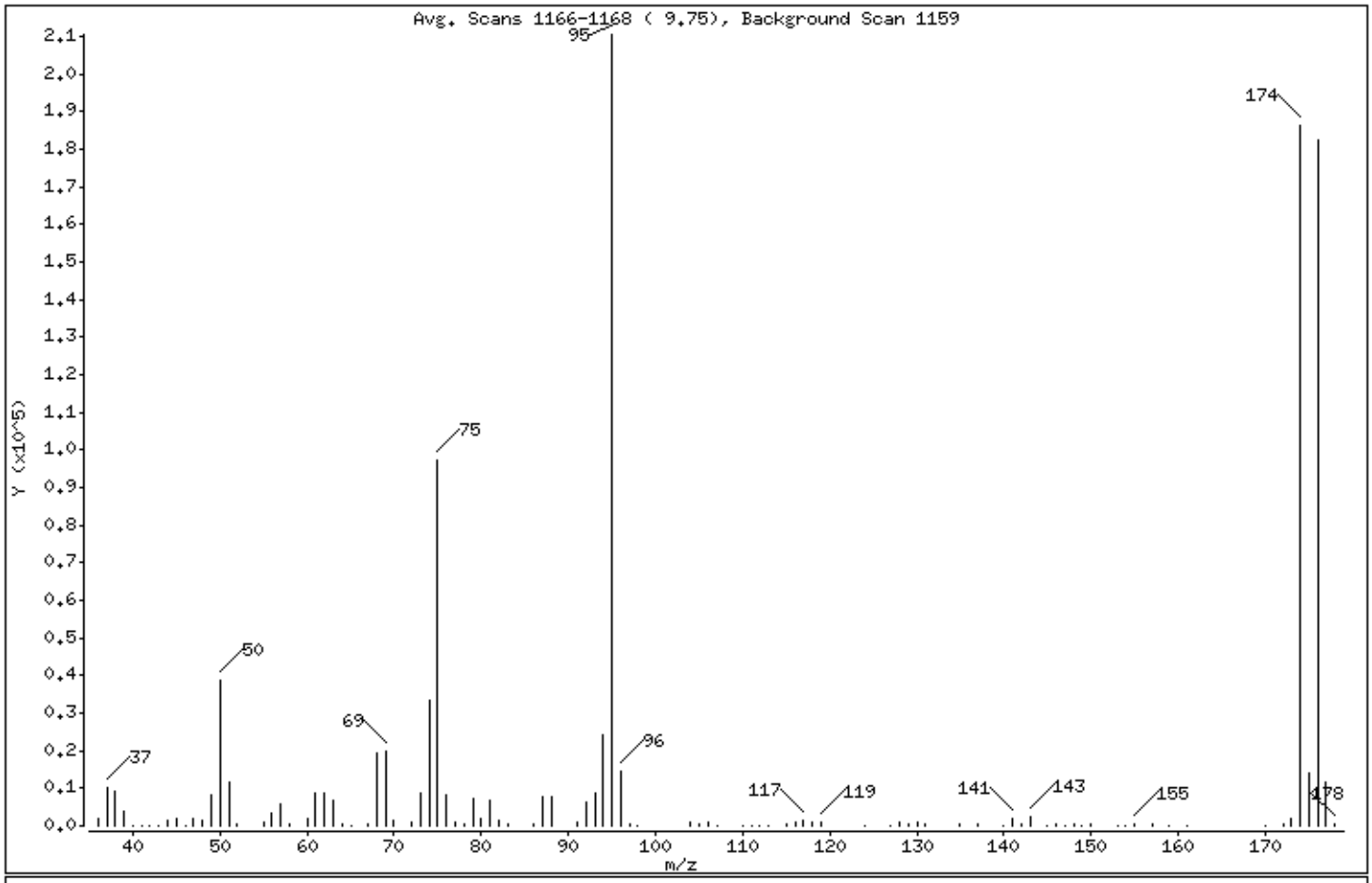
Volume Injected (uL): 1.0

Operator: js

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	18.43
75	30.00 - 66.00% of mass 95	46.25
96	5.00 - 9.00% of mass 95	7.01
173	Less than 1.99% of mass 174	0.82 (0.93)
174	50.01 - 120.00% of mass 95	88.58
175	4.00 - 9.00% of mass 174	6.64 (7.49)
176	93.01 - 100.99% of mass 174	86.75 (97.93)
177	5.00 - 9.00% of mass 176	5.54 (6.39)

Data File: /chem/msda.i/21sep15.b/a092104.d

Date : 21-SEP-2015 18:00

Client ID: BFB

Instrument: msda.i

Sample Info: 1.0mL# 2736-128; BFB Tune Check

Volume Injected (uL): 1.0

Operator: js

Column phase:

Column diameter: 2.00

Data File: a092104.d
Spectrum: Avg. Scans 1166-1168 (9.75), Background Scan 1159
Location of Maximum: 95.00
Number of points: 99

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1705	64.00	639	95.00	210496	140.00	117
37.00	10311	65.00	165	96.00	14757	141.00	2127
38.00	9419	67.00	644	97.00	457	142.00	257
39.00	3718	68.00	19488	98.00	53	143.00	2332
40.00	196	69.00	19616	104.00	1196	145.00	205
41.00	161	70.00	1563	105.00	362	146.00	282
42.00	39	72.00	1025	106.00	1058	147.00	205
43.00	135	73.00	8561	107.00	192	148.00	431
44.00	1476	74.00	33584	110.00	222	149.00	209
45.00	1904	75.00	97360	111.00	197	150.00	250
46.00	186	76.00	8219	112.00	211	153.00	214
47.00	2068	77.00	1181	113.00	141	154.00	125
48.00	1226	78.00	571	115.00	312	155.00	603
49.00	8343	79.00	7095	116.00	789	157.00	367
50.00	38792	80.00	2074	117.00	1355	159.00	217
51.00	11768	81.00	6972	118.00	854	161.00	196
52.00	518	82.00	1496	119.00	1017	170.00	104
55.00	852	83.00	315	124.00	191	172.00	346
56.00	3386	86.00	288	127.00	50	173.00	1728
57.00	5958	87.00	7867	128.00	818	174.00	186496
58.00	243	88.00	7865	129.00	375	175.00	13977
60.00	1743	91.00	837	130.00	992	176.00	182592
61.00	8584	92.00	6329	131.00	344	177.00	11671
62.00	8891	93.00	8824	135.00	408	178.00	439
63.00	6929	94.00	24376	137.00	421		

Eurofins Air Toxics Inc.

Data file : /chem/msda.i/25sep15.b/a092512.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 25-SEP-2015 17:12
Operator : ea Inst ID: msda.i
Smp Info : 200ml 403
Misc Info : Humid
Comment :
Method : /chem/msda.i/25sep15.b/bfb60.m
Meth Date : 25-Sep-2015 09:52 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 12 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.869	9.775	0.094	95	166954			100.00- 100.00	100.00
9.869	9.775	0.094	50	30432			8.00- 40.00	18.23
9.869	9.775	0.094	75	77322			30.00- 66.00	46.31
9.869	9.775	0.094	96	11179			5.00- 9.00	6.70
9.869	9.775	0.094	173	1418			0.00- 1.99	0.98
9.869	9.775	0.094	174	144165			50.01- 120.00	86.35
9.869	9.775	0.094	175	10953			4.00- 9.00	7.60
9.869	9.775	0.094	176	139232			93.01- 100.99	96.58
9.869	9.775	0.094	177	9708			5.00- 9.00	6.97

Data File: /chem/msda.i/25sep15.b/a092512.d

Date : 25-SEP-2015 17:12

Client ID: BFB

Instrument: msda.i

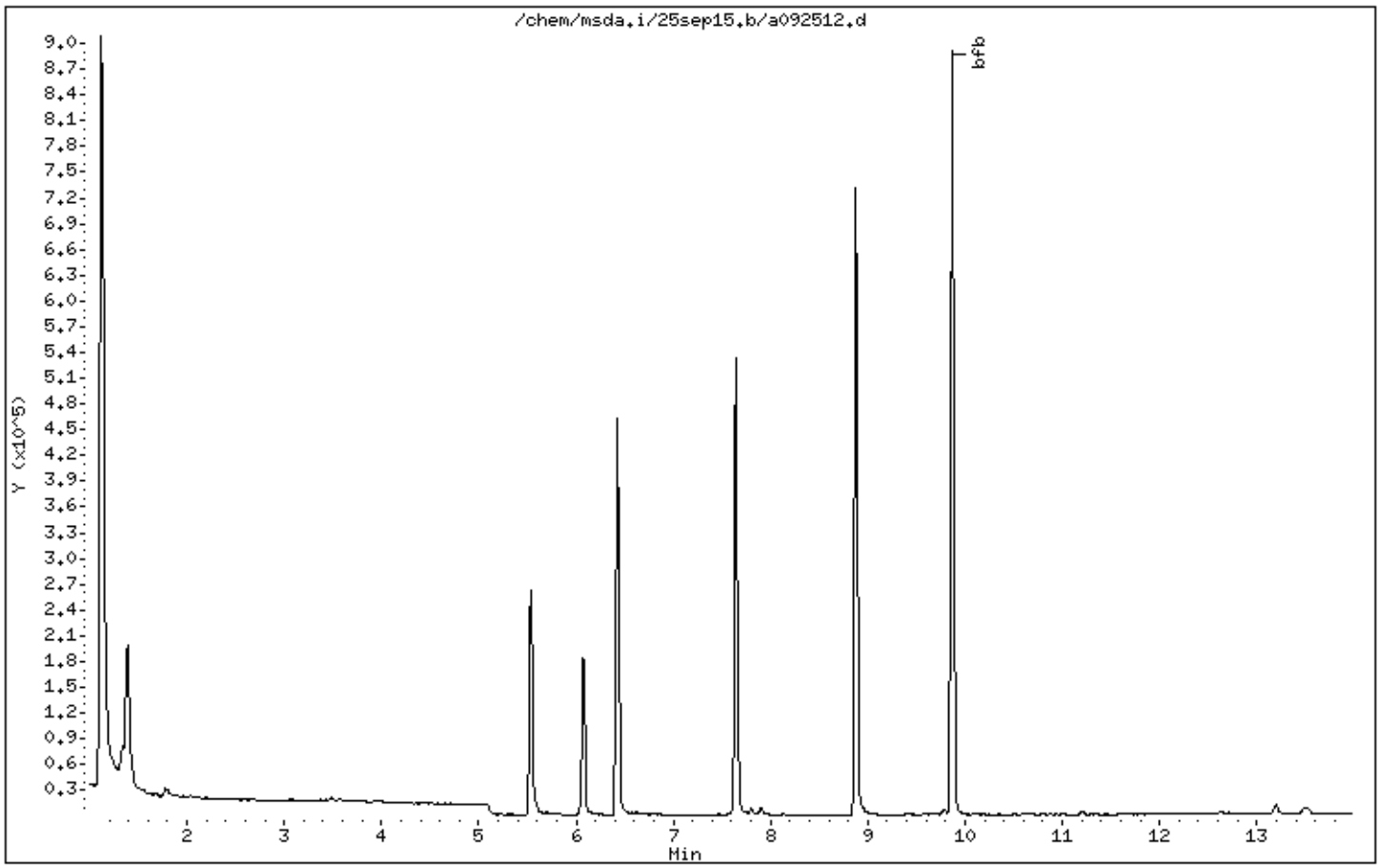
Sample Info: 200ml 403

Volume Injected (uL): 1.0

Operator: ea

Column phase:

Column diameter: 2.00



Data File: /chem/msda.i/25sep15.b/a092512.d

Date : 25-SEP-2015 17:12

Client ID: BFB

Instrument: msda.i

Sample Info: 200ml 403

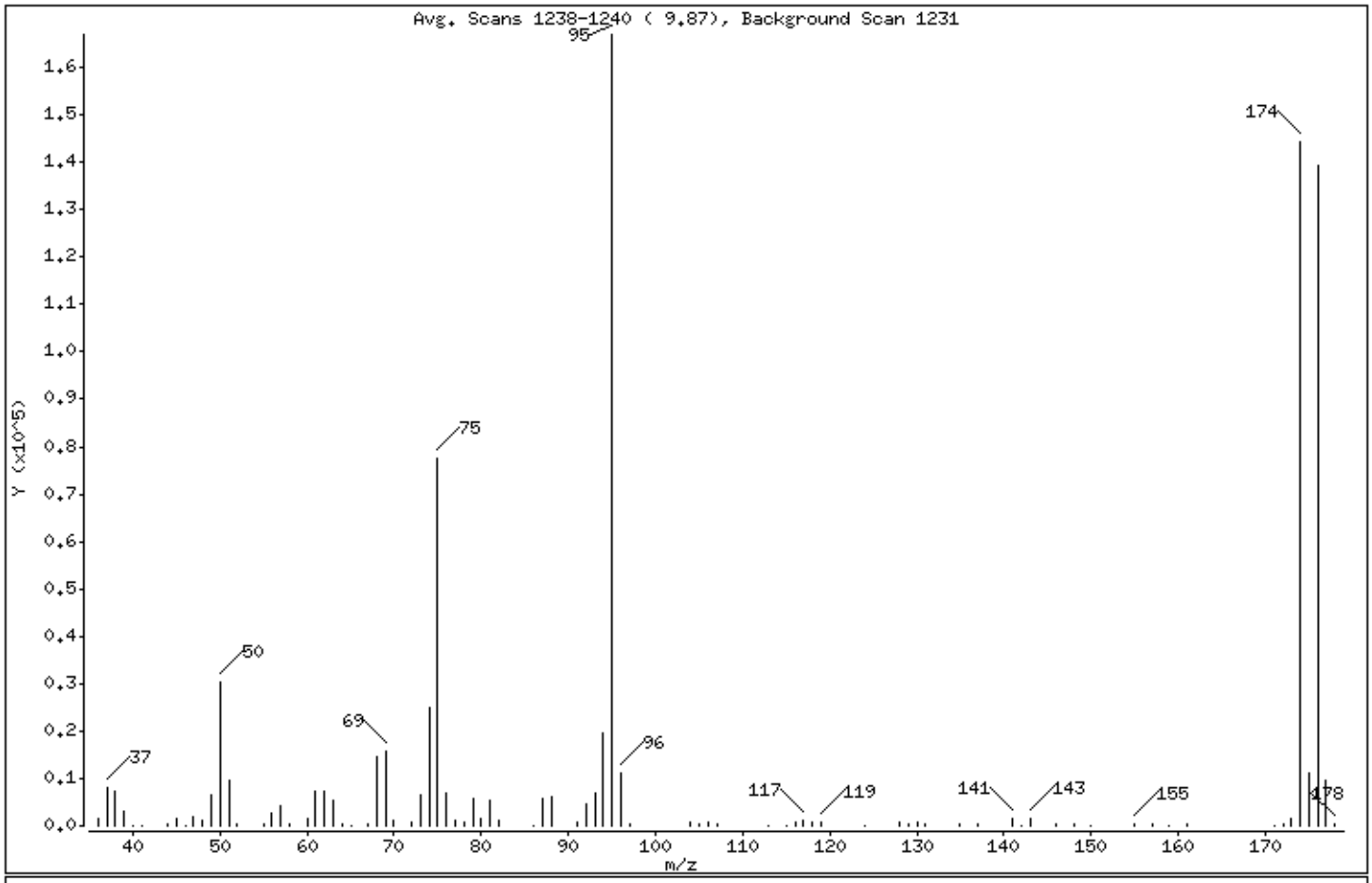
Volume Injected (uL): 1.0

Operator: ea

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	18.23
75	30.00 - 66.00% of mass 95	46.31
96	5.00 - 9.00% of mass 95	6.70
173	Less than 1.99% of mass 174	0.85 (0.98)
174	50.01 - 120.00% of mass 95	86.35
175	4.00 - 9.00% of mass 174	6.56 (7.60)
176	93.01 - 100.99% of mass 174	83.40 (96.58)
177	5.00 - 9.00% of mass 176	5.81 (6.97)

Date : 25-SEP-2015 17:12

Client ID: BFB Instrument: msda.i

Sample Info: 200ml 403

Volume Injected (uL): 1.0 Operator: ea

Column phase: Column diameter: 2.00

Data File: a092512.d
Spectrum: Avg. Scans 1238-1240 (9.87), Background Scan 1231
Location of Maximum: 95.00
Number of points: 85

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1547	63.00	5292	92.00	4508	137.00	396
37.00	7973	64.00	514	93.00	6947	141.00	1706
38.00	7273	65.00	102	94.00	19640	142.00	166
39.00	3098	67.00	385	95.00	166912	143.00	1517
40.00	39	68.00	14463	96.00	11179	146.00	214
41.00	165	69.00	15737	97.00	317	148.00	362
44.00	569	70.00	1258	104.00	863	150.00	114
45.00	1535	72.00	806	105.00	212	155.00	479
46.00	115	73.00	6609	106.00	713	157.00	284
47.00	1854	74.00	24888	107.00	210	159.00	120
48.00	1116	75.00	77320	113.00	168	161.00	226
49.00	6667	76.00	6766	115.00	166	171.00	80
50.00	30432	77.00	961	116.00	588	172.00	324
51.00	9407	78.00	669	117.00	1169	173.00	1418
52.00	480	79.00	5643	118.00	595	174.00	144128
55.00	556	80.00	1482	119.00	811	175.00	10953
56.00	2619	81.00	5383	124.00	154	176.00	139200
57.00	4315	82.00	1161	128.00	635	177.00	9708
58.00	217	86.00	117	129.00	288	178.00	310
60.00	1361	87.00	5717	130.00	694		
61.00	7106	88.00	6079	131.00	376		
62.00	7228	91.00	642	135.00	319		

Shipping/ Receiving Documents

eurofins | Air Toxics

Eurofins Air Toxics, Inc. Sample Receipt Confirmation Cover Page

Thank you for choosing Eurofins Air Toxics, Inc. (EATL). We have received your samples and have listed any Sample Receipt Descrepancies below.

In order to expedite analysis and reporting, please review the attached information for accuracy.

For corrections call: **Ausha Scott at 916-985-1000**

EATL will proceed with the analysis as specified on the Chain of Custody (COC) and Sample Receipt Summary page.

Please note : The Sample Receipt Confirmation, including the total workorder charge, is subject to change upon secondary review. Our aim is to provide a confirmation to you in a timely manner. Sample Receipt Discrepancies, if any, may not include discrepancies regarding sample receipt pressure(s). Additionally, the COC will be provided with the final report.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 6:30 A.M to 5:30 P.M. PST

eurofins | Air Toxics

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager Rob Lafferty Camp

Collected by: (Print and Sign) Rob Lafferty Camp

Company ARCADIS Email Rob.Lafferty@arcadis-us.com

Address 182 E. Washington Suite 600 City Indianapolis State IN Zip 46204

Phone 317-231-6500 Fax 317-231-6514

Project Info:
P.O. # IN000899.2013
Project # IN000899.2013
Project Name Coffeyville Manufacturing

Turn Around Time:
☐ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	SG-2 (091615)	31765	9-16-15	0755-0808	TO-15, Project List	30	4.5		
02A	SG-1 (091615)	35559	9-16-15	0842-0854	TO-15, Project List	30	6.5		
03A	SG-3 (091615)	37382	9-16-15	0933-0947	TO-15, Project List	30	4.5		
04A	SG-5 (091615)	IL2717	9-16-15	1238-1252	TO-15, Project List	30	5.0		
05A	SG-6 (091615)	33388	9-16-15	1410-1430	TO-15, Project List	30	5.0		
06A	Dup-1 (091615)	1006	9-16-15	1238-1251	TO-15, Project List	30	4.5		
07A	SG-4 (091715)	37357	9-17-15	0627-0653	TO-15, Project List	30	5.5		
08A	SG-7 (091715)	IL2720	9-17-15	0709-0723	TO-15, Project List	30	3.5		
09A	SG-8 (091715)	IL1784	9-17-15	0750-0803	TO-15, Project List	30	4.5		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
	9-18-15/0850		9/18/15 1520
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:

Lab Use Only

Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
FedEx		NA	Good	Yes / No / None	1509345

Form 1293 rev.11

eurofins | Air Toxics

SAMPLE RECEIPT SUMMARY

WORKORDER 1509345

Client

Ms. Marie Heap
Arcadis U.S., Inc.
132 East Washington St., Suite 600
Indianapolis, IN 46204

Phone

317-231-6500

Fax

317-231-6514

Sales Rep: N/A

Date Promised: 10/02/15
Date Completed: 10/2/15
Date Received: 9/21/15
PO#: IN000899.2013
Project#: IN000899.2013 GRENADA MANUFACTURING
Total $: $ 1,163.00
Logged By: CC

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	SG-2 (091615)	TO-15	9/16/2015	3.5 "Hg	$110.00
02A	SG-1 (091615)	TO-15	9/16/2015	5.7 "Hg	$110.00
03A	SG-3 (091615)	TO-15	9/16/2015	4.3 "Hg	$110.00
04A	SG-5 (091615)	TO-15	9/16/2015	6.5 "Hg	$110.00
05A	SG-6 (091615)	TO-15	9/16/2015	7.1 "Hg	$110.00
06A	DUP-1 (091615)	TO-15	9/16/2015	5.9 "Hg	$110.00
07A(cancelled	SG-4 (091715)	TO-15	9/17/2015	4.3 "Hg	$0.00
08A(cancelled	SG-7 (091715)	TO-15	9/17/2015	2.6 "Hg	$0.00
09A(cancelled	SG-8 (091715)	TO-15	9/17/2015	3.7 "Hg	$0.00
10A	Lab Blank	TO-15	NA	NA	$0.00
11A	CCV	TO-15	NA	NA	$0.00
12A	LCS	TO-15	NA	NA	$0.00
12AA	LCSD	TO-15	NA	NA	$0.00

Misc. Charges	1 Liter Summa Canister (100% Certified) (9) @ $40.00 each., Shipmen	$360.00
	Blue Body Flow Controller (100% Certified) (9) @ $10.00 each., Shipn	$90.00
	eCVP (9) @ $5.00 each.	$45.00
	Duplicate Sampling T (100% Certified) (1) @ $8.00 each.	$8.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: Grenada/20635

BILL TO: Accounts Payable
Arcadis U.S., Inc.
630 Plaza Drive
Suite 600
Highlands Ranch, CO 80129

Analysis Code: TO-14A

TERMS:

Reporting Method: TO-15 (Sh)-Arcadis (Grenada)

Sample Discrepancy Report

Identification

Initiated By: CC **Project ID:**20635 **PM**: AS **Date:** 9/23/2015 **Discrepancy Type:** ☒ **1.** ☐ **2.** ☐ **3.**

Workorder(s) affected:1509345 **Sample(s) affected:** 07A

1. Sample Receipt Discrepancies

Narration Not Required:

1.1. ☐ Sample container (cartridge/tube/VOA vial) was received broken, however sample was intact.
1.2. ☐ No brass cap on canister.
1.3. ☐ Date of Collection noted on first sample, but no arrow down to indicate all samples.

Notify Lab for further determination:

1.4. ☐ Tedlar bag received with minimal volume.

Initials: CC Date: 9/23/2015

Narration Required in Lab Narrative and Sample Confirmation:

1.5. ☐ COC was not filled out in ink.
1.6. ☐ COC improperly relinquished / received.
1.7. ☐ Sample tags / can numbers do not match the COC.
1.8. ☐ Sample date ☐ error / ☐ missing on COC but noted on sample tag (check one).
1.9. ☐ Custody Seal on the outside of the container was ☐ broken / ☐ improperly placed (check one).
1.10. ☐ ID-none on the sample Tag/Blank
1.11. ☒ Other (describe below).

Describe the Discrepancy: 1.11 07A: The collection time on the COC (0653) did not match the collection time on the sample tag (0643) - used the collection time on the COC

2. Sample Receipt/Screening Discrepancies requiring PM notification

Document on Cover Page of Sample Receipt Confirmation and in Receiving Notes of Lab Narrative

If Section II. is filled out PM must be notified within 24 hrs of initiation

2.1. ☐ COC was not received with samples.
2.2. ☐ Analysis method(s) is ☐ not specified / ☐ incorrectly specified (check one) on the COC.
2.3. ☐ Incorrect sampling media / container for analysis requested.
2.4. ☐ Number of samples on the COC does not match the number of samples that were received.
2.5. ☐ Samples were received expired.
2.6. ☐ Sampling date (time for sulfur) is not documented for ☐ *some* / ☐ *any* samples (check one).
2.7. ☐ Sample received with amount of H_2O in the Tedlar Bag.
2.8. ☐ Sample cannot be analyzed. Container was ☐ received broken / ☐ leaking / ☐ flat / ☐ defective.
2.9. ☐ Tedlar bag / canister received emitting a strong odor; Sample ☐ can / ☐ cannot (check one) be analyzed.
2.10. ☐ Tedlar Bag for Sulfur analysis has metal fitting.
2.11. ☐ Environmental Supply Company valves
2.12. ☐ Sorbent samples-sampling volume was not provided
2.13. ☐ Flow controller used – canister samples received at ambient or under pressure.
2.14. ☐ Canister was at ambient pressure at time of pressurization and (check all that apply):
- ☐ Canister failed leak check on two manifolds,
- ☐ Canister valve was open,
- ☐ Brass nut was loose/not present.
- ☐ Sample can be analyzed
- ☐ Cannot be analyzed

2.15. ☐ Canister sample received with a vacuum difference >5.0"Hg between the receipt vac. And the final vac. reported on the COC, indicating loss of vacuum.
2.16. ☐ Canister sample received at >15"Hg (*not* identified as a Trip/Field Blank).
2.17. ☐ Canister Trip Blank received at low vacuum (<25"Hg).
2.18. ☐ Sorbent Sample received outside method required temperature of 2°C to 6°C; ☐ ice / ☐ blue ice (check one) was present. A temp. Blank ☐ was / ☐ was not present (check one).
2.19. ☐ Flow Controller RPD of = 20% was not met.
2.20. ☐ Other (describe below)

Initials: _____ **Date:** _____ **Notify Receiving:** ☐ **Notify PM:** ☐

Describe the Discrepancy:

3. Lab Discrepancies requiring Team Leader/PM notification

Document in Analytical Notes of Lab Narrative

If Section III. is filled out PM must be notified within 24 hrs of initiation

3.1. ☐ Tedlar Bag found to be leaking at the time of analysis; sample ☐ can / ☐ cannot (check one) be analyzed.

3.2. ☐ Tedlar Bag found to be flat/low volume; sample cannot be analyzed.

3.3. ☐ Sulfur samples received with insufficient time to analyze prior to expiration.

3.4. ☐ Canister found to be leaking at the time of analysis.

3.5. ☐ VOST tube saturated; bag dilution necessary.

3.6. ☐ Sample loss due to instrument malfunction / broken glassware.

3.7. ☐ Low/high surrogate recoveries noted in QC/sample(s) for extractable samples.

3.8. ☐ Reporting Limit was raised.

3.9. ☐ Post weight > Pre weight in field/lab Blank for PM10/TSP samples.

3.10. ☐ Other (describe below).

Initials: _____ **Date:** _____ **Notify Receiving:** ☐ **Notify PM:** ☐ _____

Team Lead Initials: _____ **Date:** _____

Describe the Discrepancy: _____

_____

_____

How Does this Affect Client: _____

_____

_____

Project Manager Use Only

Project Manager Notification ☐ **Section 2 Complete** ☐ **Section 3 Complete**

Action:

☐ It is not necessary to notify the client. Narrate the discrepancy in Receiving Notes/Analytical Notes of Lab Narrative.

PM Initials:_____ Date: _____

☐ Client notification required. See attached client contact / email, or comments below:

Client Notification:

PM Initials:_____ Person notified: _____ Date: _____

☐ Waiting for Client Reply

Comments: _____

_____

☐ Notify Lab Name: _____ Date: _____ **Notify Receiving:** ☐ _____

☐ **Additional notifications attached.**

Additional Comments:

_____

Other Records

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} - [(\text{Initial Pressure ("Hg)}) (14.7 \text{ psi} / 30 \text{ "Hg})]}$$

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7 \text{ psi} + \text{Final Pressure (psi)}}{14.7 \text{ psi} + \text{Initial Pressure (psi)}}$$

Initial Vacuum ("Hg)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.5	1.36	1.71	2.05
1.0	1.39	1.74	2.09
1.5	1.41	1.77	2.13
2.0	1.44	1.80	2.16
2.5	1.46	1.83	2.20
3.0	1.49	1.87	2.24
3.5	1.52	1.90	2.29
4.0	1.55	1.94	2.33
4.5	1.58	1.98	2.38
5.0	1.61	2.02	2.42
5.5	1.64	2.06	2.47
6.0	1.68	2.10	2.53
6.5	1.71	2.15	2.58
7.0	1.75	2.19	2.64
7.5	1.79	2.24	2.69
8.0	1.83	2.29	2.76
8.5	1.87	2.34	2.82
9.0	1.91	2.40	2.89
9.5	1.96	2.46	2.96
10.0	2.01	2.52	3.03
10.5	2.06	2.59	3.11
11.0	2.12	2.65	3.19
11.5	2.17	2.72	3.28
12.0	2.23	2.80	3.37
12.5	2.30	2.88	3.46
13.0	2.36	2.97	3.57
13.5	2.44	3.06	3.67
14.0	2.51	3.15	3.79
14.5	2.59	3.25	3.91
15.0	2.68	3.36	4.04
15.5	2.77	3.48	4.18
16.0	2.87	3.60	4.33
16.5	2.98	3.73	4.49
17.0	3.09	3.88	4.66
17.5	3.22	4.03	4.85
18.0	3.35	4.20	5.05
18.5	3.50	4.38	5.27
19.0	3.65	4.58	5.51
19.5	3.83	4.80	5.77
20.0	4.02	5.04	6.06
20.5	4.23	5.31	6.38

Initial Vacuum ("Hg)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
21.0	4.47	5.60	6.73
21.5	4.73	5.93	7.13
22.0	5.03	6.30	7.58
22.5	5.36	6.72	8.08
23.0	5.74	7.20	8.66
23.5	6.19	7.76	9.32
24.0	6.70	8.40	10.10
24.5	7.31	9.17	11.02
25.0	8.04	10.08	12.12
25.5	8.93	11.20	13.47
26.0	10.05	12.60	15.15
26.5	11.49	14.40	17.32
27.0	13.40	16.80	20.20
27.5	16.08	20.16	24.24
28.0	20.10	25.20	30.31
28.5	26.80	33.61	40.41
29.0	40.20	50.41	60.61

Initial Pressure (psi)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59

DILUTION FACTORS

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{\text{14.7 psi + Final Pressure (psi)}}{\text{14.7 psi + Initial Pressure (psi)}}$$

Initial Pressure (psi)	**5 psi** Final Press. Dil. Factor	**10 psi** Final Press. Dil. Factor	**15 psi** Final Press. Dil. Factor
0.0	1.34	1.68	2.02
0.2	1.32	1.66	1.99
0.4	1.30	1.64	1.97
0.6	1.29	1.61	1.94
0.8	1.27	1.59	1.92
1.0	1.25	1.57	1.89
1.2	1.24	1.55	1.87
1.4	1.22	1.53	1.84
1.6	1.21	1.52	1.82
1.8	1.19	1.50	1.80
2.0	1.18	1.48	1.78
2.2	1.17	1.46	1.76
2.4	1.15	1.44	1.74
2.6	1.14	1.43	1.72
2.8	1.13	1.41	1.70
3.0	1.11	1.40	1.68
3.2	1.10	1.38	1.66
3.4	1.09	1.36	1.64
3.6	1.08	1.35	1.62
3.8	1.06	1.34	1.61
4.0	1.05	1.32	1.59
4.2	1.04	1.31	1.57
4.4	1.03	1.29	1.55
4.6	1.02	1.28	1.54
4.8	1.01	1.27	1.52
5.0	1.00	1.25	1.51
5.2	NA	1.24	1.49
5.4	NA	1.23	1.48
5.6	NA	1.22	1.46
5.8	NA	1.20	1.45
6.0	NA	1.19	1.43
6.2	NA	1.18	1.42
6.4	NA	1.17	1.41
6.6	NA	1.16	1.39
6.8	NA	1.15	1.38
7.0	NA	1.14	1.37
7.2	NA	1.13	1.36
7.4	NA	1.12	1.34
7.6	NA	1.11	1.33
7.8	NA	1.10	1.32
8.0	NA	1.09	1.31
8.2	NA	1.08	1.30
8.4	NA	1.07	1.29
8.6	NA	1.06	1.27
8.8	NA	1.05	1.26
9.0	NA	1.04	1.25
9.2	NA	1.03	1.24
9.4	NA	1.02	1.23
9.6	NA	1.02	1.22
9.8	NA	1.01	1.21
10.0	NA	1.00	1.20
10.2	NA	NA	1.19
10.4	NA	NA	1.18
10.6	NA	NA	1.17
10.8	NA	NA	1.16
11.0	NA	NA	1.16
11.2	NA	NA	1.15
11.4	NA	NA	1.14
11.6	NA	NA	1.13
11.8	NA	NA	1.12
12.0	NA	NA	1.11
12.2	NA	NA	1.10
12.4	NA	NA	1.10
12.6	NA	NA	1.09
12.8	NA	NA	1.08
13.0	NA	NA	1.07
13.2	NA	NA	1.06
13.4	NA	NA	1.06
13.6	NA	NA	1.05
13.8	NA	NA	1.04
14.0	NA	NA	1.03
14.2	NA	NA	1.03
14.4	NA	NA	1.02
14.6	NA	NA	1.01
14.8	NA	NA	1.01

Compound Listing

TO-15 (Sh)-Arcadis (Grenada)

CAS Number	Compound	Detection Limit ppbv	Type
75-01-4	Vinyl Chloride	0.50	
75-35-4	1,1-Dichloroethene	0.50	
75-09-2	Methylene Chloride	5.0	
156-60-5	trans-1,2-Dichloroethene	0.50	
156-59-2	cis-1,2-Dichloroethene	0.50	
67-66-3	Chloroform	0.50	
107-06-2	1,2-Dichloroethane	0.50	
108-38-3	m,p-Xylene	0.50	
95-47-6	o-Xylene	0.50	
79-01-6	Trichloroethene	0.50	
108-88-3	Toluene	0.50	
79-00-5	1,1,2-Trichloroethane	0.50	
127-18-4	Tetrachloroethene	0.50	
100-41-4	Ethyl Benzene	0.50	
95-63-6	1,2,4-Trimethylbenzene	0.50	
2037-26-5	Toluene-d8		
17060-07-0	1,2-Dichloroethane-d4		
460-00-4	4-Bromofluorobenzene		
71-43-2	Benzene	0.50	

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Media Certification Report

Canister Number: 1L#31765
Can#: 103510-31765
Date : 09/09/15 20:49
Data File: i090920.d

www.airtoxics.com
1-800-985-5955

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		102.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	101.00	% Recovery
Toluene-d8	2037-26-5	0.25	106.00	% Recovery

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Media Certification Report

Canister Number: 1L# 35559
Can#: 103510-35559
Date : 09/01/15 0:51
Data File: i083120.d

www.airtoxics.com
1-800-985-5955

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		95.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	103.00	% Recovery
Toluene-d8	2037-26-5	0.25	101.00	% Recovery

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Media Certification Report

Canister Number: 1L#37382w/BATCH
Can#: 103510-37382
Date : 09/09/15 18:57
Data File: i090917.d

www.airtoxics.com
1-800-985-5955

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		96.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	100.00	% Recovery
Toluene-d8	2037-26-5	0.25	103.00	% Recovery

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Media Certification Report

Canister Number: 1L# 1L2717
Can#: 103510-1L2717
Date : 09/01/15 20:24
Data File: i090118.d

www.airtoxics.com
1-800-985-5955

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		94.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	92.00	% Recovery
Toluene-d8	2037-26-5	0.25	102.00	% Recovery

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Media Certification Report

Canister Number: 1L#33388
Can#: 103510-33388
Date : 09/09/15 21:26
Data File: i090921.d

www.airtoxics.com
1-800-985-5955

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		99.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	100.00	% Recovery
Toluene-d8	2037-26-5	0.25	107.00	% Recovery

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www.airtoxics.com
1-800-985-5955

Media Certification Report

Canister Number: 1L#1006
Can#: 103510-1006
Date : 09/10/15 1:48
Data File: i090928.d

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		98.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	97.00	% Recovery
Toluene-d8	2037-26-5	0.25	108.00	% Recovery

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www.airtoxics.com
1-800-985-5955

Media Certification Report

Canister Number: 1L#37397
Can#: 103510-37397
Date : 09/09/15 20:11
Data File: i090919.d

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		98.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	97.00	% Recovery
Toluene-d8	2037-26-5	0.25	107.00	% Recovery

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Media Certification Report

Canister Number: 1L# 1L2720
Can#: 103510-1L2720
Date : 09/10/15 1:11
Data File: i090927.d

www.airtoxics.com
1-800-985-5955

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		99.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	92.00	% Recovery
Toluene-d8	2037-26-5	0.25	102.00	% Recovery

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Media Certification Report

Canister Number: 1L# 1L1784
Can#: 103510-1L1784
Date : 09/01/15 19:47
Data File: i090117.d

www.airtoxics.com
1-800-985-5955

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		94.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	99.00	% Recovery
Toluene-d8	2037-26-5	0.25	104.00	% Recovery

Eurofins Air Toxics, Inc.	Data Review Checklist			Release Date: 03/26/15
Workorder # 1509345	Form F1.27	Revision #11	Revision date: 03/26/15	Page 1 of 2

S1	S2	S3	S4	D	Section 1 – Spec Out
					Initials/Instrument/Date — S1: ED 9/25/15 — S2: — S3: — S4:
✓					Project Identification (PID), Project Requirements Table (PRT), Daily QC and ICAL met Criteria
✓					Lumen QC and ICAL evaluation (ref. SOP/Method) report initialed and in folder
AD					Manual Integrations included and approved
✓				✓	Chain of Custody verified for special comments (add comments below)
✓					Non-standard Target sublist printed

Profile, analyses, reporting, special notes and unusual circumstances:

S1 - 1 out in QC - Shortlist only

A1	A2	A3	A4	D	Section 2 – Sample Analysis
					Initials/Date — A1: CB / 9-26-15 — A2: — A3: — A4:
✓				✓	Internal Standard/Surrogate Recoveries, Dilution Factors, Load Volumes, Initial/Final Pressures, and Canister #s Verified
NA				NA	a) Tedlar Bag IDs verified against COC b) Tedlar Bag ID confirmed with loading sequence/leg of instrument
NA				NA	Manual Integrations/Bag or Can Dilution Forms/Re-pressurization Forms/Bag-Can Transfer Forms present (circle all that apply)
✓					12/24 Hr clock time & Hold Time met for all samples
NA				NA	Re-analysis of sample(s) have been evaluated for comparability and/or samples have been checked for trends (Inf/Eff).
✓				✓	All runs have been evaluated for potential carry-over (TPHg/non-Target/over-range compounds etc)

Analytical and special notes: A1 - 01A - 03A - ok

- samples 07A-09A released before analysis: see CAR below
- samples 04A-06A IS out due to matrix (see confirmation run files A092607 & A092608)

D1	D2	D3	D4	T	3T	Section 3 – Target Data Reduction
						Technical Review Needed? Circle one: Yes/No — T:
						Initials/Instrument/Date — D1: MC 10/2/15 — D2: — D3: — D4:
✓						CAR # F9U9572528 (if applicable)
✓						Spectra Verified (documentation of spectral defense included if applicable)
NA						TICs resemble reference spectra/ TICs between sample dups. are consistent (if applicable)
✓						Lab Narrative is correct
NA						TPH/NMOC calculations complete and included in folder

Special notes:
1. can released before analyze samples 07A to 09A
2. IS ↑ 04A to 06A
3. QC exceedance

A	3T	Section 4- Atlas Data Entry
		Lumen verified and included in folder — Circle one: Yes/No
		Initials/Date: MC 10/2/15 — 3rd Tier: (needed only for DOD or per client request)
✓		Sample Discrepancy Report (SDR) complete and approved (if applicable)
NA		Manually entered results are checked
✓		At least one result per sample is verified against Target quant sheets
✓		Appropriate data qualifier flags are applied
✓		Final Invoice is correct/ Final PDF report, COC and EDD reviewed and correct

Special Notes:

Note (1) *Please check all the appropriate boxes. Indicate "NA" for any statement that doesn't apply*
Note (2) 3rd Tier Report Reviewer and Write Up Reviewer must be separate individuals for DoD & Client Specific Projects

Eurofins Air Toxics, Inc.	Reissued - Data Review Checklist			Release Date 01/29/14
	Form F 1.27	Revision #8	Revision date 01/29/14	Page 2 of 2

Workorder # :				Reason for Reissue:
W	T	3T	Q	
				Reissue Request form Present
				Client or QA or Lab contact present with reason for reissue
				Review all affected data
				Report header has correct R1, R2 etc
				The Lab Narrative clearly explains the reissue (Date, Reason and whether client requested)
				Date for Reissue in Report Header matches date in Lab Narrative
				Check Project Profile for correct reporting instructions (multiple clients, # hardcopies, etc)
				Corrective Action issued - #
				The reissued workorder has been approved by QA Manager or a Technical Director
Additional Comments:				

Write Up (Initials/Date)	**Tech Review** (Initials/Date)	***3rd Tier Review** ** 3rd Tier Report Review is for DoD & Client Specific projects only* (Initials/Date)	**QA Review** (Initials/Date)

Workorder # :				Reason for Reissue:
W	T	3T	Q	
				Reissue Request form Present
				Client or QA or Lab contact present with reason for reissue
				Review all affected data
				Report header has correct R1, R2 etc
				The Lab Narrative clearly explains the reissue (Date, Reason and whether client requested)
				Date for Reissue in Report Header matches date in Lab Narrative
				Check Project Profile for correct reporting instructions (multiple clients, # hardcopies, etc)
				Corrective Action issued - #
				The reissued workorder has been approved by QA Manager or a Technical Director
Additional Comments:				

Write Up (Initials/Date)	**Tech Review** (Initials/Date)	***3rd Tier Review** ** 3rd Tier Report Review is for DoD & Client Specific projects only* (Initials/Date)	**QA Review** (Initials/Date)

Note (1) *Please check all the appropriate boxes. Indicate "NA" for any statement that doesn't apply*
Note (2) 3rd Tier Report Reviewer and Write Up Reviewer must be separate individuals for DoD & Client Specific Projects

Not Applicable

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Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager Rob Uppencamp
Collected by: (Print and Sign) Ramall Woodrow [signature]
Company ARCADIS Email Rob Uppencamp
Address 132 E. Washington Ste 600 City Indianapolis State IN Zip 46204
Phone 317-231-6500 Fax 317-231-6514

Project Info:
P.O. # IN000899.2013
Project # IN000899.2013
Project Name Lorenada Manufacturing

Turn Around Time:
☐ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	SG-2 (091615)	31765	9-16-15	0755-0808	TO-15, Project List	30	4.5		
02A	SG-1 (091615)	35559	9-16-15	0842-0854	TO-15, Project List	30	6.5		
03A	SG-3 (091615)	37382	9-16-15	0933-0947	TO-15, Project List	30	4.5		
04A	SG-5 (091615)	1L2717	9-16-15	1238-1252	TO-15, Project List	30	5.0		
05A	SG-6 (091615)	33388	9-16-15	1410-1430	TO-15, Project List	30	5.0		
06A	Dup-1 (091615)	1006	9-16-15	1238-1251	TO-15, Project List	30	4.5		
07A	SG-4 (091715)	37397	9-17-15	0627-0653	TO-15, Project List	30	5.5		
08A	SG-7 (091715)	1L2720	9-17-15	0709-0723	TO-15, Project List	30	3.5		
09A	SG-8 (091715)	1L1784	9-17-15	0750-0803	TO-15, Project List	30	4.5		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	9-18-15/0800	[signature]	9/21/15 1520
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	FedEx		NA	Good	Yes No None	1509345

Form 1293 rev.11

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10/12/2015
Ms. Marie Heap
Arcadis U.S., Inc.
132 East Washington St., Suite 600

Indianapolis IN 46204

Project Name: Grenada Manufacturing
Project #: LA003307.001
Workorder #: 1509511

Dear Ms. Marie Heap

The following report includes the data for the above referenced project for sample(s) received on 9/30/2015 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott

Project Manager

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WORK ORDER #: 1509511

Work Order Summary

CLIENT:	Ms. Marie Heap Arcadis U.S., Inc. 132 East Washington St., Suite 600 Indianapolis, IN 46204	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317-231-6500	**P.O. #**	LA003307.001
FAX:	317-231-6514	**PROJECT #**	LA003307.001 Grenada Manufacturing
DATE RECEIVED:	09/30/2015	**CONTACT:**	Ausha Scott
DATE COMPLETED:	10/12/2015		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	6-SS(092315)	TO-15	4.5 "Hg	14.5 psi
02A	1-SS(092315)	TO-15	5.3 "Hg	14.9 psi
03A	1-DUP-SS(092315)	TO-15	4.5 "Hg	14.7 psi
04A	5-SS(092315)	TO-15	4.5 "Hg	15.1 psi
05A	2-SS(092315)	TO-15	3.9 "Hg	15.3 psi
06A	3-SS(092315)	TO-15	3.7 "Hg	14.7 psi
07A	4-SS(092315)	TO-15	4.3 "Hg	14.7 psi
08A	Lab Blank	TO-15	NA	NA
09A	CCV	TO-15	NA	NA
10A	LCS	TO-15	NA	NA
10AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Mayo DATE: 10/12/15

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1509511

Seven 1 Liter Summa Canister (100% Certified) samples were received on September 30, 2015. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

The Chain of Custody (COC) information for sample 3-SS(092315) did not match the information on the canister with regard to canister identification. The information on the canister was used to process and report the sample.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: 6-SS(092315)

Lab ID#: 1509511-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	1.2	28	5.7	140
Toluene	1.2	1.2	4.4	4.7

Client Sample ID: 1-SS(092315)

Lab ID#: 1509511-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	1.2	1.2	8.3	8.5

Client Sample ID: 1-DUP-SS(092315)

Lab ID#: 1509511-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	1.2	4.1	6.3	22

Client Sample ID: 5-SS(092315)

Lab ID#: 1509511-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2,4-Trimethylbenzene	1.2	1.3	5.8	6.6

Client Sample ID: 2-SS(092315)

Lab ID#: 1509511-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Toluene	1.2	1.8	4.4	6.9

Client Sample ID: 3-SS(092315)

Lab ID#: 1509511-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
trans-1,2-Dichloroethene	1.1	3.1	4.5	12

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: 4-SS(092315)

Lab ID#: 1509511-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	1.2	1.2	7.9	7.9

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Client Sample ID: 6-SS(092315)

Lab ID#: 1509511-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100223**	**Date of Collection:**	**9/23/15 11:30:00 AM**
Dil. Factor:	**2.34**	**Date of Analysis:**	**10/2/15 10:45 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Methylene Chloride	12	Not Detected	41	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Chloroform	1.2	28	5.7	140
Benzene	1.2	Not Detected	3.7	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
Toluene	1.2	1.2	4.4	4.7
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
Ethyl Benzene	1.2	Not Detected	5.1	Not Detected
m,p-Xylene	1.2	Not Detected	5.1	Not Detected
o-Xylene	1.2	Not Detected	5.1	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.8	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	91	70-130

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Client Sample ID: 1-SS(092315)

Lab ID#: 1509511-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100224**	**Date of Collection:**	**9/23/15 12:27:00 PM**
Dil. Factor:	**2.44**	**Date of Analysis:**	**10/2/15 11:21 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Methylene Chloride	12	Not Detected	42	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Chloroform	1.2	Not Detected	6.0	Not Detected
Benzene	1.2	Not Detected	3.9	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected
Toluene	1.2	Not Detected	4.6	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.6	Not Detected
Tetrachloroethene	1.2	1.2	8.3	8.5
Ethyl Benzene	1.2	Not Detected	5.3	Not Detected
m,p-Xylene	1.2	Not Detected	5.3	Not Detected
o-Xylene	1.2	Not Detected	5.3	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	6.0	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	92	70-130

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Client Sample ID: 1-DUP-SS(092315)

Lab ID#: 1509511-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100231**	**Date of Collection:**	**9/23/15 12:30:00 PM**
Dil. Factor:	**2.35**	**Date of Analysis:**	**10/3/15 07:37 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Methylene Chloride	12	Not Detected	41	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Chloroform	1.2	Not Detected	5.7	Not Detected
Benzene	1.2	Not Detected	3.8	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	4.1	6.3	22
Toluene	1.2	Not Detected	4.4	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Tetrachloroethene	1.2	Not Detected	8.0	Not Detected
Ethyl Benzene	1.2	Not Detected	5.1	Not Detected
m,p-Xylene	1.2	Not Detected	5.1	Not Detected
o-Xylene	1.2	Not Detected	5.1	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.8	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	92	70-130

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Client Sample ID: 5-SS(092315)

Lab ID#: 1509511-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100226**	**Date of Collection:**	**9/23/15 1:32:00 PM**
Dil. Factor:	**2.38**	**Date of Analysis:**	**10/3/15 12:20 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Methylene Chloride	12	Not Detected	41	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Chloroform	1.2	Not Detected	5.8	Not Detected
Benzene	1.2	Not Detected	3.8	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
Toluene	1.2	Not Detected	4.5	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.5	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
Ethyl Benzene	1.2	Not Detected	5.2	Not Detected
m,p-Xylene	1.2	Not Detected	5.2	Not Detected
o-Xylene	1.2	Not Detected	5.2	Not Detected
1,2,4-Trimethylbenzene	1.2	1.3	5.8	6.6

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	95	70-130

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Client Sample ID: 2-SS(092315)

Lab ID#: 1509511-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100227**	**Date of Collection:**	**9/23/15 2:39:00 PM**
Dil. Factor:	**2.34**	**Date of Analysis:**	**10/3/15 12:44 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Methylene Chloride	12	Not Detected	41	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Chloroform	1.2	Not Detected	5.7	Not Detected
Benzene	1.2	Not Detected	3.7	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
Toluene	1.2	1.8	4.4	6.9
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
Ethyl Benzene	1.2	Not Detected	5.1	Not Detected
m,p-Xylene	1.2	Not Detected	5.1	Not Detected
o-Xylene	1.2	Not Detected	5.1	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.8	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	96	70-130

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Client Sample ID: 3-SS(092315)

Lab ID#: 1509511-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100230**	**Date of Collection:**	**9/23/15 4:01:00 PM**
Dil. Factor:	**2.28**	**Date of Analysis:**	**10/3/15 06:39 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Methylene Chloride	11	Not Detected	40	Not Detected
trans-1,2-Dichloroethene	1.1	3.1	4.5	12
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Chloroform	1.1	Not Detected	5.6	Not Detected
Benzene	1.1	Not Detected	3.6	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.6	Not Detected
Trichloroethene	1.1	Not Detected	6.1	Not Detected
Toluene	1.1	Not Detected	4.3	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Tetrachloroethene	1.1	Not Detected	7.7	Not Detected
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected
m,p-Xylene	1.1	Not Detected	5.0	Not Detected
o-Xylene	1.1	Not Detected	5.0	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	88	70-130

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Client Sample ID: 4-SS(092315)

Lab ID#: 1509511-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100229**	**Date of Collection:**	**9/23/15 5:13:00 PM**
Dil. Factor:	**2.33**	**Date of Analysis:**	**10/3/15 01:43 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Methylene Chloride	12	Not Detected	40	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Chloroform	1.2	Not Detected	5.7	Not Detected
Benzene	1.2	Not Detected	3.7	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
Toluene	1.2	Not Detected	4.4	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Tetrachloroethene	1.2	1.2	7.9	7.9
Ethyl Benzene	1.2	Not Detected	5.0	Not Detected
m,p-Xylene	1.2	Not Detected	5.0	Not Detected
o-Xylene	1.2	Not Detected	5.0	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.7	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1509511-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100208**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/2/15 12:43 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	87	70-130

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Client Sample ID: CCV

Lab ID#: 1509511-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100202**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/2/15 09:19 AM**	

Compound	%Recovery
Vinyl Chloride	103
1,1-Dichloroethene	100
Methylene Chloride	109
trans-1,2-Dichloroethene	109
cis-1,2-Dichloroethene	104
Chloroform	104
Benzene	105
1,2-Dichloroethane	104
Trichloroethene	105
Toluene	104
1,1,2-Trichloroethane	101
Tetrachloroethene	93
Ethyl Benzene	104
m,p-Xylene	106
o-Xylene	105
1,2,4-Trimethylbenzene	101

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	93	70-130

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Client Sample ID: LCS

Lab ID#: 1509511-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100203**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/2/15 09:54 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	111	70-130
1,1-Dichloroethene	102	70-130
Methylene Chloride	110	70-130
trans-1,2-Dichloroethene	95	70-130
cis-1,2-Dichloroethene	117	70-130
Chloroform	105	70-130
Benzene	107	70-130
1,2-Dichloroethane	104	70-130
Trichloroethene	102	70-130
Toluene	108	70-130
1,1,2-Trichloroethane	108	70-130
Tetrachloroethene	102	70-130
Ethyl Benzene	115	70-130
m,p-Xylene	116	70-130
o-Xylene	118	70-130
1,2,4-Trimethylbenzene	115	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	96	70-130

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Client Sample ID: LCSD

Lab ID#: 1509511-10AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100204**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/2/15 10:16 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	102	70-130
1,1-Dichloroethene	96	70-130
Methylene Chloride	101	70-130
trans-1,2-Dichloroethene	88	70-130
cis-1,2-Dichloroethene	110	70-130
Chloroform	99	70-130
Benzene	106	70-130
1,2-Dichloroethane	104	70-130
Trichloroethene	100	70-130
Toluene	106	70-130
1,1,2-Trichloroethane	104	70-130
Tetrachloroethene	98	70-130
Ethyl Benzene	108	70-130
m,p-Xylene	112	70-130
o-Xylene	115	70-130
1,2,4-Trimethylbenzene	113	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	96	70-130



Electronic Comprehensive Validation Package (eCVP)

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COMPREHENSIVE VALIDATION PACKAGE

TO-15

INVENTORY SHEET

Work Order #: 1509511

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Comments:

Completed by:

Vera Belitsky	Vera Belitsky / Document Control	10/23/15
(Signature)	(Print Name & Title)	(Date)

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WORK ORDER #: 1509511

Work Order Summary

CLIENT:	Ms. Marie Heap Arcadis U.S., Inc. 132 East Washington St., Suite 600 Indianapolis, IN 46204	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317-231-6500	**P.O. #**	LA003307.001
FAX:	317-231-6514	**PROJECT #**	LA003307.001 Grenada Manufacturing
DATE RECEIVED:	09/30/2015	**CONTACT:**	Ausha Scott
DATE COMPLETED:	10/12/2015		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	6-SS(092315)	TO-15	4.5 "Hg	14.5 psi
02A	1-SS(092315)	TO-15	5.3 "Hg	14.9 psi
03A	1-DUP-SS(092315)	TO-15	4.5 "Hg	14.7 psi
04A	5-SS(092315)	TO-15	4.5 "Hg	15.1 psi
05A	2-SS(092315)	TO-15	3.9 "Hg	15.3 psi
06A	3-SS(092315)	TO-15	3.7 "Hg	14.7 psi
07A	4-SS(092315)	TO-15	4.3 "Hg	14.7 psi
08A	Lab Blank	TO-15	NA	NA
09A	CCV	TO-15	NA	NA
10A	LCS	TO-15	NA	NA
10AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 10/12/15

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 956
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1509511

Seven 1 Liter Summa Canister (100% Certified) samples were received on September 30, 2015. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

The Chain of Custody (COC) information for sample 3-SS(092315) did not match the information on the canister with regard to canister identification. The information on the canister was used to process and report the sample.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
6-SS(092315)	1509511-01A	9/23/2015	9/30/2015	NA	9	10/ 2/2015	NA	Good
1-SS(092315)	1509511-02A	9/23/2015	9/30/2015	NA	9	10/ 2/2015	NA	Good
1-DUP-SS(092315)	1509511-03A	9/23/2015	9/30/2015	NA	10	10/ 3/2015	NA	Good
5-SS(092315)	1509511-04A	9/23/2015	9/30/2015	NA	10	10/ 3/2015	NA	Good
2-SS(092315)	1509511-05A	9/23/2015	9/30/2015	NA	10	10/ 3/2015	NA	Good
3-SS(092315)	1509511-06A	9/23/2015	9/30/2015	NA	10	10/ 3/2015	NA	Good
4-SS(092315)	1509511-07A	9/23/2015	9/30/2015	NA	10	10/ 3/2015	NA	Good
Lab Blank	1509511-08A	NA	NA	NA	NA	10/ 2/2015	NA	Good
CCV	1509511-09A	NA	NA	NA	NA	10/ 2/2015	NA	Good
LCS	1509511-10A	NA	NA	NA	NA	10/ 2/2015	NA	Good
LCSD	1509511-10AA	NA	NA	NA	NA	10/ 2/2015	NA	Good

Sample Results and Raw Data

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: 6-SS(092315)

Lab ID#: 1509511-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	1.2	28	5.7	140
Toluene	1.2	1.2	4.4	4.7

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Client Sample ID: 6-SS(092315)

Lab ID#: 1509511-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100223**	**Date of Collection: 9/23/15 11:30:00 AM**	
Dil. Factor:	**2.34**	**Date of Analysis: 10/2/15 10:45 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Methylene Chloride	12	Not Detected	41	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Chloroform	1.2	28	5.7	140
Benzene	1.2	Not Detected	3.7	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
Toluene	1.2	1.2	4.4	4.7
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
Ethyl Benzene	1.2	Not Detected	5.1	Not Detected
m,p-Xylene	1.2	Not Detected	5.1	Not Detected
o-Xylene	1.2	Not Detected	5.1	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.8	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	91	70-130

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EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/02oct15.b/17100223.d
Lab Smp Id: 1509511-01A
Inj Date : 02-OCT-2015 22:45
Operator : gh Inst ID: msd17.i
Smp Info : 200ml 31782
Misc Info : 4.5 Hg->14.5 psi
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/02oct15.b/175q0921c.m
Meth Date : 02-Oct-2015 12:28 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 16:22 Cal File: 17092416.d
Als bottle: 3
Dil Factor: 2.34000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.34000	Dilution Factor

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.528	5.521 (1.000)	130	72879	25.0000		80.00- 120.00	100.00
5.528	5.521 (1.000)	128	56918			46.54- 106.54	78.10
5.528	5.521 (1.000)	49	81493			83.83- 143.83	111.82
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.409	6.409 (1.000)	114	284070	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	44103			0.00- 44.86	15.53
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.859	8.859 (1.000)	117	271919	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	144109			23.93- 83.93	53.00
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.058	6.058 (1.096)	65	101013	25.7220	25.722	80.00- 120.00	100.00
6.058	6.058 (1.096)	67	54881			25.51- 85.51	54.33

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.190)	98	302733	25.8476	25.848	80.00- 120.00	100.00
7.627	7.627 (1.190)	70	32510			0.00- 40.39	10.74
7.627	7.627 (1.190)	100	193365			33.97- 93.97	63.87
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.854	9.847 (1.112)	174	158368	22.8107	22.811	80.00- 120.00	100.00
9.847	9.847 (1.112)	95	182728			79.64- 139.64	115.38
9.854	9.847 (1.112)	176	147558			65.80- 125.80	93.17
100 Chloroform					CAS #: 67-66-3		
5.585	5.585 (1.010)	83	125620	11.9852	28.045	80.00- 120.00	100.00
5.585	5.585 (1.010)	85	85155			34.67- 94.67	67.79
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.199)	91	9586	0.53121	1.243	80.00- 120.00	100.00
7.684	7.684 (1.199)	92	5429			27.24- 87.24	56.64

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17100223.d
Lab Smp Id: 1509511-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msd17.i/02oct15.b/175q0921c.m
Misc Info: 4.5 Hg->14.5 psi

Calibration Date: 02-OCT-2015
Calibration Time: 09:19
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	74352	44611	104093	72879	-1.98
123 1,4-Difluorobenze	308060	184836	431284	284070	-7.79
163 Chlorobenzene-d5	281339	168803	393875	271919	-3.35

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.53	0.13
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Oct-2015 11:57

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RECOVERY REPORT

Client Name: Client SDG: 02oct15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509511-01A
Level: LOW Operator: gh
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msd17.i/02oct15.b/175q0921c.m
Misc Info: 4.5 Hg->14.5 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.722	102.89	70-130
$ 146 Toluene-d8	25.000	25.848	103.39	70-130
$ 177 4-Bromofluorobenze	25.000	22.811	91.24	70-130

Data File: /chem/msd17.i/02oct15.b/17100223.d

Page 1

Date : 02-OCT-2015 22:45

Client ID:

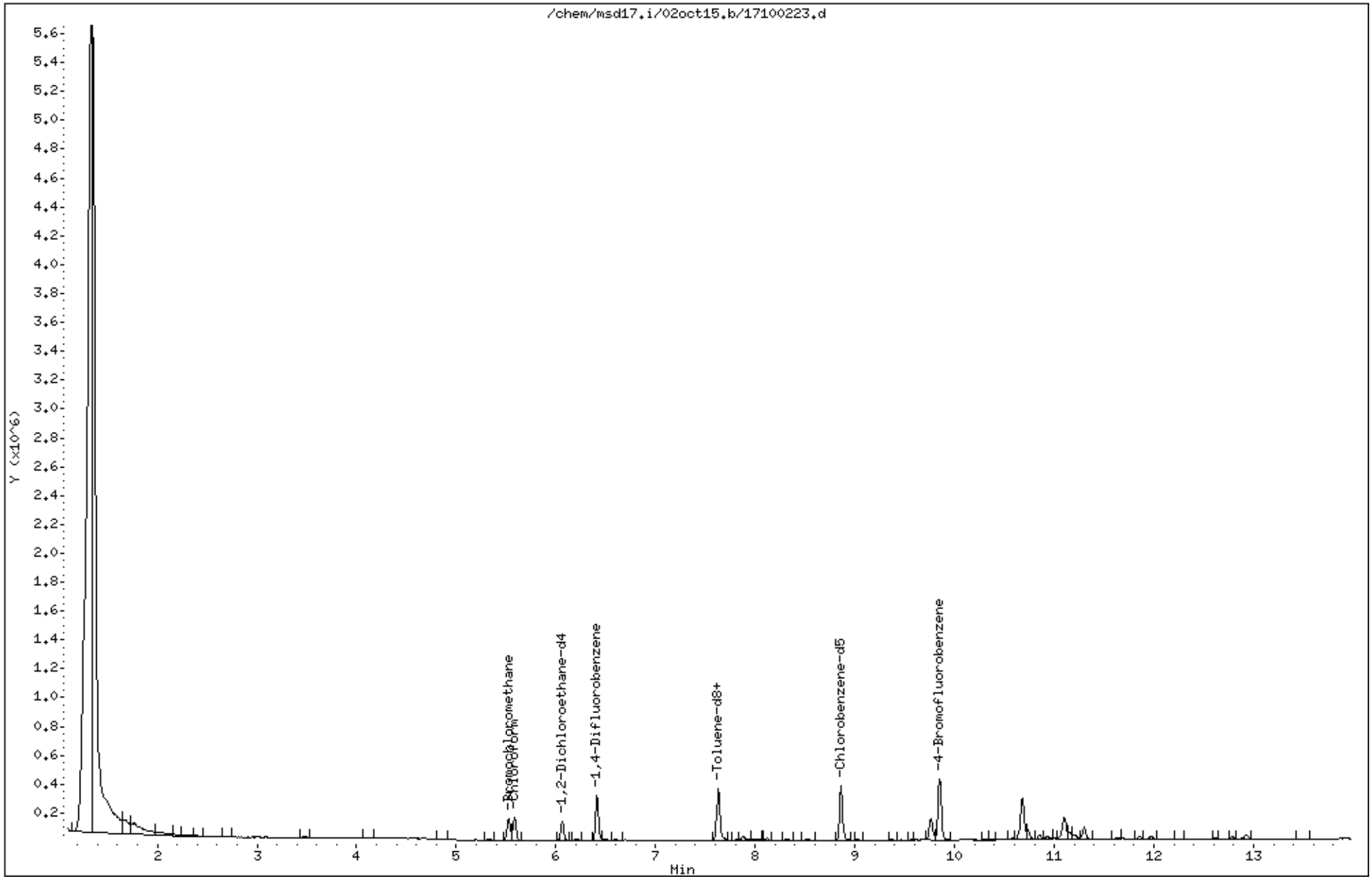
Instrument: msd17.i

Sample Info: 200ml 31782

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd17.i/02oct15.b/17100223.d

Date : 02-OCT-2015 22:45

Client ID:

Instrument: msd17.i

Sample Info: 200ml 31782

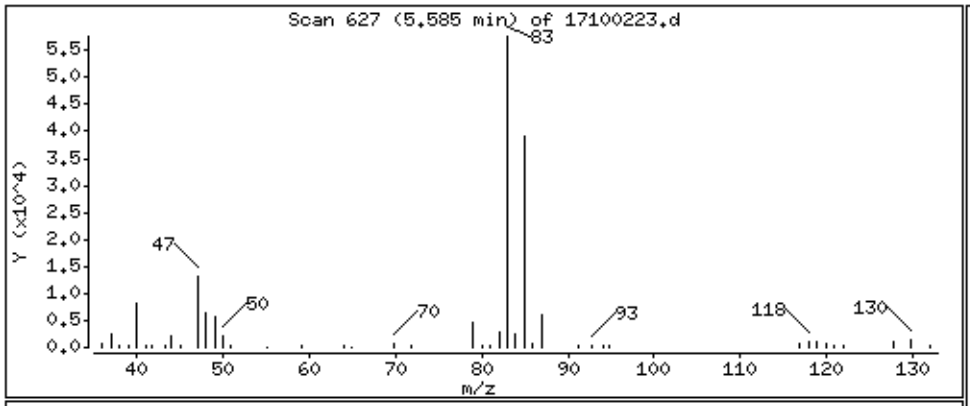
Operator: gh

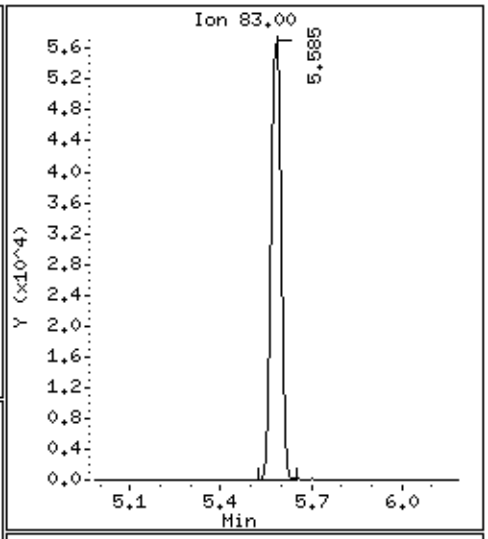
Column phase: RTX-624

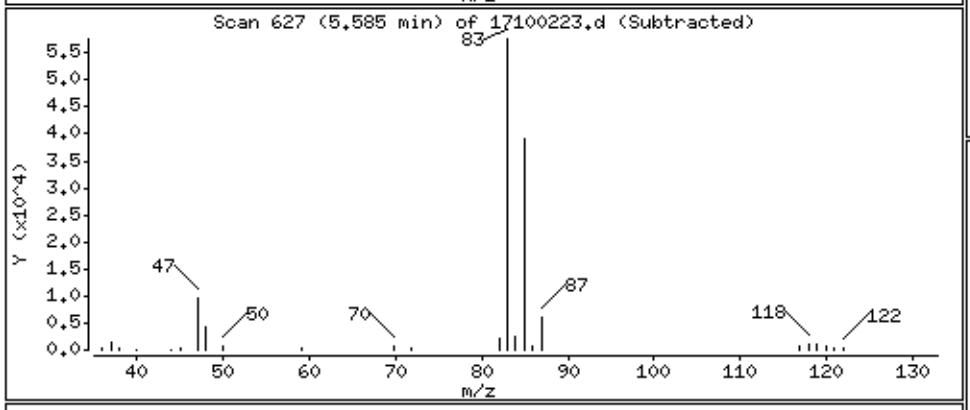
Column diameter: 0.25

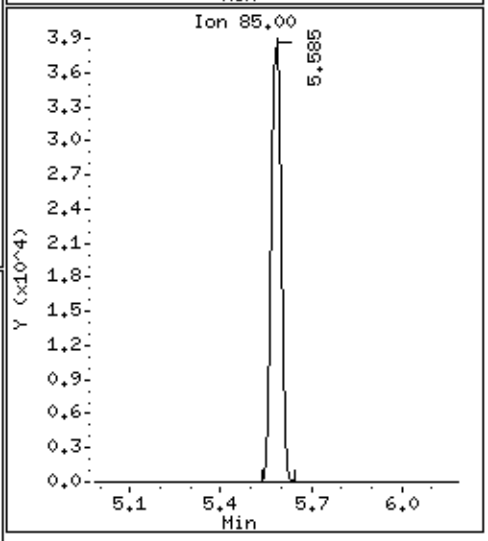
100 Chloroform

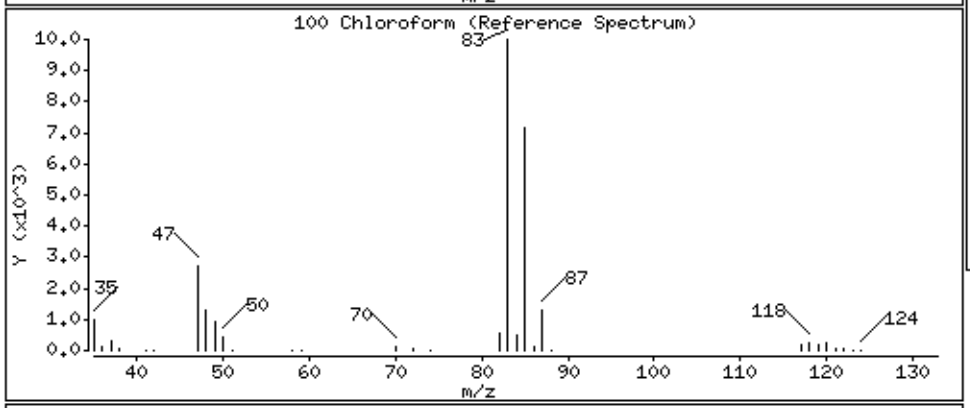
Concentration: 28.045 PPBV

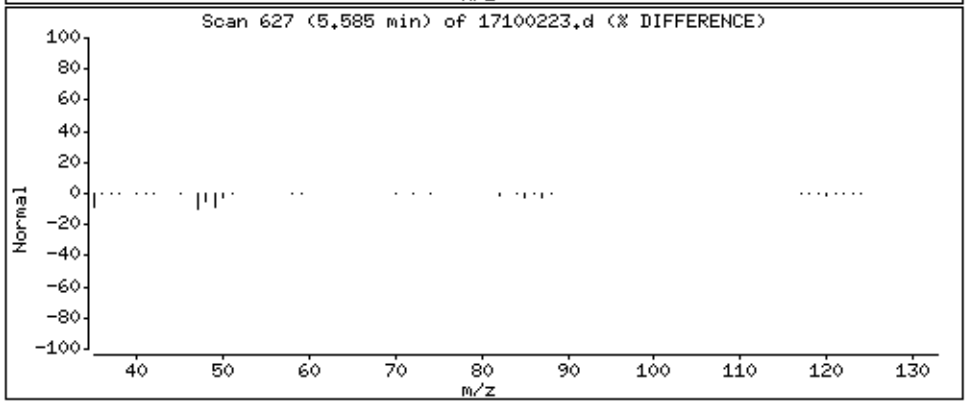












Data File: /chem/msd17.i/02oct15.b/17100223.d

Date : 02-OCT-2015 22:45

Client ID:

Instrument: msd17.i

Sample Info: 200ml 31782

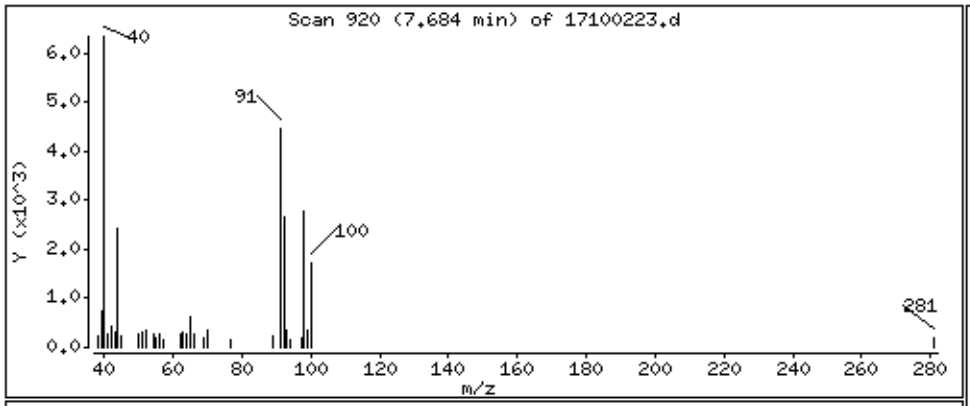
Operator: gh

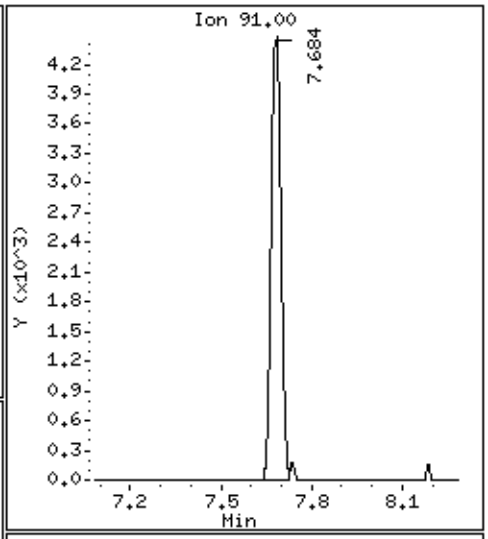
Column phase: RTX-624

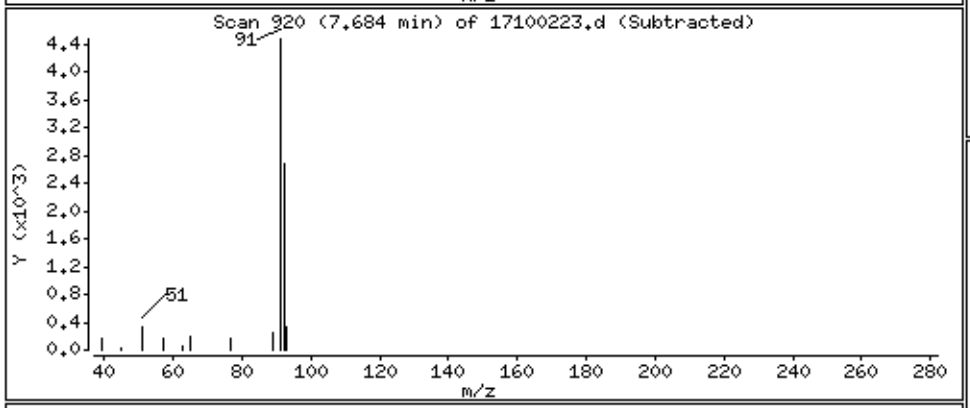
Column diameter: 0.25

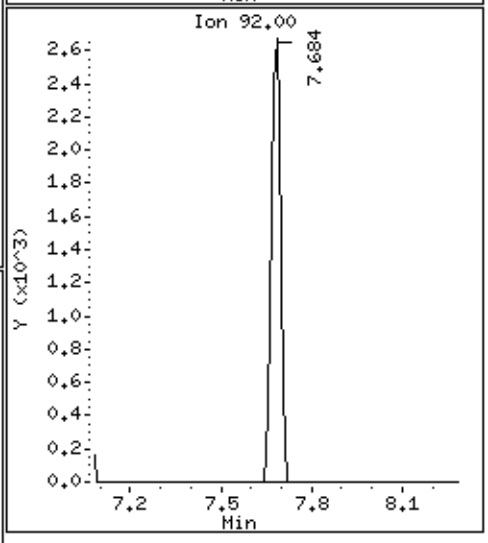
147 Toluene

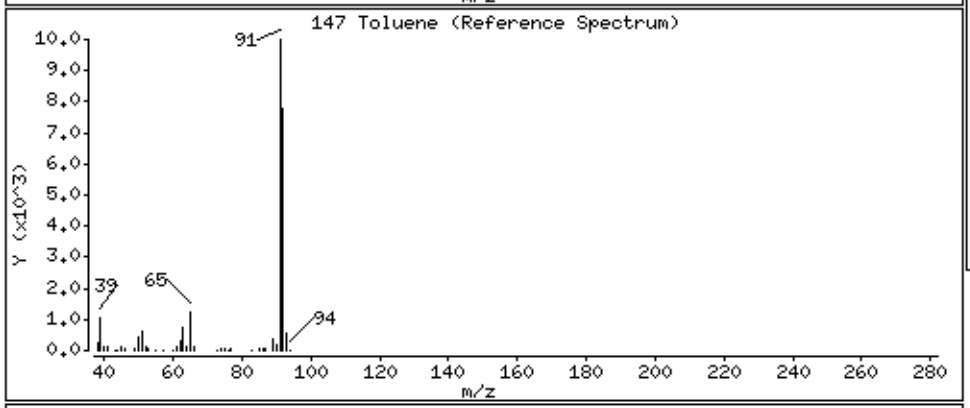
Concentration: 1.243 PPBV

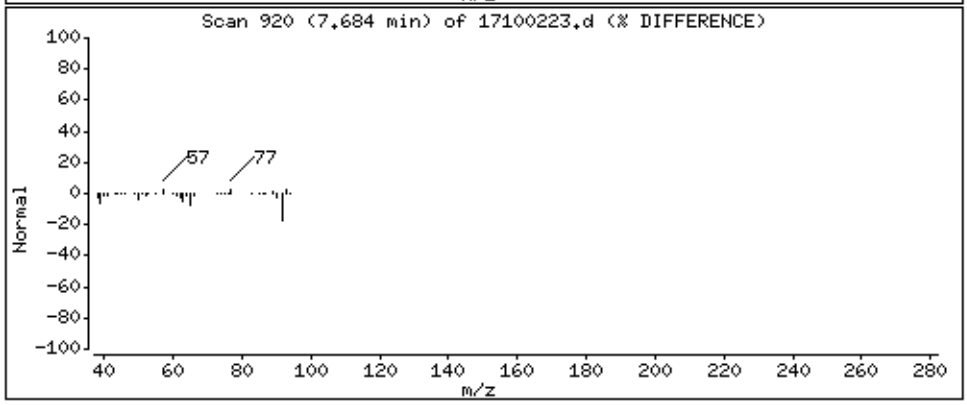












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: 1-SS(092315)

Lab ID#: 1509511-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	1.2	1.2	8.3	8.5

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Client Sample ID: 1-SS(092315)

Lab ID#: 1509511-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100224**	**Date of Collection:**	**9/23/15 12:27:00 PM**
Dil. Factor:	**2.44**	**Date of Analysis:**	**10/2/15 11:21 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Methylene Chloride	12	Not Detected	42	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Chloroform	1.2	Not Detected	6.0	Not Detected
Benzene	1.2	Not Detected	3.9	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected
Toluene	1.2	Not Detected	4.6	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.6	Not Detected
Tetrachloroethene	1.2	1.2	8.3	8.5
Ethyl Benzene	1.2	Not Detected	5.3	Not Detected
m,p-Xylene	1.2	Not Detected	5.3	Not Detected
o-Xylene	1.2	Not Detected	5.3	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	6.0	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	92	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/02oct15.b/17100224.d
Lab Smp Id: 1509511-02A
Inj Date : 02-OCT-2015 23:21
Operator : gh Inst ID: msd17.i
Smp Info : 200ml 1L1624
Misc Info : 5.3 Hg->14.9 psi
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/02oct15.b/175q0921c.m
Meth Date : 02-Oct-2015 12:28 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 16:22 Cal File: 17092416.d
Als bottle: 4
Dil Factor: 2.44000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.44000	Dilution Factor

					CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
* 98 Bromochloromethane						CAS #: 74-97-5		
5.528	5.521 (1.000)	130	74553	25.0000		80.00- 120.00		100.00
5.528	5.521 (1.000)	128	57929			46.54- 106.54		77.70
5.528	5.521 (1.000)	49	88314			83.83- 143.83		118.46
* 123 1,4-Difluorobenzene						CAS #: 540-36-3		
6.409	6.409 (1.000)	114	293544	25.0000		80.00- 120.00		100.00
6.409	6.409 (1.000)	88	43545			0.00- 44.86		14.83
* 163 Chlorobenzene-d5						CAS #: 3114-55-4		
8.844	8.859 (1.000)	117	270761	25.0000		80.00- 120.00		100.00
8.844	8.859 (1.000)	82	146267			23.93- 83.93		54.02
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
6.058	6.058 (1.096)	65	102618	25.5439	25.544	80.00- 120.00		100.00
6.058	6.058 (1.096)	67	54766			25.51- 85.51		53.37

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.190)	98	303022	25.0372	25.037	80.00- 120.00	100.00
7.627	7.627 (1.190)	70	32912			0.00- 40.39	10.86
7.627	7.627 (1.190)	100	189622			33.97- 93.97	62.58
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.811	9.847 (1.109)	174	158660	22.9505	22.950	80.00- 120.00	100.00
9.811	9.847 (1.109)	95	185394			79.64- 139.64	116.85
9.811	9.847 (1.109)	176	149898			65.80- 125.80	94.48
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.918)	166	4986	0.51203	1.249	80.00- 120.00	100.00
8.114	8.121 (0.917)	129	3822			42.46- 102.46	76.65
8.121	8.121 (0.918)	131	4020			40.24- 100.24	80.64

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17100224.d
Lab Smp Id: 1509511-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msd17.i/02oct15.b/175q0921c.m
Misc Info: 5.3 Hg->14.9 psi

Calibration Date: 02-OCT-2015
Calibration Time: 09:19
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	74352	44611	104093	74553	0.27
123 1,4-Difluorobenze	308060	184836	431284	293544	-4.71
163 Chlorobenzene-d5	281339	168803	393875	270761	-3.76

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.53	0.13
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.84	-0.16

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Oct-2015 11:57

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 02oct15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509511-02A
Level: LOW Operator: gh
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msd17.i/02oct15.b/175q0921c.m
Misc Info: 5.3 Hg->14.9 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.544	102.18	70-130
$ 146 Toluene-d8	25.000	25.037	100.15	70-130
$ 177 4-Bromofluorobenze	25.000	22.950	91.80	70-130

Data File: /chem/msd17.i/02oct15.b/17100224.d

Page 1

Date : 02-OCT-2015 23:21

Client ID:

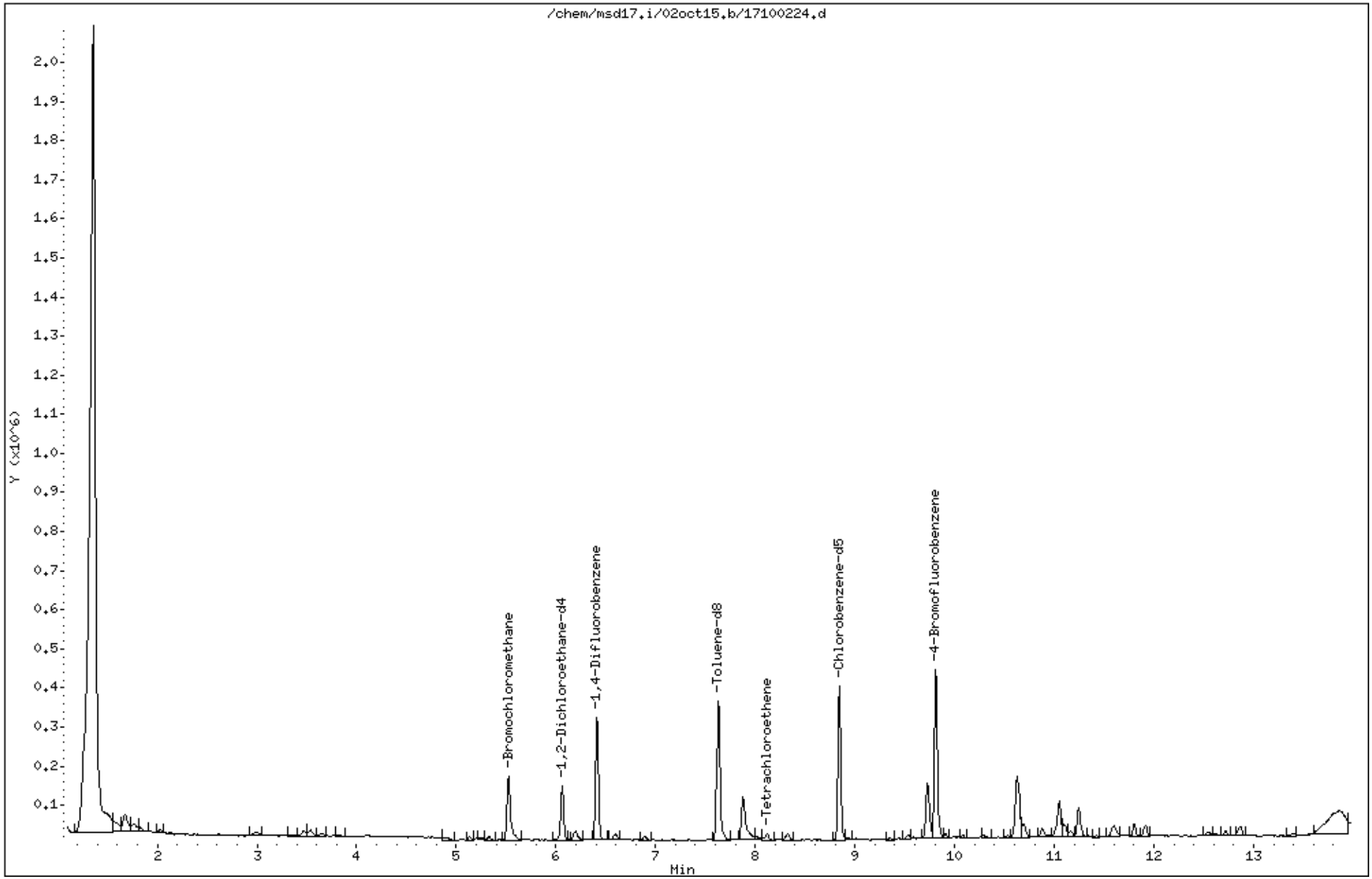
Instrument: msd17.i

Sample Info: 200ml 1L1624

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd17.i/02oct15.b/17100224.d

Date : 02-OCT-2015 23:21

Client ID:

Instrument: msd17.i

Sample Info: 200ml 1L1624

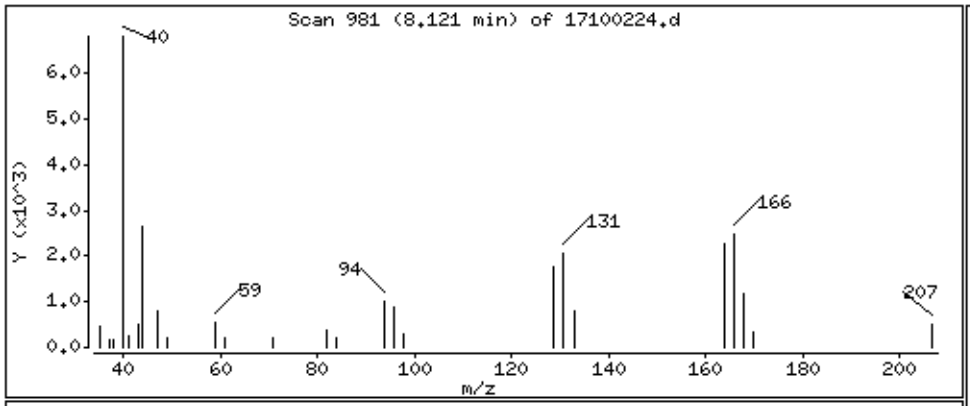
Operator: gh

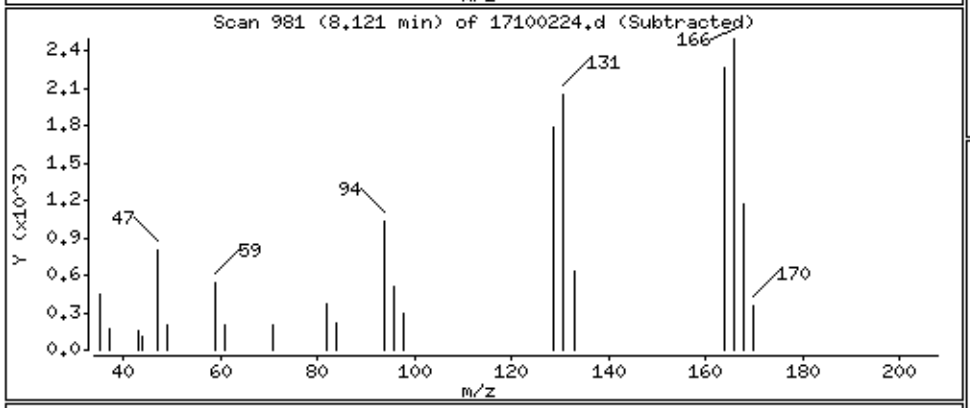
Column phase: RTX-624

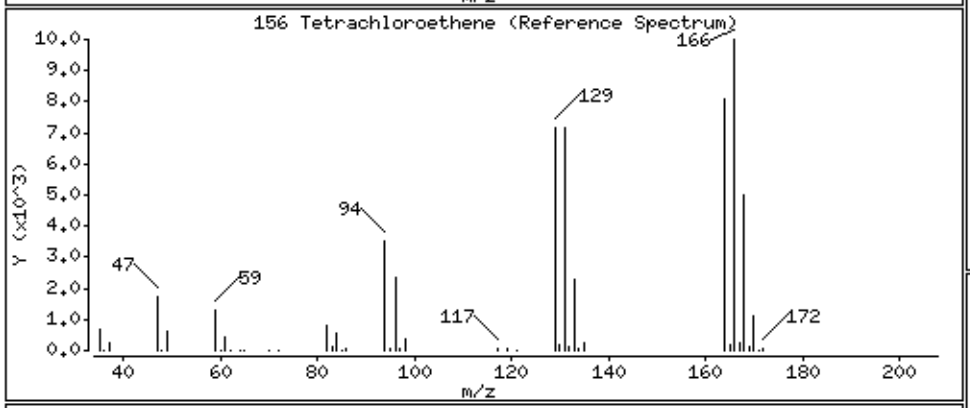
Column diameter: 0.25

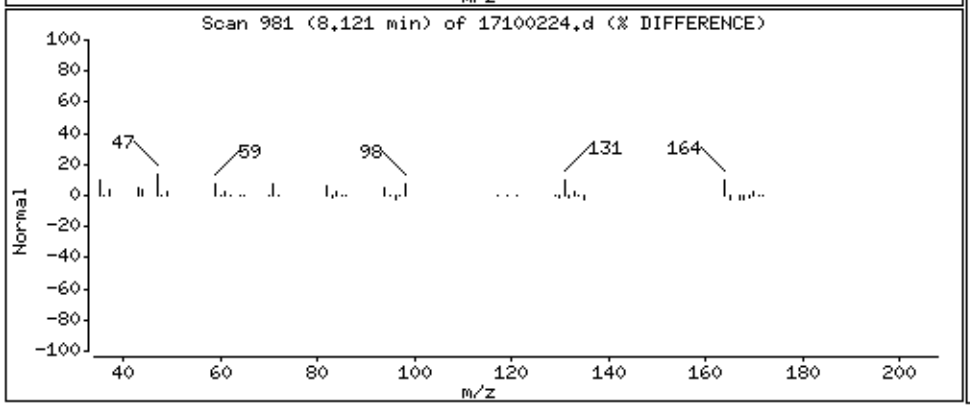
156 Tetrachloroethene

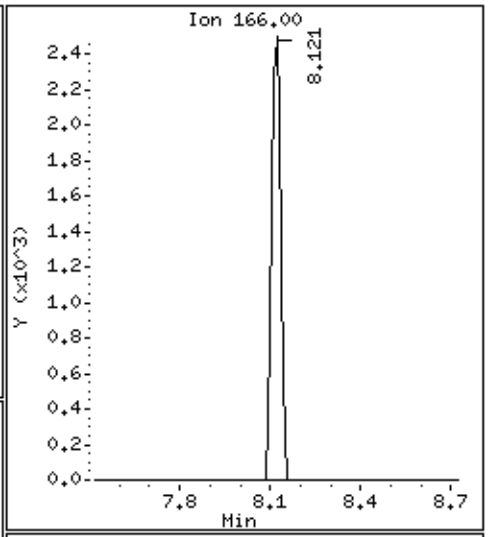
Concentration: 1.249 PPBV

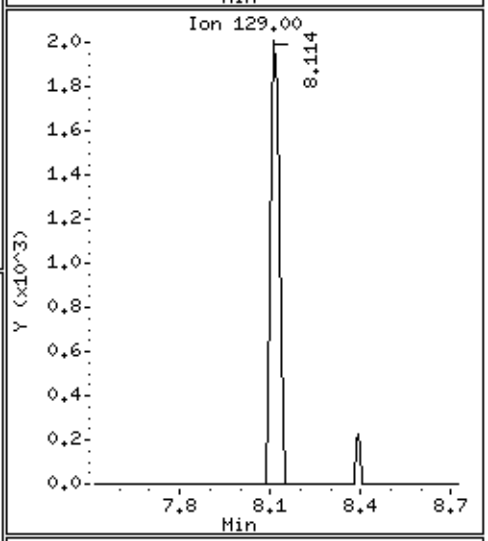


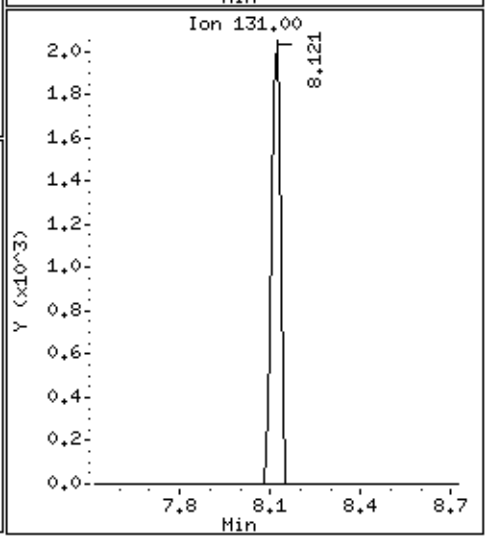












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: 1-DUP-SS(092315)

Lab ID#: 1509511-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	1.2	4.1	6.3	22

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Client Sample ID: 1-DUP-SS(092315)

Lab ID#: 1509511-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100231**	**Date of Collection:**	**9/23/15 12:30:00 PM**
Dil. Factor:	**2.35**	**Date of Analysis:**	**10/3/15 07:37 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Methylene Chloride	12	Not Detected	41	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Chloroform	1.2	Not Detected	5.7	Not Detected
Benzene	1.2	Not Detected	3.8	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	4.1	6.3	22
Toluene	1.2	Not Detected	4.4	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Tetrachloroethene	1.2	Not Detected	8.0	Not Detected
Ethyl Benzene	1.2	Not Detected	5.1	Not Detected
m,p-Xylene	1.2	Not Detected	5.1	Not Detected
o-Xylene	1.2	Not Detected	5.1	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.8	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	92	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/02oct15.b/17100231.d
Lab Smp Id: 1509511-03A
Inj Date : 03-OCT-2015 07:37
Operator : mjs Inst ID: msd17.i
Smp Info : 200ml 34618
Misc Info : 4.5 Hg->14.7 psi
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/02oct15.b/175q0921c.m
Meth Date : 02-Oct-2015 12:28 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 16:22 Cal File: 17092416.d
Als bottle: 1
Dil Factor: 2.35000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.35000	Dilution Factor

	RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
*	98 Bromochloromethane					CAS #: 74-97-5		
	5.528	5.521 (1.000)	130	64206	25.0000		80.00- 120.00	100.00
	5.528	5.521 (1.000)	128	48805			46.54- 106.54	76.01
	5.521	5.521 (1.000)	49	72301			83.83- 143.83	112.61
*	123 1,4-Difluorobenzene					CAS #: 540-36-3		
	6.409	6.409 (1.000)	114	262698	25.0000		80.00- 120.00	100.00
	6.409	6.409 (1.000)	88	42355			0.00- 44.86	16.12
*	163 Chlorobenzene-d5					CAS #: 3114-55-4		
	8.859	8.859 (1.000)	117	224646	25.0000		80.00- 120.00	100.00
	8.859	8.859 (1.000)	82	125006			23.93- 83.93	55.65
$	117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	6.058	6.058 (1.096)	65	87538	25.3017	25.302	80.00- 120.00	100.00
	6.058	6.058 (1.096)	67	47385			25.51- 85.51	54.13

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.190)	98	277254	25.5980	25.598	80.00- 120.00	100.00
7.627	7.627 (1.190)	70	29950			0.00- 40.39	10.80
7.627	7.627 (1.190)	100	171814			33.97- 93.97	61.97
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.854	9.847 (1.112)	174	131840	22.9858	22.986	80.00- 120.00	100.00
9.847	9.847 (1.112)	95	156281			79.64- 139.64	118.54
9.854	9.847 (1.112)	176	127133			65.80- 125.80	96.43
125 Trichloroethene					CAS #: 79-01-6		
6.602	6.603 (1.030)	95	11083	1.76505	4.148	80.00- 120.00	100.00
6.602	6.603 (1.030)	130	11216			74.97- 134.97	101.20
6.602	6.603 (1.030)	97	7578			35.33- 95.33	68.37

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17100231.d
Lab Smp Id: 1509511-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: mjs
Method File: /chem/msd17.i/02oct15.b/175q0921c.m
Misc Info: 4.5 Hg->14.7 psi

Calibration Date: 02-OCT-2015
Calibration Time: 09:19
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	74352	44611	104093	64206	-13.65
123 1,4-Difluorobenze	308060	184836	431284	262698	-14.73
163 Chlorobenzene-d5	281339	168803	393875	224646	-20.15

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.53	0.12
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 02oct15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509511-03A
Level: LOW Operator: mjs
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msd17.i/02oct15.b/175q0921c.m
Misc Info: 4.5 Hg->14.7 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.302	101.21	70-130
$ 146 Toluene-d8	25.000	25.598	102.39	70-130
$ 177 4-Bromofluorobenze	25.000	22.986	91.94	70-130

Data File: /chem/msd17.i/02oct15.b/17100231.d

Date : 03-OCT-2015 07:37

Client ID:

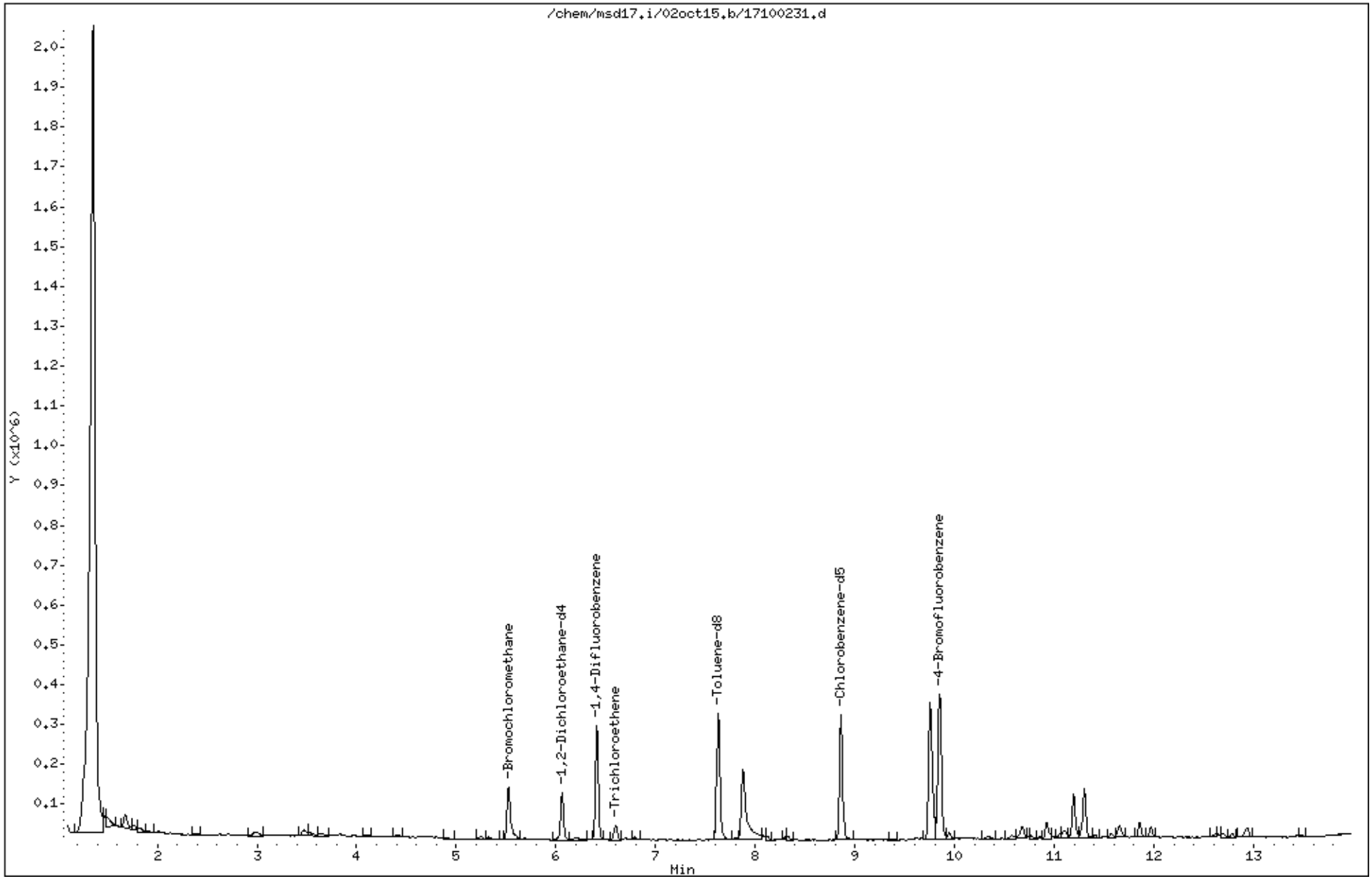
Instrument: msd17.i

Sample Info: 200ml 34618

Operator: mjs

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd17.i/02oct15.b/17100231.d

Date : 03-OCT-2015 07:37

Client ID:

Instrument: msd17.i

Sample Info: 200ml 34618

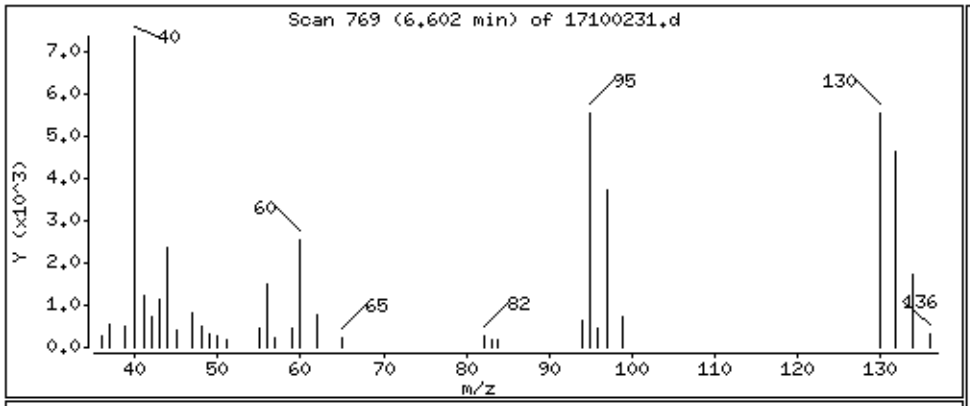
Operator: mjs

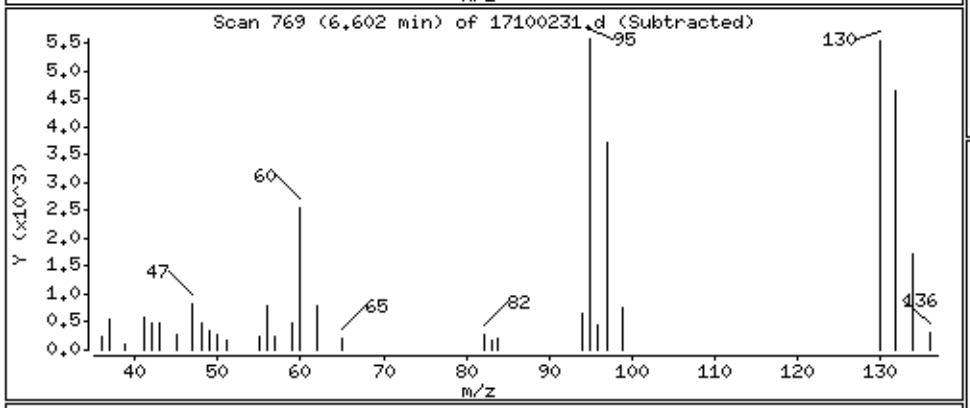
Column phase: RTX-624

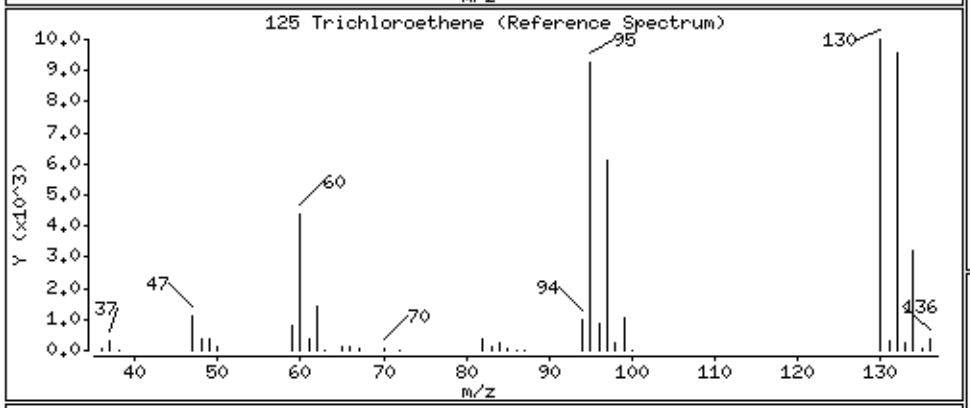
Column diameter: 0.25

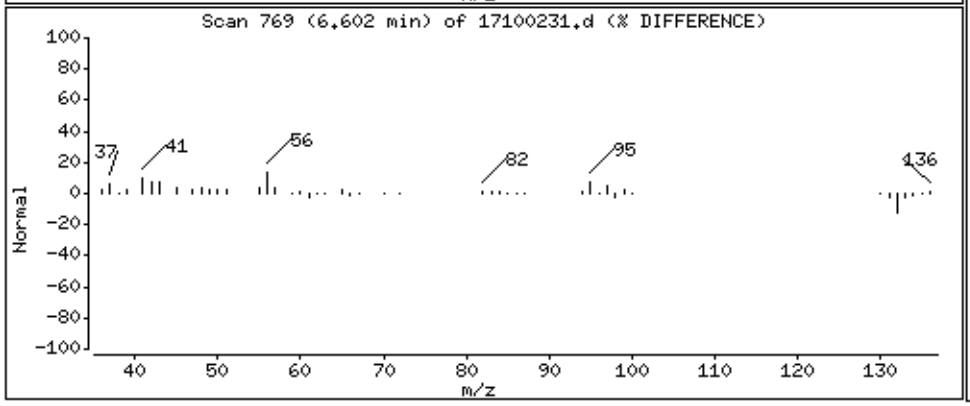
125 Trichloroethene

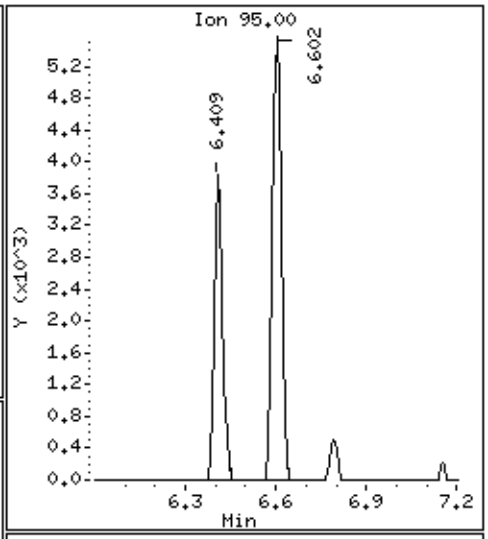
Concentration: 4.148 PPBV

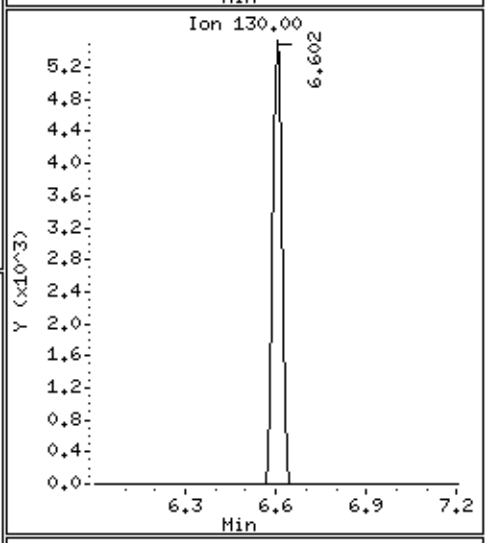


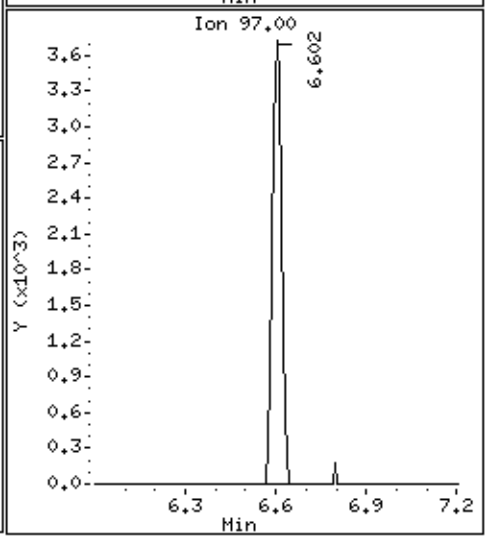












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: 5-SS(092315)

Lab ID#: 1509511-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,2,4-Trimethylbenzene	1.2	1.3	5.8	6.6

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Client Sample ID: 5-SS(092315)

Lab ID#: 1509511-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100226**	**Date of Collection: 9/23/15 1:32:00 PM**	
Dil. Factor:	**2.38**	**Date of Analysis: 10/3/15 12:20 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Methylene Chloride	12	Not Detected	41	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
Chloroform	1.2	Not Detected	5.8	Not Detected
Benzene	1.2	Not Detected	3.8	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	Not Detected	6.4	Not Detected
Toluene	1.2	Not Detected	4.5	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.5	Not Detected
Tetrachloroethene	1.2	Not Detected	8.1	Not Detected
Ethyl Benzene	1.2	Not Detected	5.2	Not Detected
m,p-Xylene	1.2	Not Detected	5.2	Not Detected
o-Xylene	1.2	Not Detected	5.2	Not Detected
1,2,4-Trimethylbenzene	1.2	1.3	5.8	6.6

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	95	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/02oct15.b/17100226.d
Lab Smp Id: 1509511-04A
Inj Date : 03-OCT-2015 00:20
Operator : gh Inst ID: msd17.i
Smp Info : 200ml 1358
Misc Info : 4.5 Hg->15.1 psi
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/02oct15.b/175q0921c.m
Meth Date : 02-Oct-2015 12:28 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 16:22 Cal File: 17092416.d
Als bottle: 6
Dil Factor: 2.38000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.38000	Dilution Factor

	RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
*	98 Bromochloromethane					CAS #: 74-97-5		
	5.528	5.521 (1.000)	130	80046	25.0000		80.00- 120.00	100.00
	5.528	5.521 (1.000)	128	61559			46.54- 106.54	76.90
	5.528	5.521 (1.000)	49	91662			83.83- 143.83	114.51
*	123 1,4-Difluorobenzene					CAS #: 540-36-3		
	6.409	6.409 (1.000)	114	282230	25.0000		80.00- 120.00	100.00
	6.409	6.409 (1.000)	88	43628			0.00- 44.86	15.46
*	163 Chlorobenzene-d5					CAS #: 3114-55-4		
	8.844	8.859 (1.000)	117	282246	25.0000		80.00- 120.00	100.00
	8.844	8.859 (1.000)	82	152311			23.93- 83.93	53.96
$	117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	6.058	6.058 (1.096)	65	105650	24.4940	24.494	80.00- 120.00	100.00
	6.065	6.058 (1.097)	67	58353			25.51- 85.51	55.23

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.190)	98	306356	26.3274	26.327	80.00- 120.00	100.00
7.627	7.627 (1.190)	70	34228			0.00- 40.39	11.17
7.627	7.627 (1.190)	100	190979			33.97- 93.97	62.34
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.819	9.847 (1.110)	174	171761	23.8346	23.834	80.00- 120.00	100.00
9.811	9.847 (1.109)	95	202963			79.64- 139.64	118.17
9.819	9.847 (1.110)	176	163886			65.80- 125.80	95.42
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.435	10.478 (1.180)	120	5995	0.56344	1.341	80.00- 120.00	100.00
10.435	10.478 (1.180)	105	12229			183.76- 243.76	203.99

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17100226.d
Lab Smp Id: 1509511-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msd17.i/02oct15.b/175q0921c.m
Misc Info: 4.5 Hg->15.1 psi

Calibration Date: 02-OCT-2015
Calibration Time: 09:19
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	74352	44611	104093	80046	7.66
123 1,4-Difluorobenze	308060	184836	431284	282230	-8.38
163 Chlorobenzene-d5	281339	168803	393875	282246	0.32

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.53	0.13
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.84	-0.16

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Oct-2015 11:57

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 02oct15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509511-04A
Level: LOW Operator: gh
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msd17.i/02oct15.b/175q0921c.m
Misc Info: 4.5 Hg->15.1 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	24.494	97.98	70-130
$ 146 Toluene-d8	25.000	26.327	105.31	70-130
$ 177 4-Bromofluorobenze	25.000	23.834	95.34	70-130

Data File: /chem/msd17.i/02oct15.b/17100226.d

Page 1

Date : 03-OCT-2015 00:20

Client ID:

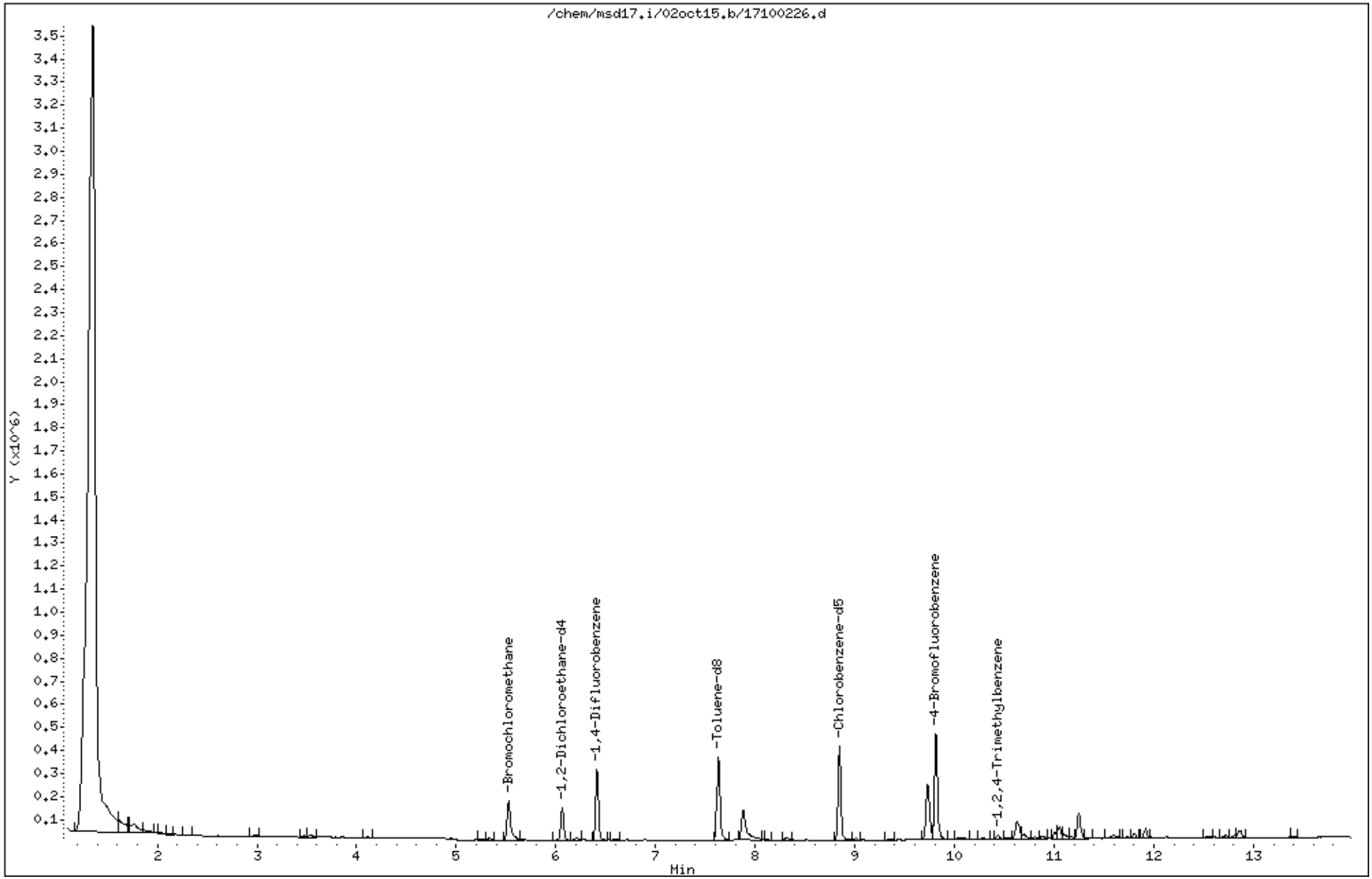
Instrument: msd17.i

Sample Info: 200ml 1358

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd17.i/02oct15.b/17100226.d

Date : 03-OCT-2015 00:20

Client ID:

Instrument: msd17.i

Sample Info: 200ml 1358

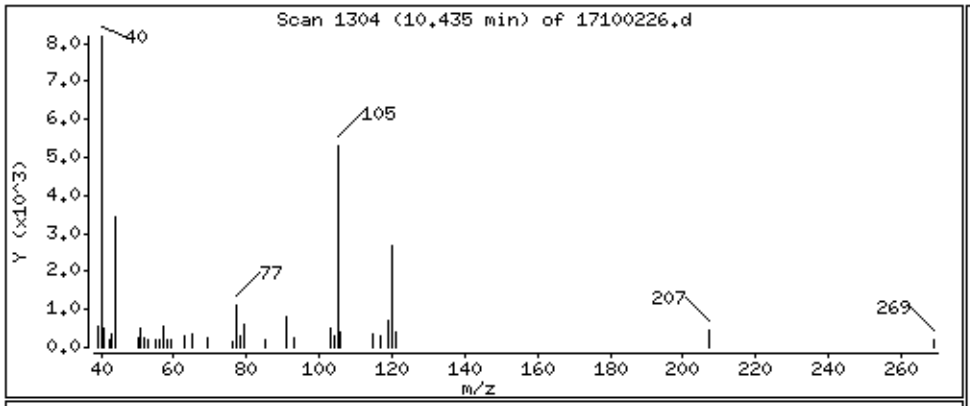
Operator: gh

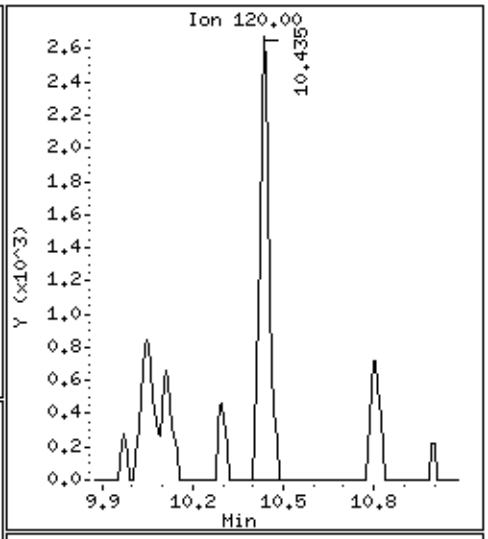
Column phase: RTX-624

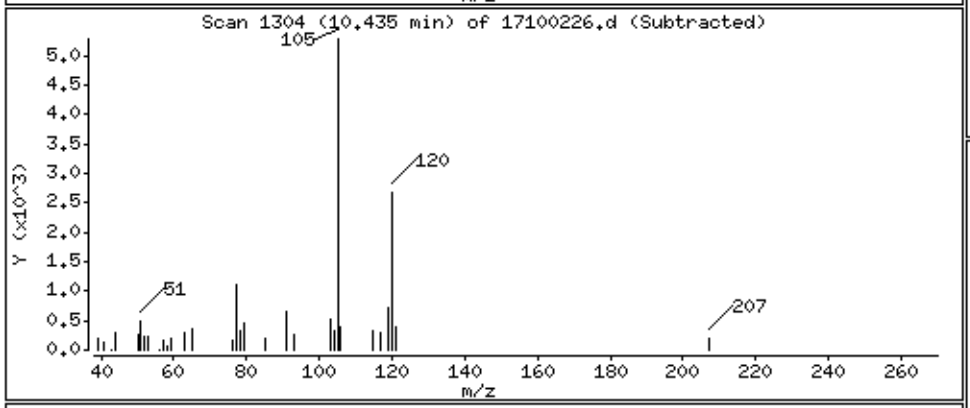
Column diameter: 0.25

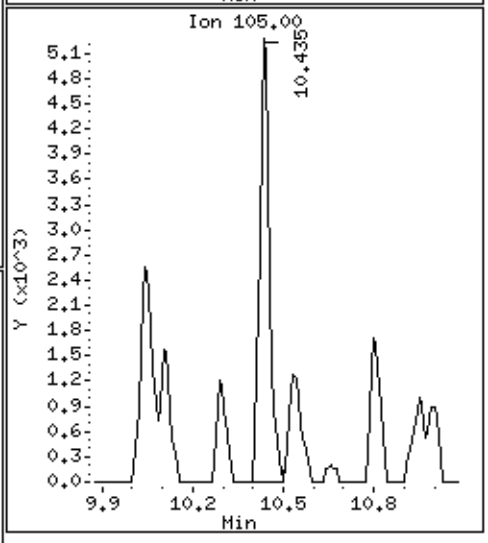
196 1,2,4-Trimethylbenzene

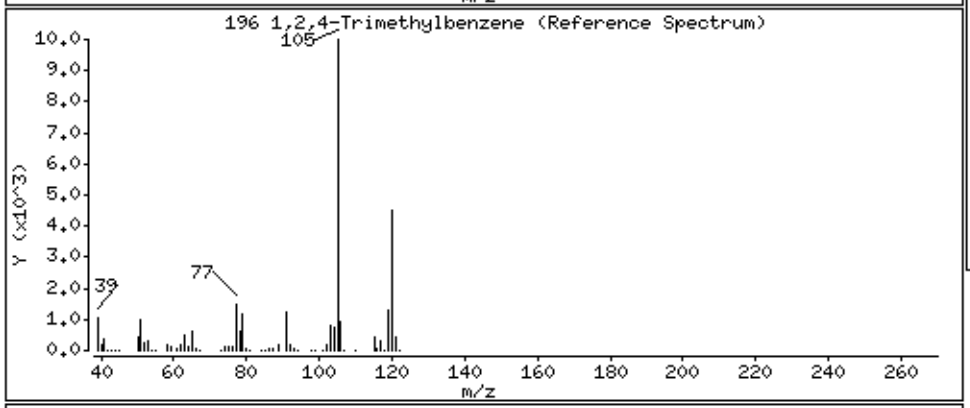
Concentration: 1.341 PPBV

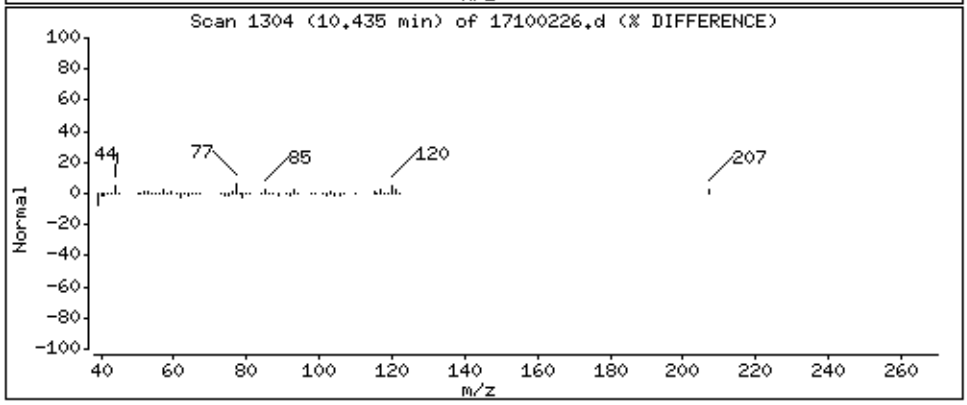












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: 2-SS(092315)

Lab ID#: 1509511-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Toluene	1.2	1.8	4.4	6.9

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Client Sample ID: 2-SS(092315)

Lab ID#: 1509511-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100227**	**Date of Collection: 9/23/15 2:39:00 PM**	
Dil. Factor:	**2.34**	**Date of Analysis: 10/3/15 12:44 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Methylene Chloride	12	Not Detected	41	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Chloroform	1.2	Not Detected	5.7	Not Detected
Benzene	1.2	Not Detected	3.7	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
Toluene	1.2	1.8	4.4	6.9
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Tetrachloroethene	1.2	Not Detected	7.9	Not Detected
Ethyl Benzene	1.2	Not Detected	5.1	Not Detected
m,p-Xylene	1.2	Not Detected	5.1	Not Detected
o-Xylene	1.2	Not Detected	5.1	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.8	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	96	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/02oct15.b/17100227.d
Lab Smp Id: 1509511-05A
Inj Date : 03-OCT-2015 00:44
Operator : gh Inst ID: msd17.i
Smp Info : 200ml 1L1901
Misc Info : 3.9 Hg->15.3 psi
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/02oct15.b/175q0921c.m
Meth Date : 02-Oct-2015 12:28 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 16:22 Cal File: 17092416.d
Als bottle: 7
Dil Factor: 2.34000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.34000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.528	5.521 (1.000)	130	80065	25.0000		80.00- 120.00	100.00
5.528	5.521 (1.000)	128	61892			46.54- 106.54	77.30
5.528	5.521 (1.000)	49	94592			83.83- 143.83	118.14
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.409	6.409 (1.000)	114	290912	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	43256			0.00- 44.86	14.87
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.859 (1.000)	117	294186	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	157277			23.93- 83.93	53.46
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.058	6.058 (1.096)	65	107421	24.8987	24.899	80.00- 120.00	100.00
6.058	6.058 (1.096)	67	57994			25.51- 85.51	53.99

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.190)	98	304690	25.4028	25.403	80.00- 120.00	100.00
7.627	7.627 (1.190)	70	35301			0.00- 40.39	11.59
7.627	7.627 (1.190)	100	196862			33.97- 93.97	64.61
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.854	9.847 (1.111)	174	179364	23.8794	23.879	80.00- 120.00	100.00
9.847	9.847 (1.111)	95	210750			79.64- 139.64	117.50
9.854	9.847 (1.111)	176	176608			65.80- 125.80	98.46
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.199)	91	14498	0.78452	1.836	80.00- 120.00	100.00
7.684	7.684 (1.199)	92	7122			27.24- 87.24	49.13

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17100227.d
Lab Smp Id: 1509511-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msd17.i/02oct15.b/175q0921c.m
Misc Info: 3.9 Hg->15.3 psi

Calibration Date: 02-OCT-2015
Calibration Time: 09:19
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	74352	44611	104093	80065	7.68
123 1,4-Difluorobenze	308060	184836	431284	290912	-5.57
163 Chlorobenzene-d5	281339	168803	393875	294186	4.57

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.53	0.13
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.87	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Oct-2015 11:58

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 02oct15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509511-05A
Level: LOW Operator: gh
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msd17.i/02oct15.b/175q0921c.m
Misc Info: 3.9 Hg->15.3 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	24.899	99.59	70-130
$ 146 Toluene-d8	25.000	25.403	101.61	70-130
$ 177 4-Bromofluorobenze	25.000	23.879	95.52	70-130

Data File: /chem/msd17.i/02oct15.b/17100227.d

Page 1

Date : 03-OCT-2015 00:44

Client ID:

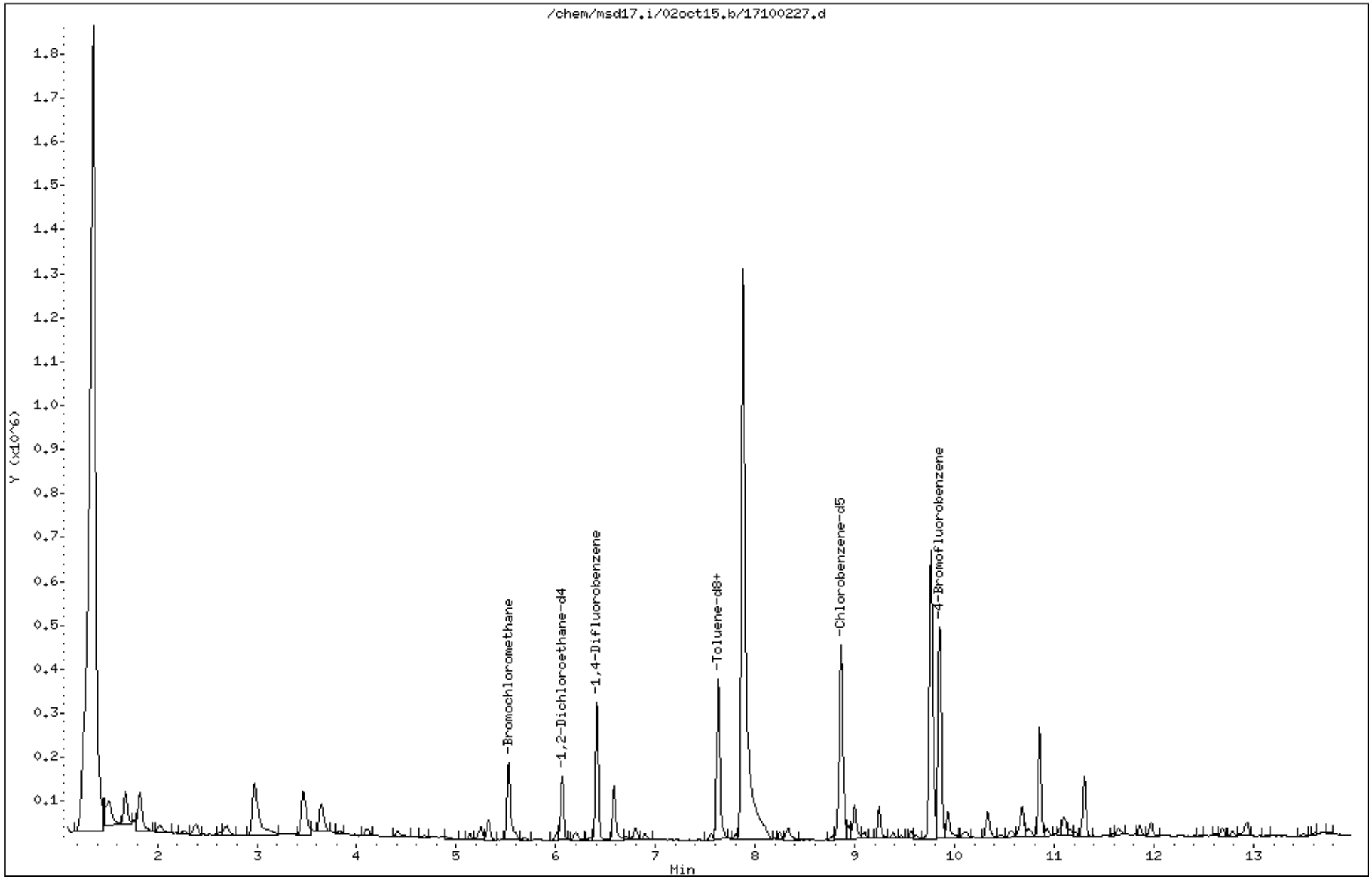
Instrument: msd17.i

Sample Info: 200ml 1L1901

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd17.i/02oct15.b/17100227.d

Date : 03-OCT-2015 00:44

Client ID:

Instrument: msd17.i

Sample Info: 200ml 1L1901

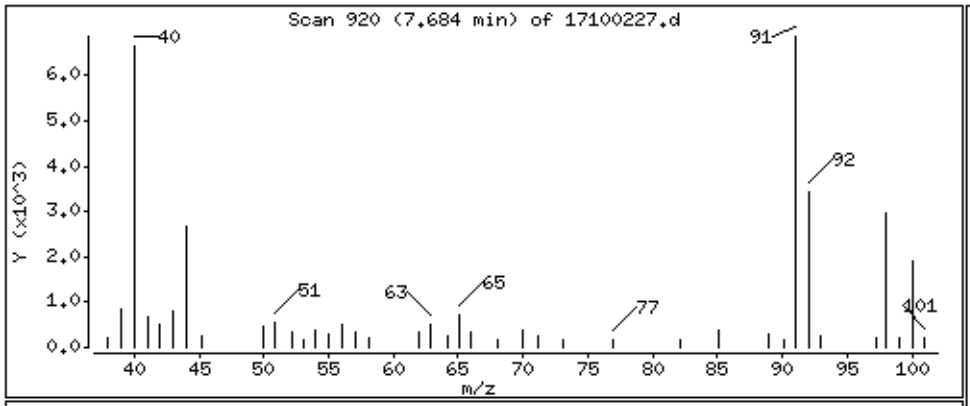
Operator: gh

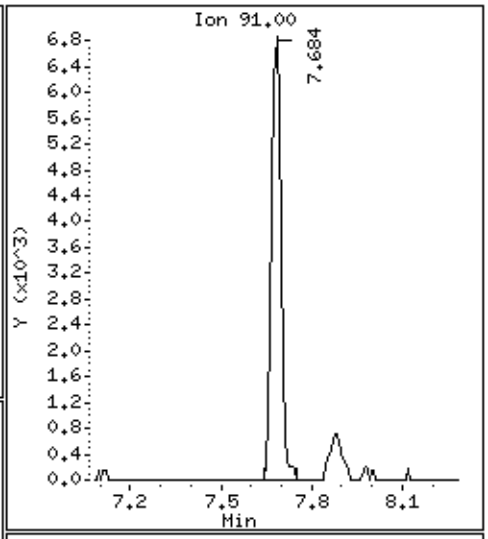
Column phase: RTX-624

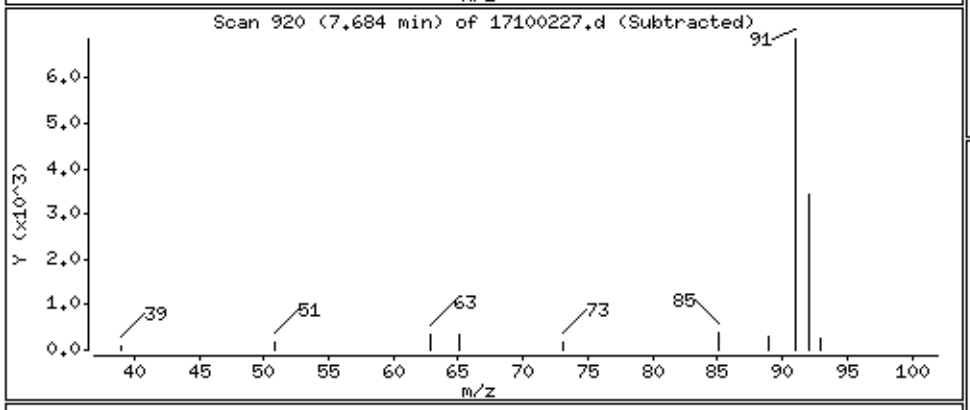
Column diameter: 0.25

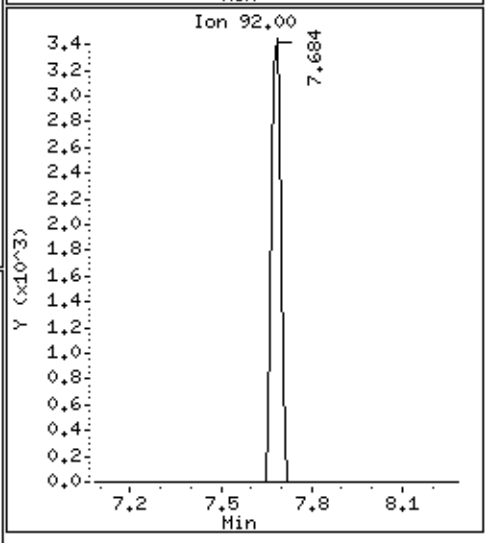
147 Toluene

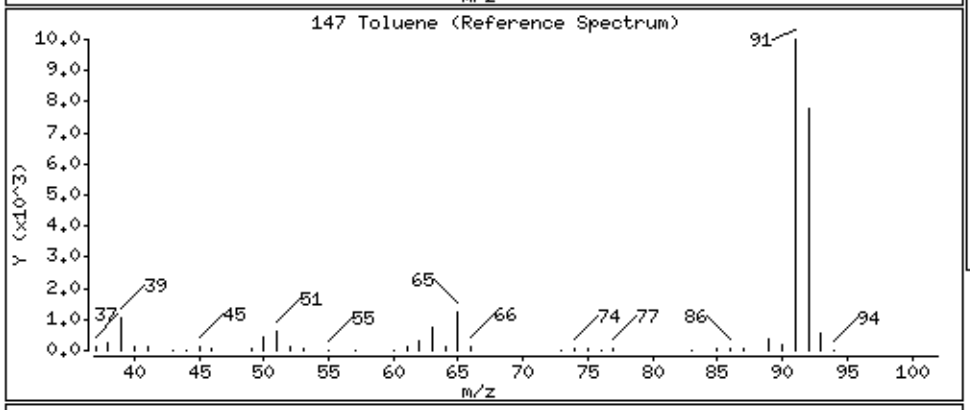
Concentration: 1.836 PPBV

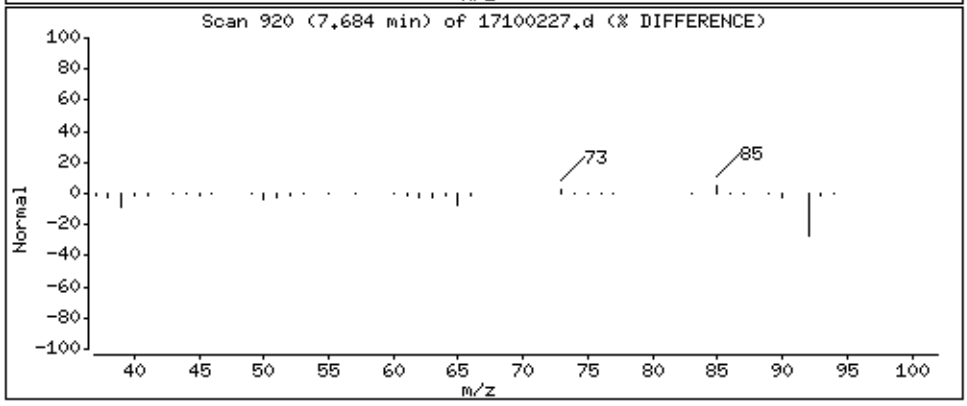












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: 3-SS(092315)

Lab ID#: 1509511-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
trans-1,2-Dichloroethene	1.1	3.1	4.5	12

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Client Sample ID: 3-SS(092315)

Lab ID#: 1509511-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100230**	**Date of Collection: 9/23/15 4:01:00 PM**	
Dil. Factor:	**2.28**	**Date of Analysis: 10/3/15 06:39 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Methylene Chloride	11	Not Detected	40	Not Detected
trans-1,2-Dichloroethene	1.1	3.1	4.5	12
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Chloroform	1.1	Not Detected	5.6	Not Detected
Benzene	1.1	Not Detected	3.6	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.6	Not Detected
Trichloroethene	1.1	Not Detected	6.1	Not Detected
Toluene	1.1	Not Detected	4.3	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Tetrachloroethene	1.1	Not Detected	7.7	Not Detected
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected
m,p-Xylene	1.1	Not Detected	5.0	Not Detected
o-Xylene	1.1	Not Detected	5.0	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	88	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/02oct15.b/17100230.d
Lab Smp Id: 1509511-06A
Inj Date : 03-OCT-2015 06:39
Operator : mjs Inst ID: msd17.i
Smp Info : 200ml 15744
Misc Info : 3.7 Hg->14.7 psi
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/02oct15.b/175q0921c.m
Meth Date : 02-Oct-2015 12:28 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 16:22 Cal File: 17092416.d
Als bottle: 8
Dil Factor: 2.28000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.28000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.528	5.521 (1.000)	130	63700	25.0000		80.00- 120.00	100.00
5.528	5.521 (1.000)	128	50577			46.54- 106.54	79.40
5.528	5.521 (1.000)	49	75278			83.83- 143.83	118.18
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.409	6.409 (1.000)	114	269001	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	40826			0.00- 44.86	15.18
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.859	8.859 (1.000)	117	236959	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	129037			23.93- 83.93	54.46
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.058	6.058 (1.096)	65	88207	25.6976	25.698	80.00- 120.00	100.00
6.058	6.058 (1.096)	67	47101			25.51- 85.51	53.40

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.190)	98	292844	26.4039	26.404	80.00- 120.00	100.00
7.627	7.627 (1.190)	70	32689			0.00- 40.39	11.16
7.627	7.627 (1.190)	100	178794			33.97- 93.97	61.05
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.847	9.847 (1.112)	174	132484	21.8978	21.898	80.00- 120.00	100.00
9.847	9.847 (1.112)	95	155378			79.64- 139.64	117.28
9.847	9.847 (1.112)	176	125328			65.80- 125.80	94.60
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.210	4.203 (0.762)	98	3770	1.36452	3.111	80.00- 120.00	100.00
4.203	4.203 (0.760)	61	7918			184.16- 244.16	210.00
4.203	4.203 (0.760)	96	5683			127.84- 187.84	150.72

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17100230.d
Lab Smp Id: 1509511-06A
Analysis Type: VOA
Quant Type: ISTD
Operator: mjs
Method File: /chem/msd17.i/02oct15.b/175q0921c.m
Misc Info: 3.7 Hg->14.7 psi

Calibration Date: 02-OCT-2015
Calibration Time: 09:19
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	74352	44611	104093	63700	-14.33
123 1,4-Difluorobenze	308060	184836	431284	269001	-12.68
163 Chlorobenzene-d5	281339	168803	393875	236959	-15.77

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.53	0.13
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Oct-2015 11:58

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 02oct15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509511-06A
Level: LOW Operator: mjs
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msd17.i/02oct15.b/175q0921c.m
Misc Info: 3.7 Hg->14.7 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.698	102.79	70-130
$ 146 Toluene-d8	25.000	26.404	105.62	70-130
$ 177 4-Bromofluorobenze	25.000	21.898	87.59	70-130

Data File: /chem/msd17.i/02oct15.b/17100230.d

Date : 03-OCT-2015 06:39

Client ID:

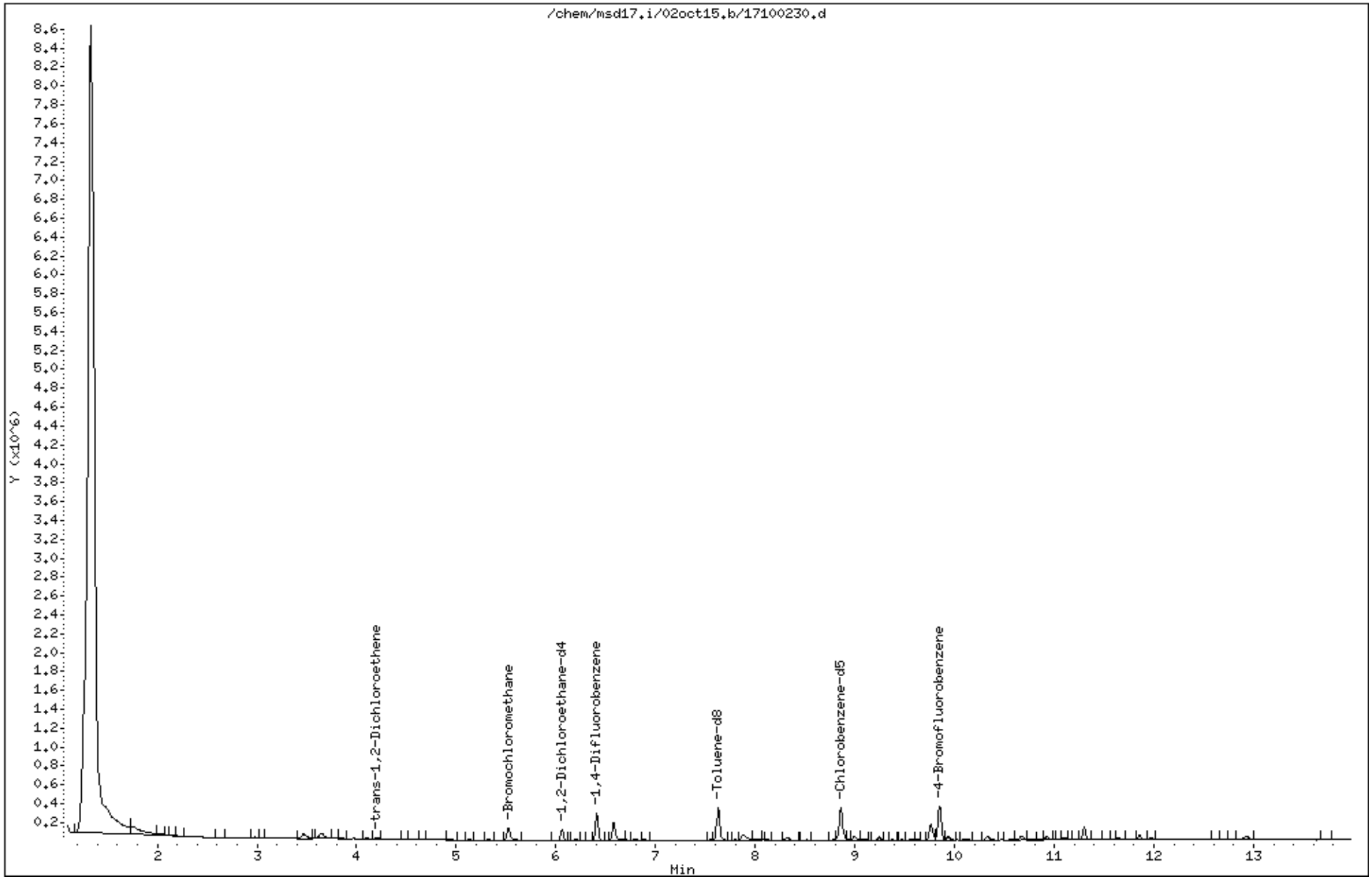
Instrument: msd17.i

Sample Info: 200ml 15744

Operator: mjs

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd17.i/02oct15.b/17100230.d

Date : 03-OCT-2015 06:39

Client ID:

Instrument: msd17.i

Sample Info: 200ml 15744

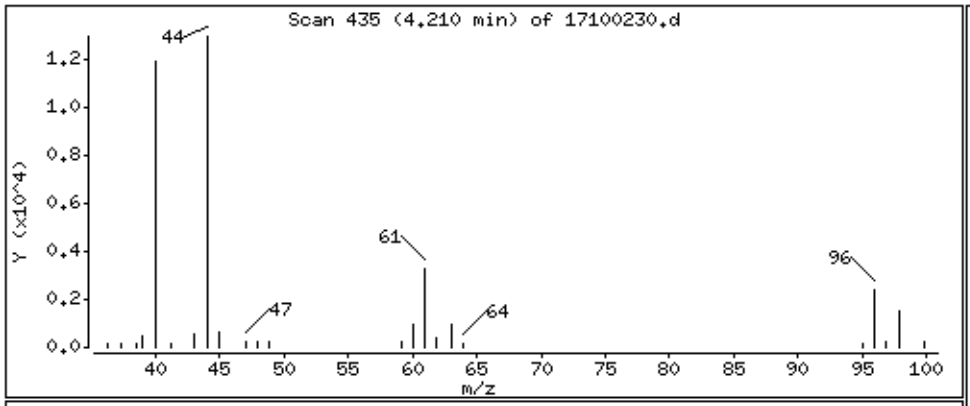
Operator: mjs

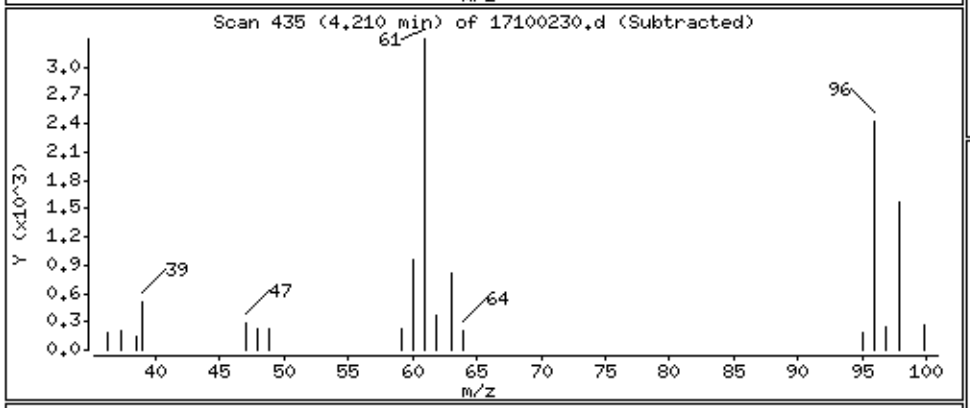
Column phase: RTX-624

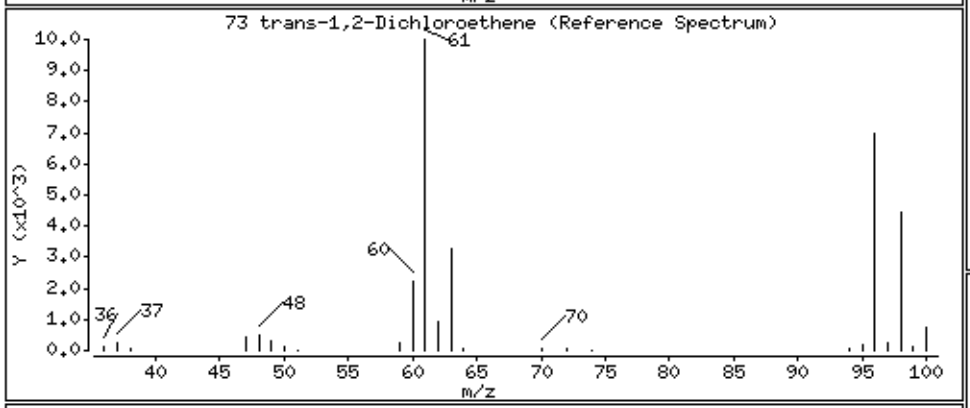
Column diameter: 0.25

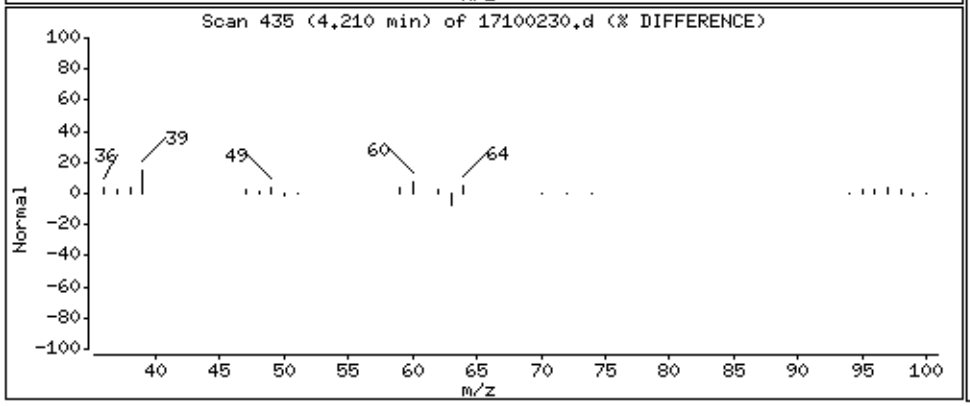
73 trans-1,2-Dichloroethene

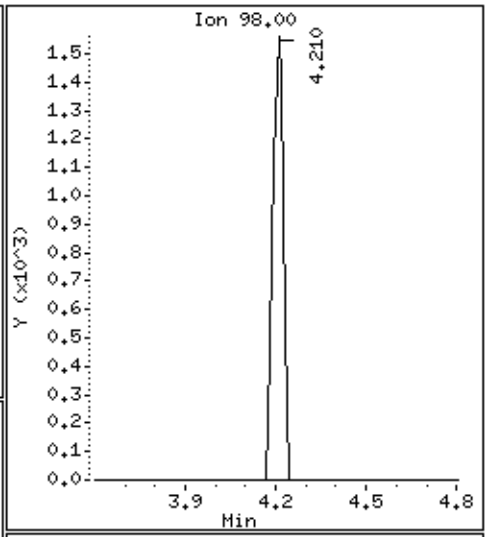
Concentration: 3.111 PPBV

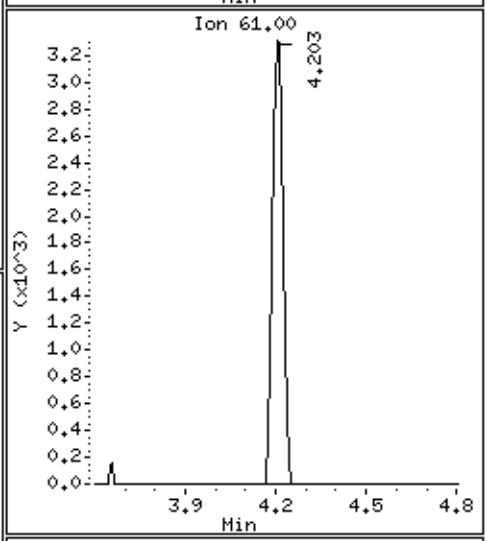


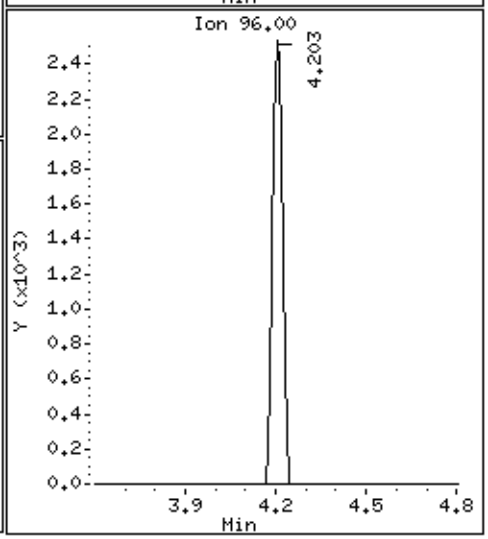












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: 4-SS(092315)

Lab ID#: 1509511-07A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Tetrachloroethene	1.2	1.2	7.9	7.9

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Client Sample ID: 4-SS(092315)

Lab ID#: 1509511-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100229**	**Date of Collection: 9/23/15 5:13:00 PM**	
Dil. Factor:	**2.33**	**Date of Analysis: 10/3/15 01:43 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Methylene Chloride	12	Not Detected	40	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
cis-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
Chloroform	1.2	Not Detected	5.7	Not Detected
Benzene	1.2	Not Detected	3.7	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	Not Detected	6.3	Not Detected
Toluene	1.2	Not Detected	4.4	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Tetrachloroethene	1.2	1.2	7.9	7.9
Ethyl Benzene	1.2	Not Detected	5.0	Not Detected
m,p-Xylene	1.2	Not Detected	5.0	Not Detected
o-Xylene	1.2	Not Detected	5.0	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.7	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	102	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/02oct15.b/17100229.d
Lab Smp Id: 1509511-07A
Inj Date : 03-OCT-2015 01:43
Operator : gh Inst ID: msd17.i
Smp Info : 200ml 36399
Misc Info : 4.3 Hg->14.7 psi
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/02oct15.b/175q0921c.m
Meth Date : 02-Oct-2015 12:28 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 16:22 Cal File: 17092416.d
Als bottle: 9
Dil Factor: 2.33000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.33000	Dilution Factor

	RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
*	98 Bromochloromethane					CAS #: 74-97-5		
	5.528	5.521 (1.000)	130	76387	25.0000		80.00- 120.00	100.00
	5.528	5.521 (1.000)	128	60490			46.54- 106.54	79.19
	5.528	5.521 (1.000)	49	89200			83.83- 143.83	116.77
*	123 1,4-Difluorobenzene					CAS #: 540-36-3		
	6.409	6.409 (1.000)	114	281709	25.0000		80.00- 120.00	100.00
	6.409	6.409 (1.000)	88	43481			0.00- 44.86	15.43
*	163 Chlorobenzene-d5					CAS #: 3114-55-4		
	8.866	8.859 (1.000)	117	279197	25.0000		80.00- 120.00	100.00
	8.859	8.859 (1.000)	82	148289			23.93- 83.93	53.11
$	117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	6.065	6.058 (1.097)	65	103119	25.0524	25.052	80.00- 120.00	100.00
	6.065	6.058 (1.097)	67	54058			25.51- 85.51	52.42

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.190)	98	302779	26.0682	26.068	80.00- 120.00	100.00
7.627	7.627 (1.190)	70	32774			0.00- 40.39	10.82
7.627	7.627 (1.190)	100	185008			33.97- 93.97	61.10
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.854	9.847 (1.111)	174	181797	25.5027	25.503	80.00- 120.00	100.00
9.847	9.847 (1.111)	95	224510			79.64- 139.64	123.49
9.854	9.847 (1.111)	176	179858			65.80- 125.80	98.93
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.916)	166	5049	0.50283	1.172	80.00- 120.00	100.00
8.121	8.121 (0.916)	129	3748			42.46- 102.46	74.23
8.121	8.121 (0.916)	131	3837			40.24- 100.24	75.99

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17100229.d
Lab Smp Id: 1509511-07A
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msd17.i/02oct15.b/175q0921c.m
Misc Info: 4.3 Hg->14.7 psi

Calibration Date: 02-OCT-2015
Calibration Time: 09:19
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	74352	44611	104093	76387	2.74
123 1,4-Difluorobenze	308060	184836	431284	281709	-8.55
163 Chlorobenzene-d5	281339	168803	393875	279197	-0.76

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.53	0.13
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.87	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Oct-2015 11:58

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 02oct15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509511-07A
Level: LOW Operator: gh
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msd17.i/02oct15.b/175q0921c.m
Misc Info: 4.3 Hg->14.7 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.052	100.21	70-130
$ 146 Toluene-d8	25.000	26.068	104.27	70-130
$ 177 4-Bromofluorobenze	25.000	25.503	102.01	70-130

Data File: /chem/msd17.i/02oct15.b/17100229.d

Page 1

Date : 03-OCT-2015 01:43

Client ID:

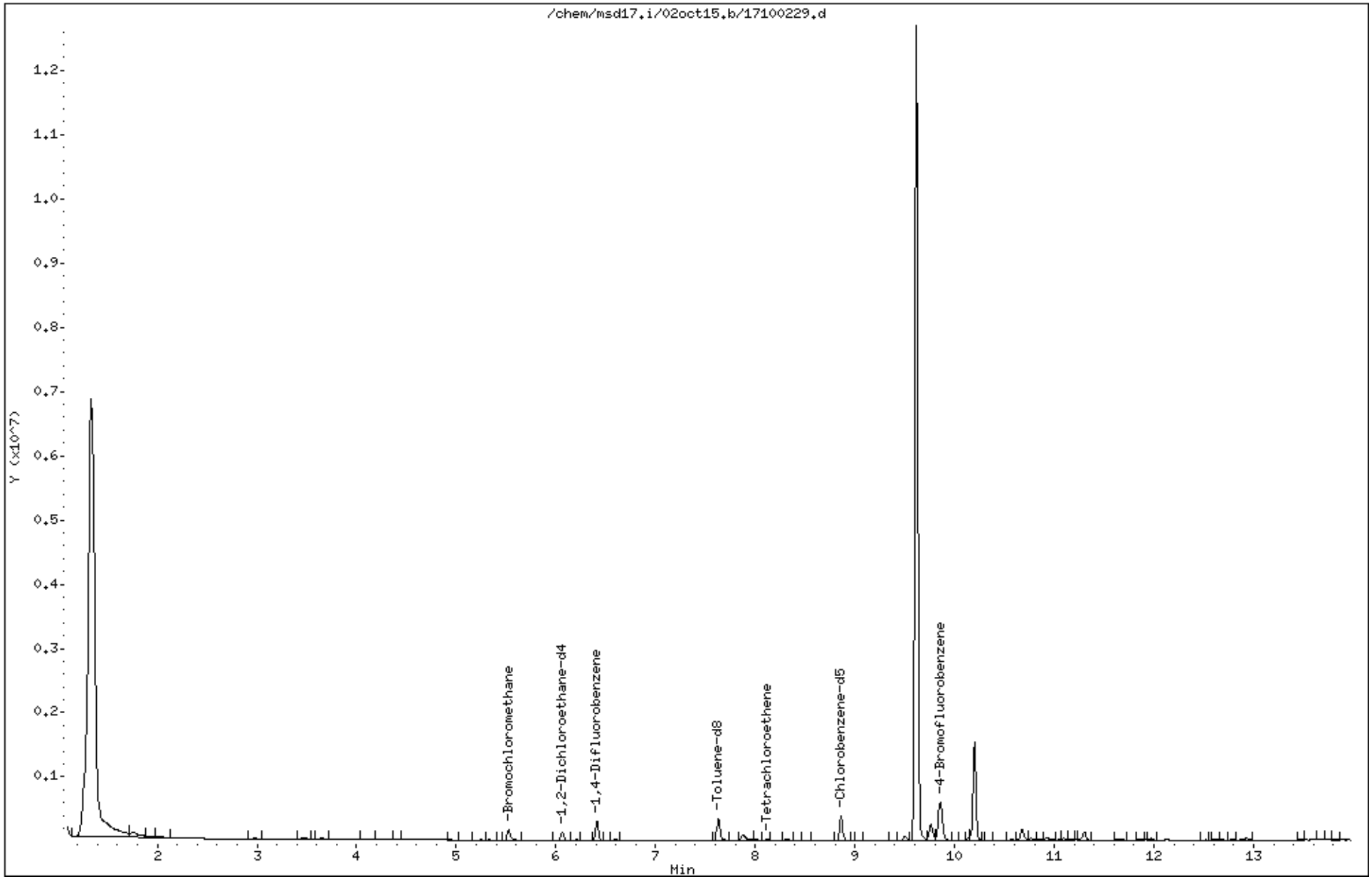
Instrument: msd17.i

Sample Info: 200ml 36399

Operator: gh

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd17.i/02oct15.b/17100229.d

Date : 03-OCT-2015 01:43

Client ID:

Instrument: msd17.i

Sample Info: 200ml 36399

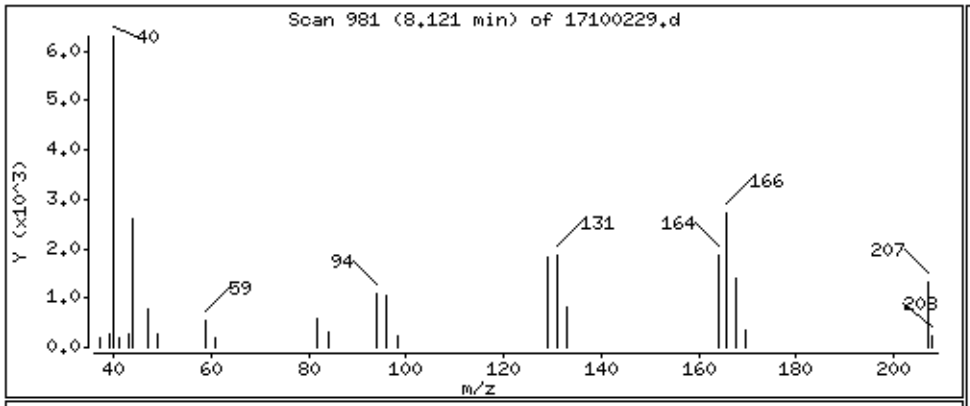
Operator: gh

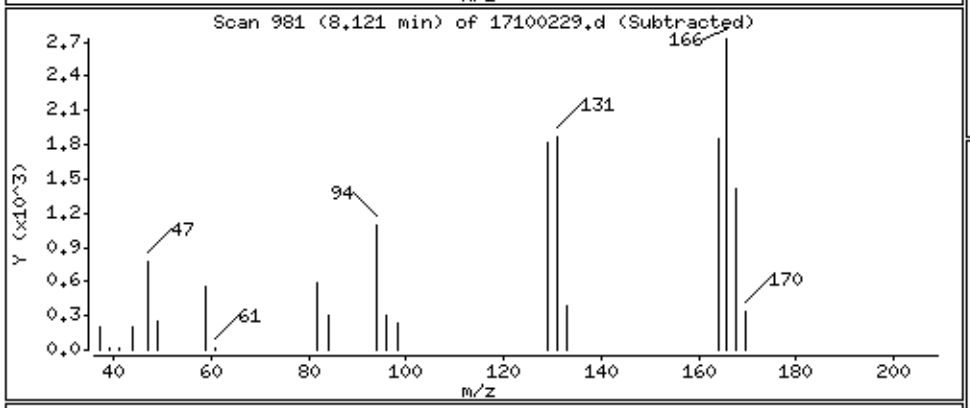
Column phase: RTX-624

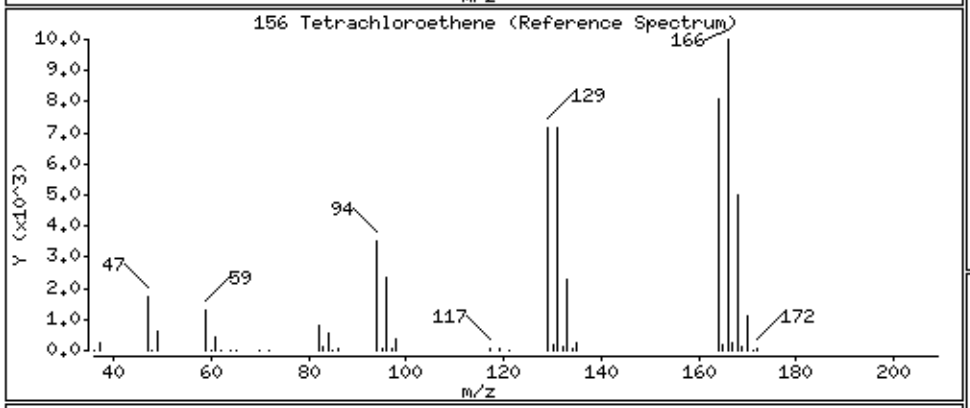
Column diameter: 0.25

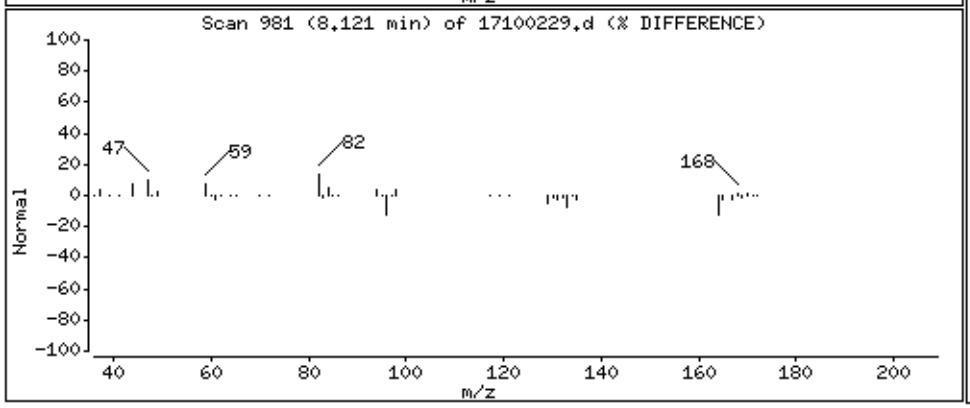
156 Tetrachloroethene

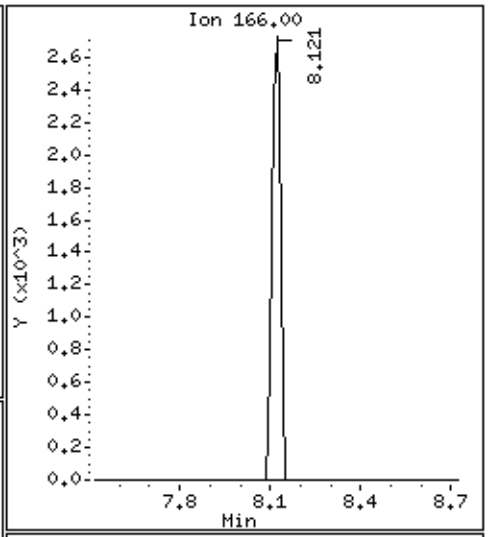
Concentration: 1.172 PPBV

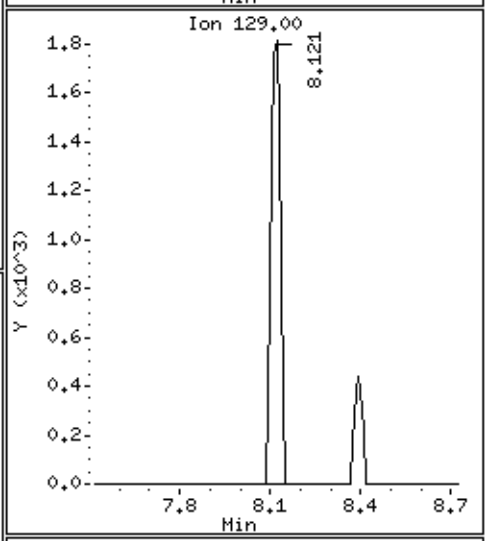


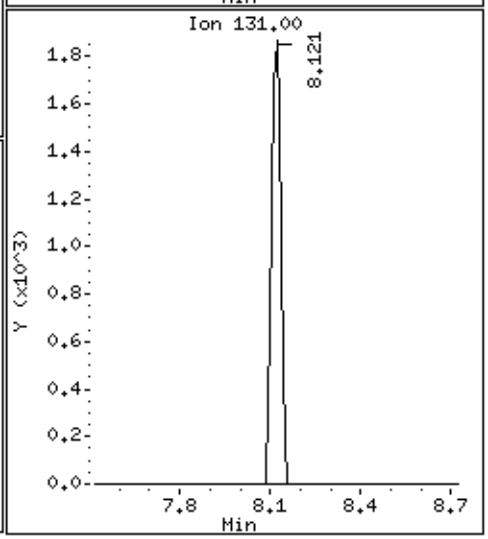












QC Results and Raw Data

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Client Sample ID: Lab Blank

Lab ID#: 1509511-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100208**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/2/15 12:43 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	87	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/02oct15.b/17100208.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 02-OCT-2015 12:43
Operator : cb Inst ID: msd17.i
Smp Info : 200ml #33555
Misc Info : Humid
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/02oct15.b/175q0921c.m
Meth Date : 02-Oct-2015 12:28 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 16:22 Cal File: 17092416.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.528	5.521 (1.000)	130	73574	25.0000		80.00- 120.00	100.00
5.528	5.521 (1.000)	128	55657			46.54- 106.54	75.65
5.528	5.521 (1.000)	49	84685			83.83- 143.83	115.10
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.409	6.409 (1.000)	114	289226	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	46133			0.00- 44.86	15.95
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.859 (1.000)	117	263529	25.0000		80.00- 120.00	100.00
8.866	8.859 (1.000)	82	138989			23.93- 83.93	52.74
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.065	6.058 (1.097)	65	99391	25.0699	25.070	80.00- 120.00	100.00
6.065	6.058 (1.097)	67	51261			25.51- 85.51	51.58

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.190)	98	306612	25.7121	25.712	80.00- 120.00	100.00
7.627	7.627 (1.190)	70	32188			0.00- 40.39	10.50
7.627	7.627 (1.190)	100	191311			33.97- 93.97	62.40
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.854	9.847 (1.111)	174	147053	21.8553	21.855	80.00- 120.00	100.00
9.847	9.847 (1.111)	95	172380			79.64- 139.64	117.22
9.854	9.847 (1.111)	176	141721			65.80- 125.80	96.37

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17100208.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/02oct15.b/175q0921c.m
Misc Info: Humid

Calibration Date: 02-OCT-2015
Calibration Time: 09:19
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	74352	44611	104093	73574	-1.05
123 1,4-Difluorobenze	308060	184836	431284	289226	-6.11
163 Chlorobenzene-d5	281339	168803	393875	263529	-6.33

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.53	0.13
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.87	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 02-Oct-2015 13:13

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 02oct15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Level: LOW Operator: cb
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msd17.i/02oct15.b/175q0921c.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.070	100.28	70-130
$ 146 Toluene-d8	25.000	25.712	102.85	70-130
$ 177 4-Bromofluorobenze	25.000	21.855	87.42	70-130

Data File: /chem/msd17.i/02oct15.b/17100208.d

Page 1

Date : 02-OCT-2015 12:43

Client ID: Lab Blank

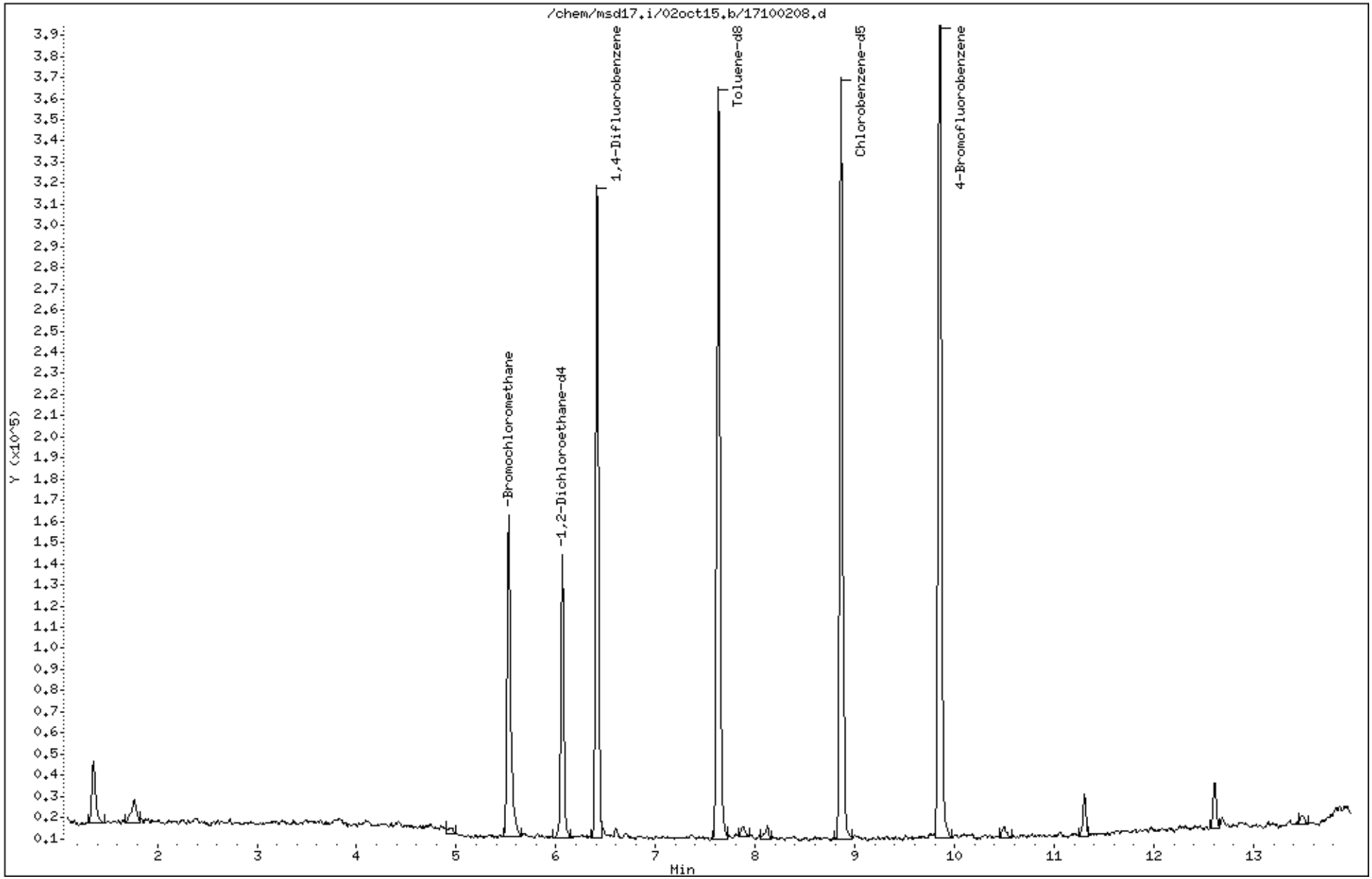
Instrument: msd17.i

Sample Info: 200ml #33555

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



LEVEL-IV VALIDATABLE

EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 1509511

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	TOTAL OUT
01	6-SS(092315)	103		103		91				0
02	1-SS(092315)	102		100		92				0
03	1-DUP-SS(092315)	101		102		92				0
04	5-SS(092315)	98		105		95				0
05	2-SS(092315)	100		102		96				0
06	3-SS(092315)	103		106		88				0
07	4-SS(092315)	100		104		102				0
08	Lab Blank	100		103		87				0
09	CCV	108		105		93				0
10	LCS	103		103		96				0
11	LCSD	101		104		96				0
12										0
13										0
14										0
15										0
16										0
17										0
18										0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

1,2-Dichloroethane-d4 70 - 130
Toluene-d8 70 - 130
4-Bromofluorobenzene 70 - 130

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD | SDG No: 1509511

Lab File ID: 17100202.d | Date Analyzed: 10/02/2015

Instrument ID: msd17.i | Time Analyzed: 09:19 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	281339		8.86		308060		6.41		74352		5.52	
	UPPER LIMIT	393875		09.19		431284		06.74		104093		05.85	
	LOWER LIMIT	168803		08.53		184836		06.08		44611		05.19	
	CLIENT SAMPLE NO												
01	6-SS(092315)	271919		8.86		284070		6.41		72879		5.53	
02	1-SS(092315)	270761		8.84		293544		6.41		74553		5.53	
03	1-DUP-SS(092315)	224646		8.86		262698		6.41		64206		5.53	
04	5-SS(092315)	282246		8.84		282230		6.41		80046		5.53	
05	2-SS(092315)	294186		8.87		290912		6.41		80065		5.53	
06	3-SS(092315)	236959		8.86		269001		6.41		63700		5.53	
07	4-SS(092315)	279197		8.87		281709		6.41		76387		5.53	
08	Lab Blank	263529		8.87		289226		6.41		73574		5.53	
09	CCV	281339		8.86		308060		6.41		74352		5.52	
10	LCS	278470		8.84		314903		6.41		75549		5.52	
11	LCSD	287147		8.86		315626		6.41		81514		5.52	
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

'Area Upper Limit=+40% of internal standard area'

'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT

RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: 17100204.d & 17100203.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 10/2/15 & 10/2/15

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
79-00-5	1,1,2-Trichloroethane	108		104		3.8	
75-35-4	1,1-Dichloroethene	102		96		6.1	
95-63-6	1,2,4-Trimethylbenzene	115		113		1.8	
107-06-2	1,2-Dichloroethane	104		104		0	
71-43-2	Benzene	107		106		0.94	
67-66-3	Chloroform	105		99		5.9	
156-59-2	cis-1,2-Dichloroethene	117		110		6.2	
100-41-4	Ethyl Benzene	115		108		6.3	
108-38-3	m,p-Xylene	116		112		3.5	
75-09-2	Methylene Chloride	110		101		8.5	
95-47-6	o-Xylene	118		115		2.6	
127-18-4	Tetrachloroethene	102		98		4.0	
108-88-3	Toluene	108		106		1.9	
156-60-5	trans-1,2-Dichloroethene	95		88		7.6	
79-01-6	Trichloroethene	102		100		2.0	
75-01-4	Vinyl Chloride	111		102		8.4	

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 20:32
End Cal Date : 24-SEP-2015 17:21
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd17.i/24sep15.b/175q0921c.m
Cal Date : 25-Sep-2015 16:17 cbond
Curve Type : Average

Calibration File Names:
Level 1: /chem/msd17.i/24sep15.b/17092414.d
Level 2: /chem/msd17.i/21sep15a.b/17092118.d
Level 3: /chem/msd17.i/24sep15.b/17092411.d
Level 4: /chem/msd17.i/21sep15a.b/17092120.d
Level 5: /chem/msd17.i/24sep15.b/17092415.d
Level 6: /chem/msd17.i/24sep15.b/17092416.d
Level 7: /chem/msd17.i/24sep15.b/17092417.d
Level 8: /chem/msd17.i/24sep15.b/17092418.d

Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD	
	100.000 Level 7	200.000 Level 8							
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
2 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
4 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
5 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
6 Freon 143a	+++++	+++++	0.55909	+++++	+++++	0.57640			
	+++++	0.18468					0.44005	50.297	<-
7 Freon 134a	+++++	+++++	1.53904	+++++	+++++	1.29587			
	+++++	0.88703					1.24065	26.558	

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Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD	
	100.000 Level 7	200.000 Level 8							
8 Propane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
9 Propylene	+++++	+++++	1.03127	0.93595	1.14154	0.95898			
	0.93957	0.94418					0.99192	8.212	
10 1,1-Difluoroethane	+++++	+++++	0.87153	+++++	+++++	0.72989			
	+++++	0.43663					0.67935	32.650	<-
11 Freon 12	+++++	3.71159	4.29781	3.83703	4.60758	3.96699			
	3.84024	3.90498					4.02374	7.854	
12 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
13 Chlorodifluoromethane	+++++	+++++	0.43142	+++++	+++++	0.33468			
	+++++	0.24435					0.33682	27.776	
14 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
15 Freon 114	+++++	2.68602	3.08356	2.76101	3.32749	2.90444			
	2.81002	2.87240					2.92071	7.494	
16 Freon 142b	+++++	+++++	3.28285	+++++	+++++	2.85236			
	+++++	2.98897					3.04140	7.233	
17 Chloromethane	+++++	+++++	1.63697	1.33371	1.62806	1.33691			
	1.28622	1.22584					1.40795	12.683	

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	100.000 Level 7	200.000 Level 8						
18 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
19 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
20 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
21 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
22 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
23 Butane	+++++	+++++	0.34646	0.32569	0.33041	0.28727		
	0.27907	0.28384					0.30879	9.319
24 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
25 Vinyl Chloride	+++++	1.71304	1.72179	1.47666	1.77091	1.51077		
	1.47080	1.47516					1.59130	8.576
26 1,3-Butadiene	+++++	1.09569	1.16466	1.05605	1.24763	1.07256		
	1.04707	1.04492					1.10408	6.858
27 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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	100.000 Level 7	200.000 Level 8						
28 Methanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
29 Bromomethane	+++++	1.35490	1.26350	1.27408	1.74260	1.44330		
	1.39378	1.39420					1.40948	11.411
30 Chloroethane	+++++	+++++	0.85206	0.78951	0.91182	0.77400		
	0.74444	0.76826					0.80668	7.806
31 Isopentane	+++++	+++++	1.54281	1.51779	1.83373	1.51656		
	1.46782	1.50985					1.56476	8.563
32 Vinyl Bromide	+++++	+++++	1.62496	+++++	+++++	1.52266		
	+++++	1.60780					1.58514	3.456
33 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
34 Pentane	+++++	+++++	2.38092	+++++	+++++	2.38822		
	+++++	2.69232					2.48716	7.145
35 Freon 11	+++++	4.09936	4.24559	3.97489	4.72080	4.01921		
	3.93649	4.00660					4.14328	6.618
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
37 Dichlorofluoromethane	+++++	+++++	3.89716	+++++	+++++	3.32409		
	+++++	3.48467					3.56864	8.284

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	100.000 Level 7	200.000 Level 8						
38 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
39 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
40 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
41 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
42 Ethanol	+++++	+++++	0.76793	0.42950	0.60935	0.50823		
	0.50042	0.51312					0.55476	21.474
43 1,2-Dichloro-1-fluoroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
44 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
45 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
46 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
47 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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	100.000 Level 7	200.000 Level 8						
48 Freon 123	+++++	+++++	4.15187	+++++	+++++	3.86544		
	+++++	3.90675					3.97469	3.895
49 Freon 113	+++++	3.09800	2.84199	2.75189	3.43449	2.88422		
	2.78895	2.86474					2.95204	8.123
50 1,1-Dichloroethene	+++++	1.15330	1.11586	1.01825	1.23141	1.03072		
	1.02505	1.04347					1.08829	7.474
51 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
52 Acetone	+++++	+++++	0.88740	0.71810	0.83285	0.72678		
	0.66657	0.67957					0.75188	11.776
53 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
54 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
55 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
56 Carbon Disulfide	+++++	+++++	5.29306	4.79251	5.74799	4.85478		
	4.70362	4.76232					5.02571	8.203
57 2-Propanol	+++++	+++++	2.41527	1.81466	2.76792	2.36878		
	2.30973	2.31811					2.33241	13.098

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	100.000 Level 7	200.000 Level 8						
58 3-Chloropropene	+++++	+++++	0.87201	0.75701	0.92175	0.78432		
	0.76210	0.76431					0.81025	8.583
59 Cyclopentene	+++++	+++++	2.77646	+++++	+++++	2.13557		
	+++++	2.26073					2.39092	14.208
60 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
61 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
62 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
63 Acetonitrile	+++++	+++++	+++++	+++++	+++++	0.81151		
	+++++	0.86429					0.83790	4.454
64 Cyclopentane	+++++	+++++	0.94732	+++++	+++++	0.88001		
	+++++	1.01457					0.94730	7.103
65 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
66 Methylene Chloride	+++++	+++++	1.89074	1.75831	1.97048	1.65743		
	1.63588	1.66183					1.76244	7.900
67 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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	100.000 Level 7	200.000 Level 8						
68 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
69 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
70 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
71 tert-Butyl alcohol	+++++	+++++	3.12004	1.84605	3.54258	2.97953		
	2.98476	3.10082					2.92896	19.440
72 Methyl tert-butyl ether	+++++	4.36191	4.69180	4.22289	5.34177	4.44626		
	4.35338	4.53873					4.56525	8.183
73 trans-1,2-Dichloroethene	+++++	0.85736	1.14288	1.06190	1.31024	1.07996		
	1.05059	1.08738					1.08433	12.353
74 Acrylonitrile	+++++	+++++	1.17791	+++++	+++++	1.04696		
	+++++	1.07659					1.10049	6.240
75 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
76 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
77 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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	100.000 Level 7	200.000 Level 8							
78 Hexane	+++++	2.47940	2.54774	2.35369	2.90615	2.36334			
	2.28302	2.33005					2.46620	8.692	
79 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
80 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
81 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
82 1,1-Dichloroethane	+++++	2.61214	2.96978	2.79820	3.46901	2.90966			
	2.86001	2.91594					2.93354	8.975	
83 Isopropyl ether	+++++	+++++	4.77776	4.31745	5.74409	4.65059			
	4.48532	4.64739					4.77043	10.540	
84 1-Propanol	+++++	+++++	0.42275	+++++	+++++	0.21815			
	+++++	0.23126					0.29072	39.394	<-
85 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
86 Vinyl Acetate	+++++	+++++	0.44222	0.37545	0.52692	0.43670			
	0.44635	0.45800					0.44761	10.833	
87 Butanal	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	

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Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD
	100.000 Level 7	200.000 Level 8						
88 Ethyl-tert-butyl ether	+++++	+++++	4.81835	4.41338	6.09666	4.87448		
	4.74626	4.92304					4.97869	11.584
89 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
90 2,2-Dichloropropane	+++++	+++++	2.84753	+++++	+++++	2.35020		
	+++++	2.41742					2.53838	10.630
91 cis-1,2-Dichloroethene	+++++	1.17417	1.24583	1.04654	1.32478	1.13129		
	1.11051	1.15238					1.16936	7.831
92 2-Butanone	+++++	+++++	0.89151	0.68627	0.94759	0.81294		
	0.80055	0.82158					0.82674	10.742
93 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
94 Ethyl Acetate	+++++	+++++	0.24989	+++++	+++++	0.19922		
	+++++	0.22422					0.22444	11.287
95 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
96 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
97 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 20:32
End Cal Date : 24-SEP-2015 17:21
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd17.i/24sep15.b/175q0921c.m
Cal Date : 25-Sep-2015 16:17 cbond
Curve Type : Average

Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD
	100.000 Level 7	200.000 Level 8						
99 Tetrahydrofuran	+++++	2.12001	1.65031	1.27461	1.74357	1.50362		
	1.46809	1.51322					1.61049	16.678
100 Chloroform	+++++	3.80175	3.62348	3.38114	4.10007	3.45819		
	3.33958	3.46383					3.59543	7.579
101 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
102 Cyclohexane	+++++	2.22520	2.22546	2.04539	2.58967	2.16645		
	2.15714	2.21923					2.23265	7.603
103 1,1,1-Trichloroethane	+++++	3.69823	3.65118	3.24811	4.14435	3.40494		
	3.33507	3.46788					3.56425	8.488
104 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
105 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
106 Carbon Tetrachloride	+++++	3.42024	3.66144	3.20340	4.23229	3.46175		
	3.41757	3.53192					3.56123	9.169
107 1,1-Dichloropropene	+++++	+++++	0.18617	+++++	+++++	0.16690		
	+++++	0.16471					0.17259	6.840
108 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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Curve Type : Average

Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD
	100.000 Level 7	200.000 Level 8						
109 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
110 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
111 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
113 2,2,4-Trimethylpentane	+++++	7.63188	7.37407	6.72559	9.04657	7.41932		
	7.14817	7.43774					7.54048	9.605
114 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
115 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
116 Benzene	+++++	1.31293	1.17890	1.16671	1.51658	1.22299		
	1.21701	1.25001					1.26645	9.505
118 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
119 tert-Amyl methyl ether	+++++	+++++	1.16192	0.99518	1.47950	1.20270		
	1.15583	1.17404					1.19486	13.179
120 1,2-Dichloroethane	+++++	0.57441	0.52476	0.51133	0.63123	0.53851		
	0.54462	0.54772					0.55322	7.162

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Curve Type : Average

Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD
	100.000 Level 7	200.000 Level 8						
121 Heptane	+++++	0.41813	0.40627	0.39283	0.53981	0.43534		
	0.43480	0.44117					0.43834	10.955
122 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
124 n-Butanol	+++++	+++++	0.54755	+++++	+++++	0.48214		
	+++++	0.49498					0.50822	6.819
125 Trichloroethene	+++++	0.65647	0.56102	0.52413	0.70096	0.57240		
	0.57914	0.58883					0.59756	10.119
126 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
127 Methylcyclohexane	+++++	3.09675	2.96158	2.67903	3.74514	3.07389		
	2.93744	3.07339					3.08103	10.583
128 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
129 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
130 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
131 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD
	100.000 Level 7	200.000 Level 8						
132 1,2-Dichloropropane	+++++	0.40754	0.42321	0.43929	0.55766	0.44806		
	0.44883	0.44896					0.45337	10.713
133 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
134 Methyl Methacrylate	+++++	+++++	0.54587	+++++	+++++	0.58089		
	+++++	0.60280					0.57652	4.981
135 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
136 1,4-Dioxane	+++++	+++++	0.26761	0.17590	0.33617	0.28286		
	0.28976	0.29361					0.27432	19.454
137 Dibromomethane	+++++	+++++	0.54343	+++++	+++++	0.63706		
	+++++	0.70005					0.62685	12.572
138 Bromodichloromethane	+++++	0.90275	0.90388	0.87377	1.10541	0.91332		
	0.92750	0.93919					0.93797	8.175
139 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
140 bis(chloromethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
141 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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	100.000 Level 7	200.000 Level 8						
142 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
143 2-Chloroethyl Vinyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
144 cis-1,3-Dichloropropene	+++++	0.74032	0.75874	0.71240	0.95172	0.77536		
	0.78024	0.79656					0.78791	9.823
145 4-Methyl-2-pentanone	+++++	0.28334	0.29416	0.17252	0.39045	0.32937		
	0.32970	0.33541					0.30499	22.225
147 Toluene	+++++	1.61586	1.45352	1.42273	1.91757	1.55166		
	1.55247	1.60303					1.58812	10.205
148 Octane	+++++	+++++	0.33941	+++++	+++++	0.35003		
	+++++	0.35873					0.34939	2.769
149 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
150 trans-1,3-Dichloropropene	+++++	0.76557	0.72216	0.68306	0.91925	0.79483		
	0.76985	0.78091					0.77652	9.490
151 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
152 1-Chloro-2-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD	
	100.000 Level 7	200.000 Level 8							
153 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
154 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
155 1,1,2-Trichloroethane	+++++	0.61769	0.56880	0.57429	0.72467	0.61366			
	0.58813	0.60105					0.61261	8.613	
156 Tetrachloroethene	+++++	0.91793	0.86632	0.82986	1.06913	0.88910			
	0.84981	0.87161					0.89911	8.900	
157 1,3-Dichloropropane	+++++	+++++	0.76266	+++++	+++++	0.68411			
	+++++	0.68454					0.71043	6.366	
158 2-Hexanone	+++++	+++++	0.43024	0.17196	0.55460	0.47586			
	0.47377	0.48747					0.43232	30.930	<-
159 Butyl Acetate	+++++	+++++	0.19366	+++++	+++++	0.14004			
	+++++	0.15430					0.16267	17.075	
160 Dibromochloromethane	+++++	1.17081	1.09976	0.99436	1.34382	1.13379			
	1.11469	1.14858					1.14369	9.169	
161 1,2-Dibromoethane (EDB)	+++++	0.94833	0.88889	0.89452	1.14842	0.97244			
	0.95730	0.96981					0.96853	8.915	
162 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	

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Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD
	100.000 Level 7	200.000 Level 8						
164 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
165 Chlorobenzene	+++++	1.32599	1.37652	1.26611	1.65197	1.40885		
	1.37338	1.41303					1.40226	8.654
166 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
167 Ethyl Benzene	+++++	0.58458	0.63540	0.61104	0.82496	0.70757		
	0.69499	0.72208					0.68294	11.889
168 1,1,1,2-Tetrachloroethane	+++++	+++++	0.75880	+++++	+++++	0.72738		
	+++++	0.71342					0.73320	3.170
169 m,p-Xylene	+++++	0.74271	0.79583	0.72024	1.02276	0.88422		
	0.87239	0.89731					0.84792	12.276
170 Nonane	+++++	+++++	0.80540	+++++	+++++	0.91055		
	+++++	0.94302					0.88632	8.117
171 o-Xylene	+++++	0.67673	0.70458	0.69023	0.95790	0.82461		
	0.80974	0.84337					0.78674	12.987
172 Styrene	+++++	1.13581	1.15691	1.12737	1.64198	1.41734		
	1.42492	1.48941					1.34196	15.123
173 2-Heptanone	+++++	+++++	0.08817	+++++	+++++	0.05930		
	+++++	0.06115					0.06954	23.238

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	100.000 Level 7	200.000 Level 8						
174 Bromoform	+++++	1.03447	1.05576	0.99349	1.38571	1.19624		
	1.18488	1.23302					1.15479	11.850
175 Cumene	+++++	2.36035	2.21135	2.12603	3.01155	2.58167		
	2.59864	2.70250					2.51316	12.162
176 Cyclohexanone	+++++	+++++	0.65133	+++++	+++++	0.55436		
	+++++	0.56250					0.58940	9.127
178 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
179 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
180 Bromobenzene	+++++	+++++	0.90443	+++++	+++++	0.80957		
	+++++	0.85101					0.85500	5.562
181 1,1,2,2-Tetrachloroethane	+++++	1.33413	1.28081	1.13317	1.54698	1.33545		
	1.29923	1.32776					1.32250	9.201
182 Propylbenzene	+++++	2.84701	2.72523	2.54375	3.54181	3.11531		
	3.09783	3.24871					3.01709	11.185
183 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
184 trans-1,4-Dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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	100.000 Level 7	200.000 Level 8						
185 1,2,3-Trichloropropane	+++++	+++++	0.41510	+++++	+++++	0.39964		
	+++++	0.40036					0.40503	2.155
186 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
187 Decane	+++++	+++++	0.93069	+++++	+++++	1.21527		
	+++++	1.26661					1.13752	15.908
188 4-Ethyltoluene	+++++	0.80116	0.70094	0.67383	0.92766	0.83689		
	0.79177	0.86089					0.79902	11.096
189 2-Chlorotoluene	+++++	+++++	0.66023	+++++	+++++	0.59949		
	+++++	0.65234					0.63735	5.182
190 1,3,5-Trimethylbenzene	+++++	0.88364	0.94535	0.87103	1.27258	1.09561		
	1.13010	1.15027					1.04980	14.486
191 4-Chlorotoluene	+++++	+++++	0.66513	+++++	+++++	0.61798		
	+++++	0.69098					0.65803	5.625
192 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
193 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
194 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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	100.000 Level 7	200.000 Level 8						
195 tert-Butylbenzene	+++++	+++++	1.97024	+++++	+++++	1.90679		
	+++++	2.03461					1.97055	3.243
196 1,2,4-Trimethylbenzene	+++++	0.84087	0.84742	0.77545	1.09898	0.99323		
	0.99528	1.04586					0.94244	12.836
197 Pentachloroethane	+++++	+++++	0.49809	+++++	+++++	0.68455		
	+++++	0.74161					0.64142	19.856
198 Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
199 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
200 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
201 Indan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
202 Indene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
203 sec-Butylbenzene	+++++	+++++	0.62084	+++++	+++++	0.59759		
	+++++	0.62187					0.61343	2.238
204 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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	100.000 Level 7	200.000 Level 8						
205 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
206 bis(2-Chloroethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
207 p-Cymene	+++++	+++++	2.60444	+++++	+++++	2.55549		
	+++++	2.63740					2.59911	1.586
208 1,3-Dichlorobenzene	+++++	1.42062	1.44525	1.28040	1.74872	1.54834		
	1.55784	1.61058					1.51596	9.913
209 1,4-Dichlorobenzene	+++++	1.28723	1.43177	1.29117	1.73352	1.56745		
	1.55784	1.62992					1.49984	11.316
210 1,2,3-Trimethylbenzene	+++++	+++++	1.00025	+++++	+++++	0.98293		
	+++++	1.04661					1.00993	3.260
211 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
212 alpha-Chlorotoluene	+++++	1.61363	1.49455	1.28822	2.08865	1.92071		
	1.96218	2.11620					1.78345	17.911
213 Butylbenzene	+++++	+++++	0.71110	+++++	+++++	0.69676		
	+++++	0.62613					0.67800	6.709
214 1,2-Dichlorobenzene	+++++	1.31692	1.36120	1.21373	1.64359	1.48043		
	1.47919	1.55649					1.43593	10.276

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 20:32
End Cal Date : 24-SEP-2015 17:21
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd17.i/24sep15.b/175q0921c.m
Cal Date : 25-Sep-2015 16:17 cbond
Curve Type : Average

Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD
	100.000 Level 7	200.000 Level 8						
215 Undecane	+++++	+++++	0.98931	+++++	+++++	1.31784		
	+++++	1.50351					1.27022	20.499
216 4-Ethyl-1,2-dimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
217 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
218 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
219 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
220 1,2,4,5-tetramethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
221 1,2-Dibromo-3-chloropropane	+++++	+++++	1.01087	+++++	+++++	0.89964		
	+++++	1.00633					0.97228	6.475
222 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
223 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
224 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 20:32
End Cal Date : 24-SEP-2015 17:21
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd17.i/24sep15.b/175q0921c.m
Cal Date : 25-Sep-2015 16:17 cbond
Curve Type : Average

Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD
	100.000 Level 7	200.000 Level 8						
225 Dodecane	+++++	+++++	0.77889	+++++	+++++	1.10157		
	+++++	1.49063					1.12370	31.716
226 1,2,4-Trichlorobenzene	+++++	+++++	1.17307	0.96135	1.27909	1.29747		
	1.34170	1.43067					1.24723	13.093
227 Hexachlorobutadiene	+++++	+++++	1.04908	0.87132	1.10501	1.07884		
	1.11840	1.20305					1.07095	10.335
228 Naphthalene	1.77954	+++++	+++++	+++++	1.22837	1.00421		
	1.00308	0.94113					1.19126	29.092
229 1,2,3-Trichlorobenzene	+++++	+++++	0.80929	+++++	+++++	0.63959		
	+++++	0.84879					0.76589	14.513
230 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
231 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
234 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 20:32
End Cal Date : 24-SEP-2015 17:21
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd17.i/24sep15.b/175q0921c.m
Cal Date : 25-Sep-2015 16:17 cbond
Curve Type : Average

Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD
	100.000 Level 7	200.000 Level 8						
235 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
236 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
M 237 1,2-Dichloroethene (Total)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
M 238 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
M 239 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
M 240 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
241 Total Volatile Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
242 TPH reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
243 TPH reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
244 TPH reference to Gasoline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 20:32
End Cal Date : 24-SEP-2015 17:21
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd17.i/24sep15.b/175q0921c.m
Cal Date : 25-Sep-2015 16:17 cbond
Curve Type : Average

Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD
245 TPH reference MineralSpirits	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
246 TPH reference to Stoddard	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
247 TVOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
248 TVOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
249 TVOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
250 TVOC reference to Toluene-d8	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
251 NMOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
252 NMOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
253 NMOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
254 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 20:32
End Cal Date : 24-SEP-2015 17:21
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd17.i/24sep15.b/175q0921c.m
Cal Date : 25-Sep-2015 16:17 cbond
Curve Type : Average

Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD
	100.000 Level 7	200.000 Level 8						
255 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
256 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
257 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
258 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
259 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
260 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
261 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
262 C5 - C6 Aliphatic ref C5 + C6	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
263 C6-C8 Aliphatic ref Heptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
264 C8-C10 Aliphatic ref Decane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 20:32
End Cal Date : 24-SEP-2015 17:21
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd17.i/24sep15.b/175q0921c.m
Cal Date : 25-Sep-2015 16:17 cbond
Curve Type : Average

Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD
	100.000 Level 7	200.000 Level 8						
265 C10-C12 Aliphatic ref Dodecan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
266 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
267 C8-C10 Aromatic ref 1,2,3-TMB	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
268 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
269 C10-C12 Aromatic 1,2,4,5-TMB	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
270 C10-C12 Aromatic Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
$ 112 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
$ 117 1,2-Dichloroethane-d4	+++++	1.27319	1.39125	1.36777	1.33656	1.36474		
	1.32719	1.36923					1.34713	2.898
$ 146 Toluene-d8	+++++	1.01159	1.01542	1.03062	1.02494	1.02933		
	1.04997	1.05341					1.03075	1.545
$ 177 4-Bromofluorobenzene	+++++	0.61716	0.61594	0.62132	0.63545	0.66080		
	0.64588	0.67161					0.63831	3.454

Calibration History

Method : /chem/msd17.i/24sep15.b/175q0921c.m
Start Cal Date: 21-SEP-2015 20:32
End Cal Date : 24-SEP-2015 17:21

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 10.00000		
24-SEP-2015 15:25	Naphcrv	/chem/msd17.i/24sep15.b/17092414.d
Cal Level: 2 , Cal Amount: 0.50000		
21-SEP-2015 20:32	AT12low	/chem/msd17.i/21sep15a.b/17092118.d
Cal Level: 3 , Cal Amount: 2.00000		
24-SEP-2015 13:15	AT1	/chem/msd17.i/24sep15.b/17092411.d
24-SEP-2015 12:00	Combo	/chem/msd17.i/24sep15.b/17092408.d
24-SEP-2015 10:29	123TCB	/chem/msd17.i/24sep15.b/17092405.d
21-SEP-2015 21:07	AT12mdlnoNaph	/chem/msd17.i/21sep15a.b/17092119.d
Cal Level: 4 , Cal Amount: 5.00000		
21-SEP-2015 21:52	AT12mdlnoNaph	/chem/msd17.i/21sep15a.b/17092120.d
Cal Level: 5 , Cal Amount: 20.00000		
24-SEP-2015 15:59	Naphcrv	/chem/msd17.i/24sep15.b/17092415.d
21-SEP-2015 22:31	AT12noNaph	/chem/msd17.i/21sep15a.b/17092121.d
Cal Level: 6 , Cal Amount: 50.00000		
24-SEP-2015 16:22	Naphcrv	/chem/msd17.i/24sep15.b/17092416.d
24-SEP-2015 13:50	AT1	/chem/msd17.i/24sep15.b/17092412.d
24-SEP-2015 12:23	Combo	/chem/msd17.i/24sep15.b/17092409.d
24-SEP-2015 11:04	123TCB	/chem/msd17.i/24sep15.b/17092406.d
21-SEP-2015 22:55	AT12noNaph	/chem/msd17.i/21sep15a.b/17092122.d
Cal Level: 7 , Cal Amount: 100.00000		

24-SEP-2015 16:58	Naphcrv	/chem/msd17.i/24sep15.b/17092417.d
21-SEP-2015 23:31	AT12noNaph	/chem/msd17.i/21sep15a.b/17092123.d

Cal Level: 8 , Cal Amount: 200.00000		
24-SEP-2015 17:21	Naphcrv	/chem/msd17.i/24sep15.b/17092418.d
24-SEP-2015 14:13	AT1	/chem/msd17.i/24sep15.b/17092413.d
24-SEP-2015 12:46	Combo	/chem/msd17.i/24sep15.b/17092410.d
24-SEP-2015 11:27	123TCB	/chem/msd17.i/24sep15.b/17092407.d
21-SEP-2015 23:54	AT12noNaph	/chem/msd17.i/21sep15a.b/17092124.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 50.000		
24-SEP-2015 08:49	AT12noNaph	/chem/msd17.i/24sep15.b/17092402c.d

Ccal Level: 6 , Ccal Amount: 50.000		
24-SEP-2015 16:22	NaphCCV	/chem/msd17.i/24sep15.b/17092416a.d

Ccal Level: 6 , Ccal Amount: 50.000		
24-SEP-2015 16:22	Naphcrv	/chem/msd17.i/24sep15.b/17092416.d

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

CB 9/25/15

Start Cal Date : 21-SEP-2015 20:32
End Cal Date : 24-SEP-2015 17:21
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd17.i/25sep15.b/175q0921c.m
Cal Date : 25-Sep-2015 16:02 cbond
Curve Type : Average

Calibration File Names:
Level 1: /chem/msd17.i/24sep15.b/17092414.d
Level 2: /chem/msd17.i/21sep15a.b/17092118.d
Level 3: /chem/msd17.i/24sep15.b/17092411.d
Level 4: /chem/msd17.i/21sep15a.b/17092120.d
Level 5: /chem/msd17.i/24sep15.b/17092415.d
Level 6: /chem/msd17.i/24sep15.b/17092416.d
Level 7: /chem/msd17.i/24sep15.b/17092417.d
Level 8: /chem/msd17.i/24sep15.b/17092418.d

Please see Calibration History page(s) for all the calibration files.

Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	___ RRF	% RSD	
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
2 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
4 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
5 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
6 Freon 143a	+++++	+++++	0.55909	+++++	+++++	0.57640	+++++	0.18468	0.44005	50.297	<-
7 Freon 134a	+++++	+++++	1.53904	+++++	+++++	1.29587	+++++	0.88703	1.24065	26.558	

Initial Calibration Narrative

175q0921C.m

A multi-point initial calibration was analyzed on MSD-17 on 09/21/15 for AT12 minus Naph.

ICAL: 1 out – 2-Hexanone @ 31% RSD

ICV: 0 out
File: 17092127, 100ml: 2736-188A (100ppbv->50ppbv)
17092505, 100ml: 2736-188A (10ppbv->5ppbv Naphthalene)
Naphthalene ICV canister expired 9/12/15 – CAR #F9A2A2185)

OK for AFCEE and DoD unless Naph required.

BFB TUNE FILE:

A) 17092117
B) 17092401
C) 17092501

MDL: The TO-15 MDL was analyzed 03/12/2015 and 03/17/2015.

A three point initial calibration was analyzed for **1,2,3 Trichlorbenzene** on 09/24/15 – **0 out**

A three point initial calibration was analyzed for **Combo Special** on 09/24/15 – **0 out**
Acetonitrile has a two point calibration at 50ppbv and 200ppbv. 2-Heptanone was miss-identified but not needed for samples; therefore it was disabled from calibration.

A three point initial calibration was analyzed for **AT1 Compounds** on 09/24/15 – **1 out: Freon 143a and NO ISOBUTANOL.**

A five point initial calibration was analyzed for **Naphthalene** on 09/24/15.

MSD17

BFB verification of 176/174 ratio:	(111461/116408) * 100 = 95.75%		
	2736-191	Exp. Date:	11/14/2015
BCM	116,527		
1,4-DFB	475,185		
CB-d5	418,099		

Method TO-15/TO-14			
SOP# 6			
Vacuum:	na		
Please check all standards			
Surrogate#	2736-191	Exp. Date:	11/14/2015
Surrogate#	NA	Exp. Date:	NA

Verified CCV vs ICAL mid-point (-40%): cb

Method: 175Q0921A.m

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	Amount	DF	Verify Load	Loaded By	Date Analyzed	Time Analyzed	Review Init	Comments
√	17092117	BFB Tune Check	2736-191	12	36ng	1.0ml	1.00	gh	gh	09/21/15	1945	gh	
√	17092118	I Cal Level #2	2736-257	1	0.5ppbv(2.0ppbv)	50ml	1.00	gh	gh	09/21/15	2032	mjs	exp. 11/20/15
√	17092119	I Cal Level #3	2736-257	1	2.0ppbv(2.0pbbv)	200ml	1.00	gh	gh	09/21/15	2107	mjs	exp. 11/20/15
√	17092120	I Cal Level #4	2737-258	3	5.0ppbv(5.0ppbv)	200ml	1.00	mjs	gh	09/21/15	2152	mjs	exp. 11/20/15
√	17092121	I Cal Level #5	2737-240	2	20ppbv(200ppbv)	20ml	1.00	mjs	gh	09/21/15	2231	mjs	exp. 11/20/15
√	17092122	I Cal Level #6	2737-240	2	50ppbv(200ppbv)	50ml	1.00	mjs	gh	09/21/15	2255	mjs	exp. 11/20/15; CCV
√	17092123	I Cal Level #7	2737-240	2	100ppbv(200ppbv)	100ml	1.00	mjs	gh	09/21/15	2331	mjs	exp. 11/20/15
√	17092124	I Cal Level #8	2737-240	2	200ppbv(200ppbv)	200ml	1.00	mjs	gh	09/21/15	2354	mjs	exp. 11/20/15
√	17092125	System Blank	33555	12	humid	200ml	1.00	mjs	gh	09/22/15	0031	mjs	
√	17092126	System Blank	33555	12	humid	200ml	1.00	mjs	gh	09/22/15	0055	mjs	
√	17092127	ICV	2736-188A	14	50ppbv(100ppbv)	100ml	1.00	cb	gh	09/22/15	0753	cb	exp 11/11/15

CB 9/22/15

MSD17

BFB verification of 176/174 ratio:	(101344/104328) * 100 = 97.14%	
2736-191	Exp. Date:	11/14/2015
BCM	102,227	
1,4-DFB	417,792	
CB-d5	379,305	

Method TO-15/TO-14		
SOP# 6		
Vacuum:	na	
Please check all standards		
Surrogate# 2736-191	Exp. Date:	11/14/2015
Surrogate# NA	Exp. Date:	NA

Verified CCV vs ICAL mid-point (-40%): cb

Method: 175Q09218.m

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	Amount	DF	Verify Load	Loaded By	Date Analyzed	Time Analyzed	Review Init	Comments
√	17092401	BFB Tune Check	2736-191	12	36ng	1.0ml	1.00	cb	cb	09/24/15	0806	cb	
√	17092402	CCV	2737-240	13	50ppbv(200ppbv)	50ml	1.00	cb	cb	09/24/15	0849	cb	exp. 11/20/15; 0 out
√	17092403	LCS	2736-188A	14	50ppbv(100ppbv)	100ml	1.00	cb	cb	09/24/15	0921	cb	exp 10/30/15; 0 out
√	17092404	LCSD	2736-188A	14	50ppbv(100ppbv)	100ml	1.00	cb	cb	09/24/15	0951	cb	exp 10/30/15;
√	17092405	ICAL Level 3	2736-111	1	2.0ppbv(2.0ppbv)	200ml	1.00	cb	cb	09/24/15	1029	cb	exp. 10/7/15; 1,2,3-TCB
√	17092406	ICAL Level 6	2736-107	2	50ppbv(200ppbv)	50ml	1.00	cb	cb	09/24/15	1104	cb	exp. 10/7/15; 1,2,3-TCB; CCV
√	17092407	ICAL Level 8	2736-107	2	200ppbv(200ppbv)	200ml	1.00	cb	cb	09/24/15	1127	cb	exp. 10/7/15; 1,2,3-TCB
√	17092408	ICAL Level 3	2736-223	3	2.0ppbv(5.0ppbv)	80ml	1.00	cb	cb	09/24/15	1200	cb	exp. 11/21/15; Combo
√	17092409	ICAL Level 6	2736-222	4	50ppbv(200ppbv)	50ml	1.00	cb	cb	09/24/15	1223	cb	exp. 11/21/15; Combo; CCV
√	17092410	ICAL Level 8	2736-222	4	200ppbv(200ppbv)	200ml	1.00	cb	cb	09/24/15	1246	cb	exp. 11/21/15; Combo
√	17092411	ICAL Level 3	2736-198	1	2.0ppbv(2.0ppbv)	200ml	1.00	cb	cb	09/24/15	1315	cb	exp. 11/21/15; AT-1
√	17092412	ICAL Level 6	2736-197	2	50ppbv(200ppbv)	50ml	1.00	cb	cb	09/24/15	1350	cb	exp. 11/21/15; AT-1; CCV
√	17092413	ICAL Level 8	2736-197	2	200ppbv(200ppbv)	200ml	1.00	cb	cb	09/24/15	1413	cb	exp. 11/21/15; AT-1
√	17092414	ICAL Level 1	2736-262	7	1.0ppbv(20ppbv)	10ml	1.00	gh	cb	09/24/15	1525	gh	exp 12/22/15; Naphthalene
√	17092415	ICAL Level 5	2736-262	7	2.0ppbv(20ppbv)	20ml	1.00	gh	cb	09/24/15	1559	gh	exp 12/22/15; Naphthalene
√	17092416	ICAL Level 6	2736-262	7	5.0ppbv(20ppbv)	50ml	1.00	gh	cb	09/24/15	1622	gh	exp 12/22/15; Naphthalene; CCV
√	17092417	ICAL Level 7	2736-262	7	10ppbv(20ppbv)	100ml	1.00	gh	cb	09/24/15	1658	gh	exp 12/22/15; Naphthalene
√	17092418	ICAL Level 8	2736-262	7	20ppbv(20ppbv)	200ml	1.00	gh	cb	09/24/15	1721	gh	exp 12/22/15; Naphthalene
√	17092419	System Blank	33555	12	humid	200ml	1.00	gh	gh	09/24/15	1746	gh	Naph<RL
√	17092420	System Blank	33555	12	humid	200ml	1.00	gh	gh	09/24/15	1813	gh	Naph<RL
X	17092421	ICV	2736-280	7	5.0ppbv(20ppbv)	50ml	1.00	gh	gh	09/24/15	1908	gh	exp 12/22/15; Naphthalene
√	17092422	Lab Blank	33555	12	humid	200ml	1.00	gh	gh	09/24/15	1955	gh	<RL
√	17092423	1509353-01A	1L Bag	1	QCF-GET-Air-1509222	200ml	1.00	gh	gh	09/24/15	2039	gh	
√	17092424	1509279B-08A	1L2711	1	4.1 Hg->14.9 psi	200ml	2.33	gh	gh	09/24/15	2206	gh	
√	17092425	1509279B-08AA	1L2711	1	4.1 Hg->14.9 psi	200ml	2.33	gh	gh	09/24/15	2229	cb	
√	17092426	1509344-01A	37799	2	5.5 Hg->15 psi	30ml	16.5	mjs	gh	09/24/15	2304	cb	
√	17092427	1509344-02A	35626	3	6.0 Hg->15 psi	200ml	2.52	mjs	gh	09/24/15	2328	cb	"E" flag Fr152a
√	17092428	1509344-03A	30823	4	6.0 Hg->15 psi	200ml	2.52	mjs	gh	09/25/15	0004	cb	"E" flag Fr152a
√	17092429	1509344-04A	20781	5	5.5 Hg->15 psi	20ml	24.7	mjs	gh	09/25/15	0027	cb	"E" flag Fr152a
√	17092430	1509344-05A	15755	6	4.5 Hg->15 psi	200ml	2.38	mjs	gh	09/25/15	0104	cb	Fr152a < 5X RL
√	17092431	1509346-01A	34470	7	6.5 Hg->5 psi	200ml	1.71	mjs	gh	09/25/15	0127	cb	
√	17092432	1509346-02A	33864	8	8.0 Hg->5 psi	200ml	1.83	mjs	gh	09/25/15	0204	cb	

Chad 9/25/15

MSD17

BFB verification of 176/174 ratio:	(82816/86792) * 100 = 95.42%		
	2736-191	Exp. Date:	11/14/2015
BCM	100,313		
1,4-DFB	396,584		
CB-d5	367,479		

Method TO-15/TO-14			
SOP# 6			
Vacuum:	na		
Please check all standards			
Surrogate#	2736-191	Exp. Date:	11/14/2015
Surrogate#	NA	Exp. Date:	NA

Verified CCV vs ICAL mid-point (-40%): cb

Method: 175Q0921C.m

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	Amount	DF	Verify Load	Loaded By	Date Analyzed	Time Analyzed	Review Init	Comments
√	17092501	BFB Tune Check	2736-191	12	36ng	1.0ml	1.00	cb	cb	09/25/15	0906	cb	
X	17092502	Test Std	2736-280	1	5.0ppbv(20ppbv)	50ml	1.00	cb	cb	09/25/15	0938	cb	exp 12/22/15
X	17092503	CCVsp	2736-262	2	5.0ppbv(20ppbv)	50ml	1.00	cb	cb	09/25/15	1032	cb	exp 12/22/15; Naphthalene
√	17092504	CCV	2737-240	13	50ppbv(200ppbv)	50ml	1.00	cb	cb	09/25/15	1103	cb	exp. 11/20/15; 0 out
√	17092505	LCS	2736-188A	14	50ppbv(100ppbv)	100ml	1.00	cb	cb	09/25/15	1139	cb	exp 10/30/15; 0 out; Naph iCV
√	17092506	LCSD	2736-188A	14	50ppbv(100ppbv)	100ml	1.00	cb	cb	09/25/15	1202	cb	exp 10/30/15;
√	17092507	System Blank	33555	12	Humid	200ml	1.00	cb	cb	09/25/15	1239	cb	
√	17092508	CCVsp	2736-262	2	5.0ppbv(20ppbv)	50ml	1.00	cb	cb	09/25/15	1311	cb	exp 12/22/15; Naphthalene
	~~17092509~~	~~CCVsp~~	~~2736-107~~	~~4~~	~~50ppbv(200ppbv)~~	50ml	1.00			~~09/25/15~~			exp. 10/7/15; 1,2,3-TCB
	17092510	CCVsp	2736-197	5	50ppbv(200ppbv)	50ml	1.00			09/25/15			exp. 11/21/15; AT-1; CCV
	17092511	Lab Blank	33555	12	Humid	200ml	1.00			09/25/15			exp 10/30/15; 0 out

CB
9/25/15

9/25/15

CB
9/25/15

Modified EPA Methods TO-14A/TO-15
Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
3-Chloropropene
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
2,2,4-Trimethylpentane
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/21sep15a.b/17092127.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 22-SEP-2015 07:53
Operator : cb Inst ID: msd17.i
Smp Info : 100ml #2736-188A
Misc Info : 50ppbv(100ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/21sep15a.b/175q0921a.m
Meth Date : 25-Sep-2015 15:05 cbond Quant Type: ISTD
Cal Date : 21-SEP-2015 23:31 Cal File: 17092123.d
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12noNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.528	5.528 (1.000)	130	117099	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	90304			46.54- 106.54	77.12
5.528	5.528 (1.000)	49	135549			83.83- 143.83	115.76
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.416	6.416 (1.000)	114	477585	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	72690			0.00- 44.86	15.22
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	433695	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	235876			23.93- 83.93	54.39
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.065	6.065 (1.097)	65	162736	25.7905	25.790	80.00- 120.00	100.00
6.065	6.065 (1.097)	67	88133			25.51- 85.51	54.16

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.189)	98	493019	25.0379	25.038	80.00- 120.00	100.00
7.627	7.627 (1.189)	70	52130			0.00- 40.39	10.57
7.627	7.627 (1.189)	100	314392			33.97- 93.97	63.77
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.847	9.854 (1.111)	174	276694	24.9877	24.988	80.00- 120.00	100.00
9.847	9.847 (1.111)	95	315562			79.64- 139.64	114.05
9.854	9.847 (1.111)	176	274854			65.80- 125.80	99.34
9 Propylene					CAS #: 115-07-1		
1.517	1.517 (0.274)	41	200334	43.1188	43.119	80.00- 120.00	100.00
1.517	1.517 (0.274)	42	133737			37.10- 97.10	66.76
1.517	1.517 (0.274)	39	148421			44.98- 104.98	74.09
11 Freon 12					CAS #: 75-71-8		
1.552	1.552 (0.281)	85	837362	44.4293	44.429	80.00- 120.00	100.00
1.552	1.552 (0.281)	87	272986			2.33- 62.33	32.60
15 Freon 114					CAS #: 76-14-2		
1.674	1.674 (0.303)	135	631026	46.1261	46.126	80.00- 120.00	100.00
1.674	1.674 (0.303)	137	202583			2.02- 62.02	32.10
17 Chloromethane					CAS #: 74-87-3		
1.760	1.760 (0.318)	50	283842	43.0404	43.040	80.00- 120.00	100.00
1.760	1.760 (0.318)	52	94179			2.35- 62.35	33.18
23 Butane					CAS #: 106-97-8		
1.839	1.839 (0.333)	58	64574	44.6460	44.646	80.00- 120.00	100.00
1.839	1.839 (0.333)	43	426359			657.81- 717.81	660.26
25 Vinyl Chloride					CAS #: 75-01-4		
1.875	1.875 (0.339)	62	323903	43.4559	43.456	80.00- 120.00	100.00
1.875	1.875 (0.339)	64	103909			2.69- 62.69	32.08
26 1,3-Butadiene					CAS #: 106-99-0		
1.903	1.903 (0.344)	54	226974	43.8896	43.890	80.00- 120.00	100.00
1.903	1.903 (0.344)	39	211655			63.95- 123.95	93.25
29 Bromomethane					CAS #: 74-83-9		
2.261	2.262 (0.409)	94	301222	45.6262	45.626	80.00- 120.00	100.00
2.261	2.262 (0.409)	96	285940			63.69- 123.69	94.93
30 Chloroethane					CAS #: 75-00-3		
2.383	2.383 (0.431)	64	167563	44.3469	44.347	80.00- 120.00	100.00
2.383	2.376 (0.431)	66	52911			1.86- 61.86	31.58

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.383	2.383 (0.431)	49	42717			0.00- 55.51	25.49
31 Isopentane					CAS #: 78-78-4		
2.405	2.405 (0.435)	43	323388	44.1228	44.123	80.00- 120.00	100.00
2.405	2.405 (0.435)	57	247928			44.35- 104.35	76.67
35 Freon 11					CAS #: 75-69-4		
2.634	2.634 (0.476)	101	862741	44.4553	44.455	80.00- 120.00	100.00
2.634	2.634 (0.476)	103	557173			35.20- 95.20	64.58
42 Ethanol					CAS #: 64-17-5		
2.992	2.992 (0.541)	45	116754	44.9319	44.932	80.00- 120.00	100.00
2.992	2.992 (0.541)	43	25976			0.00- 50.36	22.25
2.992	2.992 (0.541)	46	45574			10.31- 70.31	39.03
49 Freon 113					CAS #: 76-13-1		
3.286	3.286 (0.594)	151	583979	42.2340	42.234	80.00- 120.00	100.00
3.286	3.286 (0.594)	153	370580			33.72- 93.72	63.46
3.286	3.286 (0.594)	101	724400			95.23- 155.23	124.05
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.314	3.315 (0.600)	98	216453	42.4623	42.462	80.00- 120.00	100.00
3.314	3.315 (0.600)	96	337024			130.14- 190.14	155.70
3.314	3.315 (0.600)	61	533233			218.16- 278.16	246.35
52 Acetone					CAS #: 67-64-1		
3.479	3.479 (0.629)	58	151072	42.8966	42.897	80.00- 120.00	100.00
3.479	3.479 (0.629)	43	454019			266.49- 326.49	300.53
56 Carbon Disulfide					CAS #: 75-15-0		
3.551	3.551 (0.642)	76	901925	38.3142	38.314	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.651	3.651 (0.660)	45	533905	48.8704	48.870	80.00- 120.00	100.00
3.651	3.651 (0.660)	43	109511			0.00- 50.02	20.51
3.651	3.651 (0.660)	59	22091			0.00- 34.32	4.14
58 3-Chloropropene					CAS #: 107-05-1		
3.794	3.794 (0.686)	76	159009	41.8977	41.898	80.00- 120.00	100.00
3.794	3.794 (0.686)	41	345366			185.01- 245.01	217.20
66 Methylene Chloride					CAS #: 75-09-2		
3.981	3.981 (0.720)	49	357398	43.2936	43.294	80.00- 120.00	100.00
3.981	3.981 (0.720)	84	304259			59.02- 119.02	85.13
3.981	3.981 (0.720)	51	111491			1.78- 61.78	31.20

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.196	4.196 (0.759)	73	906556	42.3952	42.395	80.00- 120.00	100.00
4.196	4.196 (0.759)	57	198602			0.00- 51.46	21.91
4.196	4.196 (0.759)	41	175874			0.00- 49.34	19.40
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.217	4.224 (0.763)	98	197171	38.8212	38.821	80.00- 120.00	100.00
4.217	4.217 (0.763)	61	419568			184.16- 244.16	212.79
4.217	4.217 (0.763)	96	303356			127.84- 187.84	153.85
78 Hexane					CAS #: 110-54-3		
4.425	4.432 (0.800)	57	491441	42.5432	42.543	80.00- 120.00	100.00
4.425	4.432 (0.800)	43	278895			27.64- 87.64	56.75
4.432	4.432 (0.802)	86	85305			0.00- 46.92	17.36
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.711	4.711 (0.852)	63	608910	44.3148	44.315	80.00- 120.00	100.00
4.711	4.711 (0.852)	65	192162			2.04- 62.04	31.56
83 Isopropyl ether					CAS #: 108-20-3		
4.196	4.697 (0.759)	45	44338	1.98429	1.984	80.00- 120.00	100.00(a)
4.425	4.704 (0.800)	87	5762			1.31- 61.31	13.00
4.217	4.704 (0.763)	59	17519			0.00- 42.69	39.51
86 Vinyl Acetate					CAS #: 108-05-4		
4.754	4.754 (0.860)	86	88522	42.2222	42.222	80.00- 120.00	100.00
4.754	4.754 (0.860)	43	782091			891.41- 951.41	883.50
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.299	5.299 (0.959)	98	261223	47.6927	47.693	80.00- 120.00	100.00
5.299	5.299 (0.959)	96	404195			124.38- 184.38	154.73
5.299	5.299 (0.959)	61	493111			162.07- 222.07	188.77
92 2-Butanone					CAS #: 78-93-3		
5.327	5.327 (0.964)	72	166228	42.9262	42.926	80.00- 120.00	100.00
5.327	5.327 (0.964)	43	570388			306.33- 366.33	343.14
5.327	5.327 (0.964)	57	50801			0.00- 59.26	30.56
99 Tetrahydrofuran					CAS #: 109-99-9		
5.528	5.528 (1.000)	42	308288	40.8682	40.868	80.00- 120.00	100.00
5.528	5.528 (1.000)	71	148429			17.72- 77.72	48.15
5.528	5.528 (1.000)	72	155984			20.99- 80.99	50.60
100 Chloroform					CAS #: 67-66-3		
5.592	5.592 (1.012)	83	705982	41.9208	41.921	80.00- 120.00	100.00
5.592	5.592 (1.012)	85	459464			34.67- 94.67	65.08

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
102 Cyclohexane					CAS #: 110-82-7		
5.693	5.693 (1.030)	84	453050	43.3224	43.322	80.00- 120.00	100.00
5.685	5.686 (1.028)	56	479803			77.09- 137.09	105.91
5.685	5.686 (1.028)	41	252650			25.87- 85.87	55.77
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.707	5.714 (1.032)	97	707299	42.3664	42.366	80.00- 120.00	100.00
5.707	5.714 (1.032)	99	447563			34.33- 94.33	63.28
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.822	5.822 (1.053)	119	716988	42.9832	42.983	80.00- 120.00	100.00
5.822	5.822 (1.053)	117	738799			74.90- 134.90	103.04
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.088)	57	1539362	43.5842	43.584	80.00- 120.00	100.00
6.015	6.015 (1.088)	56	489670			1.80- 61.80	31.81
6.015	6.015 (1.088)	41	395331			0.00- 55.83	25.68
116 Benzene					CAS #: 71-43-2		
6.044	6.044 (0.942)	78	1023786	42.3166	42.317	80.00- 120.00	100.00
6.044	6.044 (0.942)	77	251879			0.00- 54.08	24.60
119 tert-Amyl methyl ether					CAS #: 994-05-8		
5.592	6.108 (1.012)	87	75516	13.4930	13.493	80.00- 120.00	100.00
5.592	6.108 (1.012)	73	359			376.57- 436.57	0.48
5.549	6.108 (1.004)	55	321			64.52- 124.52	0.43
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.130	6.130 (0.955)	62	452618	42.8272	42.827	80.00- 120.00	100.00
6.130	6.137 (0.955)	64	148720			2.16- 62.16	32.86
121 Heptane					CAS #: 142-82-5		
6.187	6.187 (0.964)	71	361521	43.1733	43.173	80.00- 120.00	100.00
6.187	6.187 (0.964)	43	508187			110.94- 170.94	140.57
6.187	6.187 (0.964)	57	307069			53.72- 113.72	84.94
125 Trichloroethene					CAS #: 79-01-6		
6.609	6.610 (1.030)	95	537939	47.1236	47.124	80.00- 120.00	100.00
6.609	6.610 (1.030)	130	555767			74.97- 134.97	103.31
6.609	6.610 (1.030)	97	340509			35.33- 95.33	63.30
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.212)	83	619735	42.9434	42.943	80.00- 120.00	100.00
6.703	6.703 (1.212)	98	288945			16.41- 76.41	46.62
6.703	6.703 (1.212)	55	443991			40.41- 100.41	71.64

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.846	6.846 (1.067)	63	379307	43.7956	43.796	80.00- 120.00	100.00
6.846	6.846 (1.067)	62	263009			38.78- 98.78	69.34
6.846	6.846 (1.067)	41	188940			20.16- 80.16	49.81
136 1,4-Dioxane					CAS #: 123-91-1		
6.939	6.939 (1.081)	88	239471	45.6968	45.697	80.00- 120.00	100.00
6.939	6.939 (1.081)	58	153659			31.02- 91.02	64.17
6.939	6.939 (1.081)	57	51796			0.00- 51.33	21.63
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.103)	83	783898	43.7481	43.748	80.00- 120.00	100.00
7.075	7.075 (1.103)	85	499696			34.16- 94.16	63.75
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.448	7.448 (1.161)	75	613446	40.7560	40.756	80.00- 120.00	100.00
7.448	7.448 (1.161)	77	192638			1.57- 61.57	31.40
7.448	7.448 (1.161)	39	268130			13.98- 73.98	43.71
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.555	7.555 (1.178)	58	285197	48.9490	48.949	80.00- 120.00	100.00
7.555	7.555 (1.178)	43	675251			205.93- 265.93	236.77
7.555	7.555 (1.178)	85	139044			18.04- 78.04	48.75
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.198)	91	1292916	42.6164	42.616	80.00- 120.00	100.00
7.684	7.684 (1.198)	92	719487			27.24- 87.24	55.65
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.927	7.928 (0.894)	75	584019	43.3541	43.354	80.00- 120.00	100.00
7.927	7.928 (0.894)	77	184555			1.57- 61.57	31.60
7.927	7.928 (0.894)	39	249051			13.98- 73.98	42.64
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.085	8.085 (0.912)	97	444447	41.8205	41.820	80.00- 120.00	100.00
8.085	8.085 (0.912)	99	277548			31.05- 91.05	62.45
8.085	8.085 (0.912)	83	399958			58.29- 118.29	89.99
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.916)	166	641059	41.1000	41.100	80.00- 120.00	100.00
8.121	8.121 (0.916)	129	467343			42.46- 102.46	72.90
8.121	8.121 (0.916)	131	449618			40.24- 100.24	70.14
158 2-Hexanone					CAS #: 591-78-6		
8.243	8.243 (0.930)	58	381328	50.8456	50.846	80.00- 120.00	100.00
8.243	8.243 (0.930)	43	654353			205.93- 265.93	171.60

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
158 2-Hexanone (continued)							
8.250	8.250 (0.931)	100	89764			11.40- 71.40	23.54
160 Dibromochloromethane					CAS #: 124-48-1		
8.393	8.393 (0.947)	129	837290	42.2012	42.201	80.00- 120.00	100.00
8.393	8.393 (0.947)	127	650174			47.28- 107.28	77.65
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.508	8.508 (0.960)	107	723126	43.0385	43.038	80.00- 120.00	100.00
8.508	8.508 (0.960)	109	679702			66.45- 126.45	93.99
165 Chlorobenzene					CAS #: 108-90-7		
8.887	8.887 (1.002)	112	1034100	42.5098	42.510	80.00- 120.00	100.00
8.887	8.887 (1.002)	114	323071			2.06- 62.06	31.24
8.887	8.887 (1.002)	77	587990			26.47- 86.47	56.86
167 Ethyl Benzene					CAS #: 100-41-4		
8.930	8.930 (1.007)	106	520954	43.9713	43.971	80.00- 120.00	100.00
8.930	8.930 (1.007)	91	1633835			289.94- 349.94	313.62
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	637906	43.3666	43.367	80.00- 120.00	100.00
9.031	9.031 (1.019)	91	1269372			167.83- 227.83	198.99
171 o-Xylene					CAS #: 95-47-6		
9.374	9.374 (1.057)	106	610899	44.7606	44.761	80.00- 120.00	100.00
9.374	9.374 (1.057)	91	1275877			181.11- 241.11	208.85
172 Styrene					CAS #: 100-42-5		
9.396	9.396 (1.060)	104	994442	42.7163	42.716	80.00- 120.00	100.00
9.389	9.389 (1.059)	78	472188			17.79- 77.79	47.48
174 Bromoform					CAS #: 75-25-2		
9.596	9.597 (1.082)	173	870620	43.4590	43.459	80.00- 120.00	100.00
9.596	9.597 (1.082)	171	449280			21.45- 81.45	51.60
175 Cumene					CAS #: 98-82-8		
9.661	9.661 (1.090)	105	1872755	42.9553	42.955	80.00- 120.00	100.00
9.661	9.661 (1.090)	120	508135			0.00- 57.47	27.13
9.661	9.661 (1.090)	51	165942			0.00- 38.62	8.86
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.976	9.976 (1.125)	83	886187	38.6264	38.626	80.00- 120.00	100.00
9.976	9.976 (1.125)	85	576722			34.77- 94.77	65.08
182 Propylbenzene					CAS #: 103-65-1		
10.005	10.005 (1.128)	91	2293506	43.8195	43.819	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
182 Propylbenzene (continued)							
10.005	10.005 (1.128)	120	543096			0.00- 53.65	23.68
10.005	10.005 (1.128)	105	84910			0.00- 33.57	3.70
188 4-Ethyltoluene					CAS #: 622-96-8		
10.098	10.098 (1.139)	120	606041	43.7219	43.722	80.00- 120.00	100.00
10.098	10.098 (1.139)	105	1953324			292.89- 352.89	322.31
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.148	10.148 (1.145)	120	796015	43.7090	43.709	80.00- 120.00	100.00
10.148	10.148 (1.145)	105	1623593			175.25- 235.25	203.97
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.477	10.478 (1.182)	120	722869	44.2142	44.214	80.00- 120.00	100.00
10.477	10.478 (1.182)	105	1552163			183.76- 243.76	214.72
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.771	10.771 (1.215)	146	1158485	44.0511	44.051	80.00- 120.00	100.00
10.771	10.771 (1.215)	148	730536			33.69- 93.69	63.06
10.771	10.771 (1.215)	111	443463			8.12- 68.12	38.28
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.850	10.850 (1.224)	146	1145930	44.0421	44.042	80.00- 120.00	100.00
10.850	10.850 (1.224)	148	738376			33.86- 93.86	64.43
10.850	10.850 (1.224)	111	428586			6.71- 66.71	37.40
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.965	10.965 (1.237)	91	1477552	47.7571	47.757	80.00- 120.00	100.00
10.972	10.965 (1.238)	126	325212			0.00- 51.95	22.01
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.179	11.180 (1.261)	146	1089900	43.7530	43.753	80.00- 120.00	100.00
11.179	11.180 (1.261)	148	699772			33.90- 93.90	64.21
11.179	11.180 (1.261)	111	432545			8.86- 68.86	39.69
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.605	12.598 (1.422)	180	1061763	49.0725	49.072	80.00- 120.00	100.00
12.605	12.598 (1.422)	182	1010506			65.21- 125.21	95.17
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.691	12.691 (1.431)	225	840790	45.2558	45.256	80.00- 120.00	100.00
12.691	12.691 (1.431)	223	524797			33.22- 93.22	62.42

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092127.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/21sep15a.b/175q0921a.m
Misc Info: 50ppbv(100ppbv)

Calibration Date: 21-SEP-2015
Calibration Time: 22:55
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	116527	69916	163138	117099	0.49
123 1,4-Difluorobenze	475185	285111	665259	477585	0.51
163 Chlorobenzene-d5	418099	250859	585339	433695	3.73

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 21sep15a
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: ICV Client Smp ID: ICV
Level: LOW Operator: cb
Data Type: MS DATA SampleType: LCS
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: AT12noNaph.sub
Method File: /chem/msd17.i/21sep15a.b/175q0921a.m
Misc Info: 50ppbv(100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9 Propylene	50.000	43.119	86.24	70-130
11 Freon 12	50.000	44.429	88.86	70-130
15 Freon 114	50.000	46.126	92.25	70-130
17 Chloromethane	50.000	43.040	86.08	70-130
23 Butane	50.000	44.646	89.29	70-130
25 Vinyl Chloride	50.000	43.456	86.91	70-130
26 1,3-Butadiene	50.000	43.890	87.78	70-130
29 Bromomethane	50.000	45.626	91.25	70-130
30 Chloroethane	50.000	44.347	88.69	70-130
31 Isopentane	50.000	44.123	88.25	70-130
35 Freon 11	50.000	44.455	88.91	70-130
42 Ethanol	50.000	44.932	89.86	70-130
49 Freon 113	50.000	42.234	84.47	70-130
50 1,1-Dichloroethene	50.000	42.462	84.92	70-130
52 Acetone	50.000	42.897	85.79	70-130
56 Carbon Disulfide	50.000	38.314	76.63	70-130
57 2-Propanol	50.000	48.870	97.74	70-130
58 3-Chloropropene	50.000	41.898	83.80	70-130
66 Methylene Chloride	50.000	43.294	86.59	70-130
72 Methyl tert-butyl	50.000	42.395	84.79	70-130
73 trans-1,2-Dichloro	50.000	38.821	77.64	70-130
78 Hexane	50.000	42.543	85.09	70-130
82 1,1-Dichloroethane	50.000	44.315	88.63	70-130
86 Vinyl Acetate	50.000	42.222	84.44	70-130
91 cis-1,2-Dichloroet	50.000	47.693	95.39	70-130
92 2-Butanone	50.000	42.926	85.85	70-130
99 Tetrahydrofuran	50.000	40.868	81.74	70-130
100 Chloroform	50.000	41.921	83.84	70-130
103 1,1,1-Trichloroeth	50.000	42.366	84.73	70-130
106 Carbon Tetrachlori	50.000	42.983	85.97	70-130
102 Cyclohexane	50.000	43.322	86.64	70-130
113 2,2,4-Trimethylpen	50.000	43.584	87.17	70-130
116 Benzene	50.000	42.317	84.63	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	50.000	42.827	85.65	70-130
121 Heptane	50.000	43.173	86.35	70-130
125 Trichloroethene	50.000	47.124	94.25	70-130
127 Methylcyclohexane	50.000	42.943	85.89	70-130
132 1,2-Dichloropropan	50.000	43.796	87.59	70-130
136 1,4-Dioxane	50.000	45.697	91.39	70-130
138 Bromodichlorometha	50.000	43.748	87.50	70-130
144 cis-1,3-Dichloropr	50.000	40.756	81.51	70-130
145 4-Methyl-2-pentano	50.000	48.949	97.90	70-130
147 Toluene	50.000	42.616	85.23	70-130
150 trans-1,3-Dichloro	50.000	43.354	86.71	70-130
155 1,1,2-Trichloroeth	50.000	41.820	83.64	70-130
156 Tetrachloroethene	50.000	41.100	82.20	70-130
158 2-Hexanone	50.000	50.846	101.69	70-130
160 Dibromochlorometha	50.000	42.201	84.40	70-130
161 1,2-Dibromoethane	50.000	43.038	86.08	70-130
165 Chlorobenzene	50.000	42.510	85.02	70-130
167 Ethyl Benzene	50.000	43.971	87.94	70-130
169 m,p-Xylene	50.000	43.367	86.73	70-130
171 o-Xylene	50.000	44.761	89.52	70-130
172 Styrene	50.000	42.716	85.43	70-130
174 Bromoform	50.000	43.459	86.92	70-130
175 Cumene	50.000	42.955	85.91	70-130
181 1,1,2,2-Tetrachlor	50.000	38.626	77.25	70-130
182 Propylbenzene	50.000	43.819	87.64	70-130
188 4-Ethyltoluene	50.000	43.722	87.44	70-130
190 1,3,5-Trimethylben	50.000	43.709	87.42	70-130
196 1,2,4-Trimethylben	50.000	44.214	88.43	70-130
208 1,3-Dichlorobenzen	50.000	44.051	88.10	70-130
209 1,4-Dichlorobenzen	50.000	44.042	88.08	70-130
212 alpha-Chlorotoluen	50.000	47.757	95.51	70-130
214 1,2-Dichlorobenzen	50.000	43.753	87.51	70-130
226 1,2,4-Trichloroben	50.000	49.072	98.14	70-130
227 Hexachlorobutadien	50.000	45.256	90.51	70-130
228 Naphthalene	5.000	0.000	*	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.790	103.16	70-130
$ 146 Toluene-d8	25.000	25.038	100.15	70-130
$ 177 4-Bromofluorobenze	25.000	24.988	99.95	70-130

Data File: /chem/msd17.i/21sep15a.b/17092127.d

Date : 22-SEP-2015 07:53

Client ID: ICV

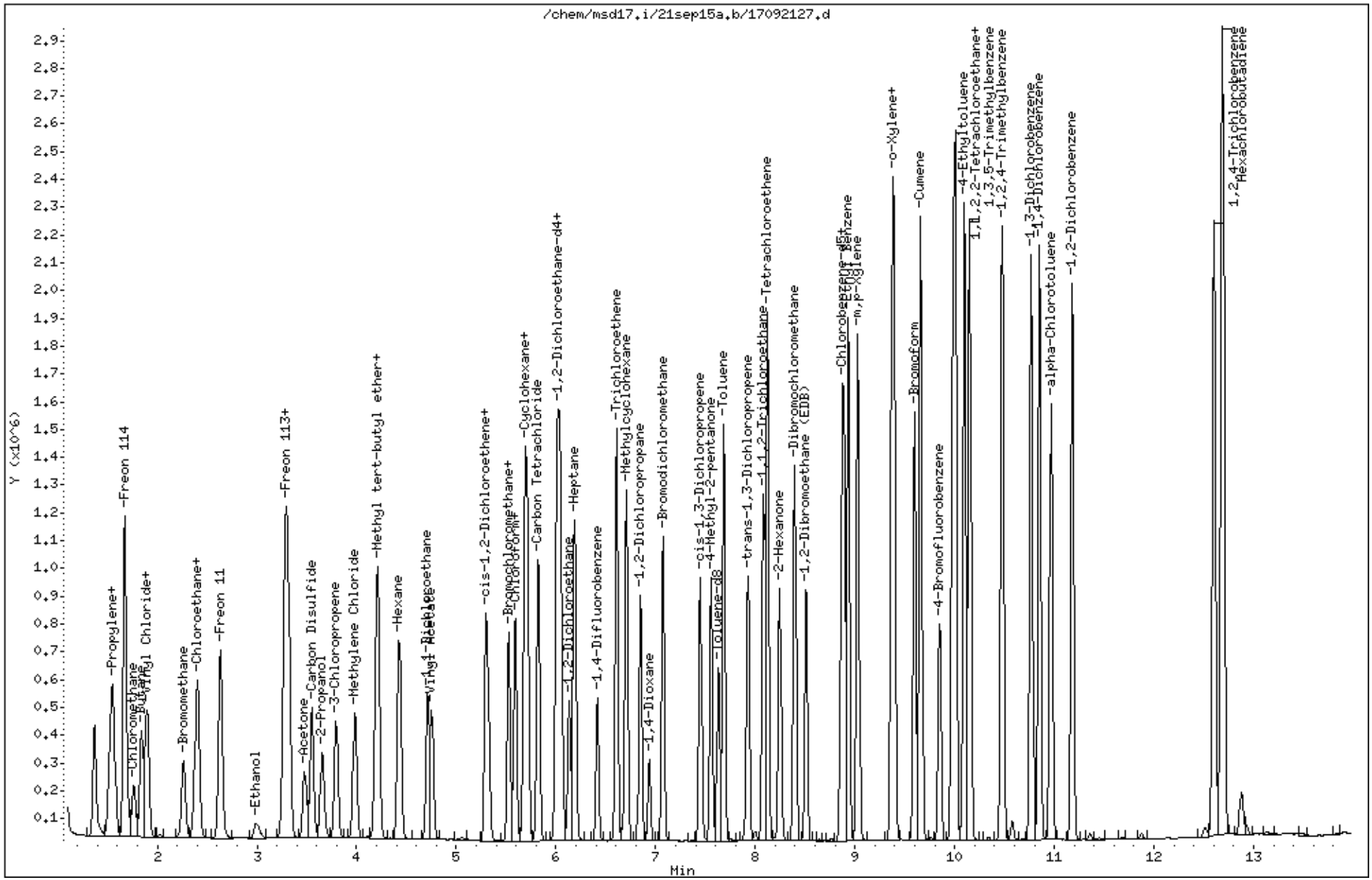
Instrument: msd17.i

Sample Info: 100ml #2736-188A

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/25sep15.b/17092505a.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 25-SEP-2015 11:39
Operator : cb Inst ID: msd17.i
Smp Info : 100ml #2736-188A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/25sep15.b/175q0921c.m
Meth Date : 25-Sep-2015 16:23 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 16:22 Cal File: 17092416.d
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NaphCCV.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

	RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
*	98 Bromochloromethane					CAS #: 74-97-5		
	5.521	5.521 (1.000)	130	98181	25.0000		80.00- 120.00	100.00
	5.521	5.521 (1.000)	128	77671			46.54- 106.54	79.11
	5.521	5.521 (1.000)	49	111263			83.83- 143.83	113.32
*	123 1,4-Difluorobenzene					CAS #: 540-36-3		
	6.409	6.409 (1.000)	114	411644	25.0000		80.00- 120.00	100.00
	6.409	6.409 (1.000)	88	63636			0.00- 44.86	15.46
*	163 Chlorobenzene-d5					CAS #: 3114-55-4		
	8.844	8.866 (1.000)	117	375610	25.0000		80.00- 120.00	100.00
	8.844	8.866 (1.000)	82	202168			23.93- 83.93	53.82
$	117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	6.058	6.058 (1.097)	65	133413	25.2174	25.217	80.00- 120.00	100.00
	6.058	6.058 (1.097)	67	75413			25.51- 85.51	56.53

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.190)	98	431738	25.4380	25.438	80.00- 120.00	100.00
7.627	7.627 (1.190)	70	45787			0.00- 40.39	10.61
7.627	7.627 (1.190)	100	278465			33.97- 93.97	64.50
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.811	9.854 (1.109)	174	233597	24.3580	24.358	80.00- 120.00	100.00
9.811	9.854 (1.109)	95	266439			79.64- 139.64	114.06
9.811	9.854 (1.109)	176	230564			65.80- 125.80	98.70
228 Naphthalene					CAS #: 91-20-3		
12.806	12.877 (1.448)	128	122535	6.84628	6.846	0.00- 30.00	100.00
12.806	12.877 (1.448)	127	15460			0.00- 30.00	12.62

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092505a.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/25sep15.b/175q0921c.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 25-SEP-2015
Calibration Time: 11:03
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	100313	60188	140438	98181	-2.13
123 1,4-Difluorobenze	396584	237950	555218	411644	3.80
163 Chlorobenzene-d5	367479	220487	514471	375610	2.21

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.52	0.00
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.84	-0.24

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 25sep15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: ICV Client Smp ID: ICV
Level: LOW Operator: cb
Data Type: MS DATA SampleType: LCS
SpikeList File: Naph.spk Quant Type: ISTD
Sublist File: NaphCCV.sub
Method File: /chem/msd17.i/25sep15.b/175q0921c.m
Misc Info: 50ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
228 Naphthalene	5.000	6.846	136.93	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.217	100.87	70-130
$ 146 Toluene-d8	25.000	25.438	101.75	70-130
$ 177 4-Bromofluorobenze	25.000	24.358	97.43	70-130

Data File: /chem/msd17.i/25sep15.b/17092505a.d

Date : 25-SEP-2015 11:39

Client ID: ICV

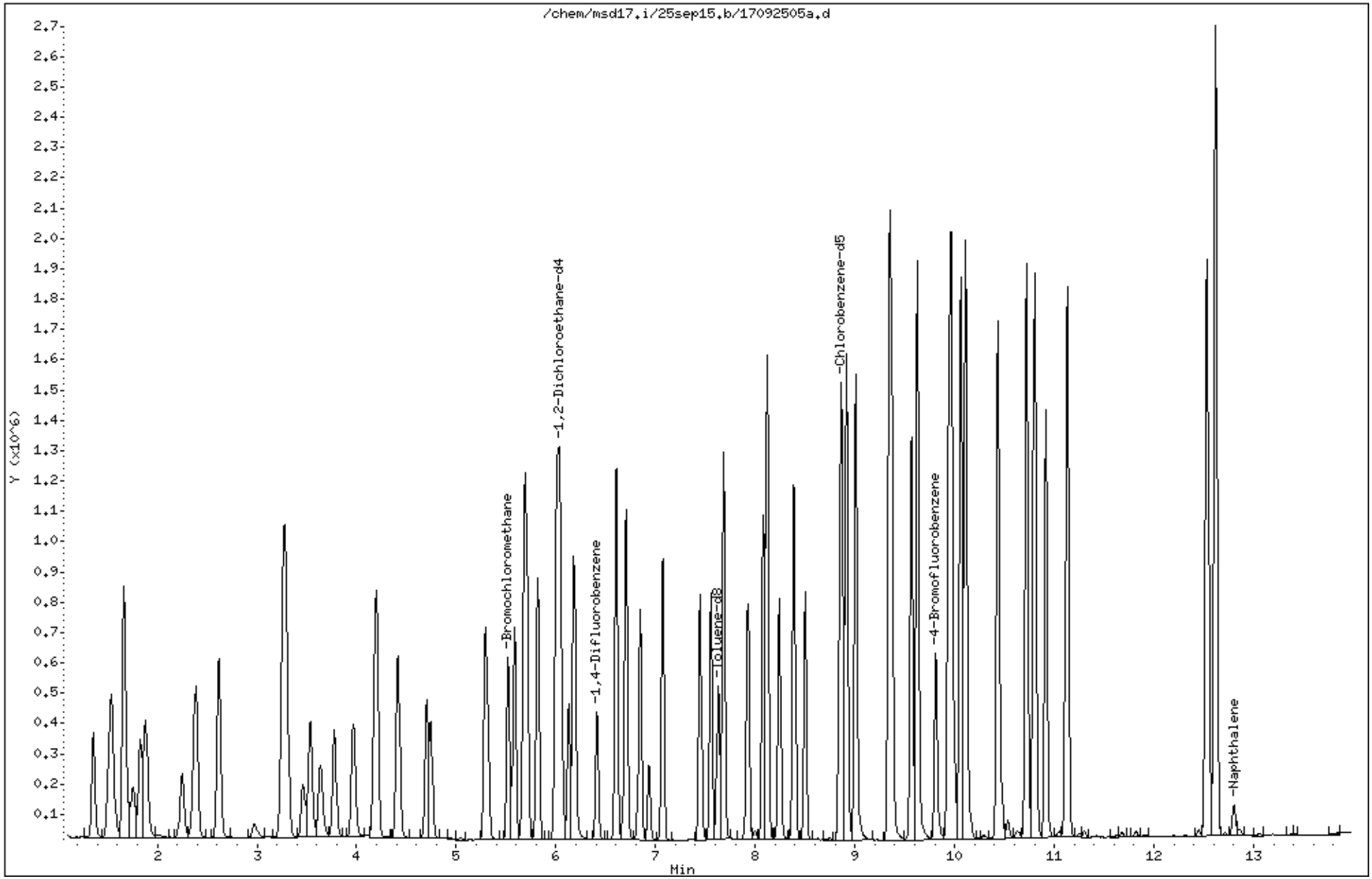
Instrument: msd17.i

Sample Info: 100ml #2736-188A

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092414.d
Lab Smp Id: ICAL Level 1
Inj Date : 24-SEP-2015 15:25
Operator : cb Inst ID: msd17.i
Smp Info : 10ml 2736-262
Misc Info : 1.0ppbv(20ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921c.m
Meth Date : 25-Sep-2015 15:58 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 15:25 Cal File: 17092414.d
Als bottle: 7 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Naphcrv.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.521	5.521 (1.000)	130	108101	25.0000		80.00- 120.00	100.00
5.521	5.521 (1.000)	128	81728			46.54- 106.54	75.60
5.521	5.521 (1.000)	49	116938			83.83- 143.83	108.17
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.409	6.409 (1.000)	114	431642	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	64297			0.00- 44.86	14.90
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	398600	25.0000		80.00- 120.00	100.00
8.866	8.866 (1.000)	82	214942			23.93- 83.93	53.92
228 Naphthalene					CAS #: 91-20-3		
12.877	12.877 (1.452)	128	28373	1.00000	1.000	0.00- 30.00	100.00(a)
12.877	12.877 (1.452)	127	4399			0.00- 30.00	15.50

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092414.d
Lab Smp Id: ICAL Level 1
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921c.m
Misc Info: 1.0ppbv(20ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 08:49
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	102227	61336	143118	108101	5.75
123 1,4-Difluorobenze	417792	250675	584909	431642	3.32
163 Chlorobenzene-d5	379305	227583	531027	398600	5.09

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.52	-0.13
123 1,4-Difluorobenze	6.42	6.09	6.75	6.41	-0.11
163 Chlorobenzene-d5	8.86	8.53	9.19	8.87	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092414.d

Page 1

Date : 24-SEP-2015 15:25

Client ID:

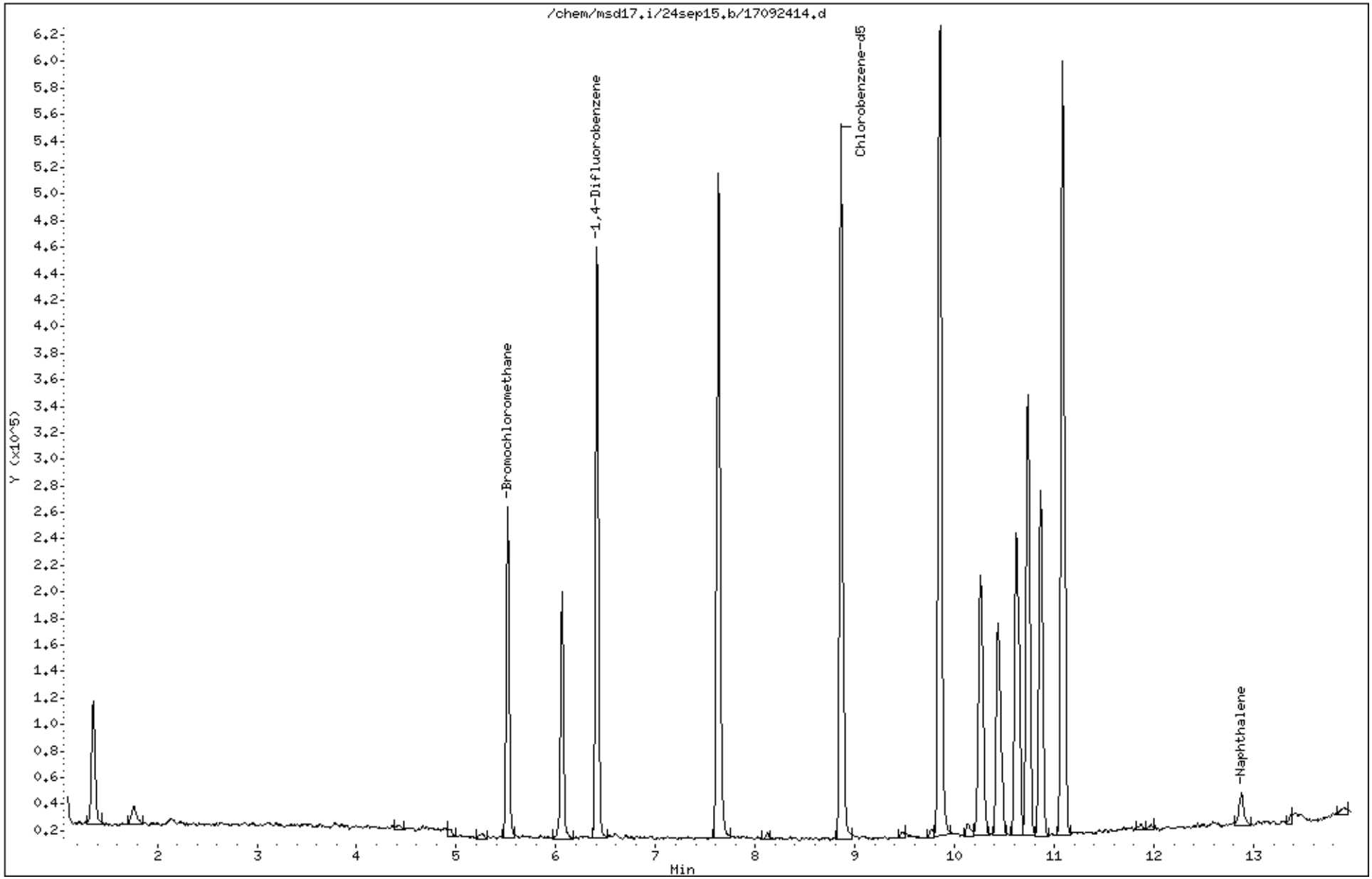
Instrument: msd17.i

Sample Info: 10ml 2736-262

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/21sep15a.b/17092118.d
Lab Smp Id: ICAL Level #2
Inj Date : 21-SEP-2015 20:32
Operator : gh Inst ID: msd17.i
Smp Info : 50ml 2736-257
Misc Info : 0.5ppbv(2.0ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/21sep15a.b/175q0921a.m
Meth Date : 25-Sep-2015 15:15 cbond Quant Type: ISTD
Cal Date : 21-SEP-2015 20:32 Cal File: 17092118.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12low.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.528	5.528 (1.000)	130	119787	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	88762			46.54- 106.54	74.10
5.528	5.528 (1.000)	49	129732			83.83- 143.83	108.30
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.416	6.416 (1.000)	114	472226	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	73687			0.00- 44.86	15.60
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.866	8.866 (1.000)	117	424323	25.0000		80.00- 120.00	100.00
8.866	8.866 (1.000)	82	219044			23.93- 83.93	51.62
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.065	6.065 (1.097)	65	152512	25.0000	23.628	80.00- 120.00	100.00
6.065	6.065 (1.097)	67	80491			25.51- 85.51	52.78

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.189)	98	477701	25.0000	24.535	80.00- 120.00	100.00
7.627	7.627 (1.189)	70	50338			0.00- 40.39	10.54
7.634	7.634 (1.190)	100	301382			33.97- 93.97	63.09
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.854	9.854 (1.111)	174	261875	25.0000	24.172	80.00- 120.00	100.00
9.847	9.847 (1.111)	95	294044			79.64- 139.64	112.28
9.854	9.854 (1.111)	176	251513			65.80- 125.80	96.04
11 Freon 12					CAS #: 75-71-8		
1.552	1.552 (0.281)	85	8892	0.50000	0.4612	80.00- 120.00	100.00(a)
1.552	1.552 (0.281)	87	2857			2.33- 62.33	32.13
15 Freon 114					CAS #: 76-14-2		
1.667	1.667 (0.302)	135	6435	0.50000	0.4598	80.00- 120.00	100.00(a)
1.667	1.667 (0.302)	137	1947			2.02- 62.02	30.26
25 Vinyl Chloride					CAS #: 75-01-4		
1.868	1.868 (0.338)	62	4104	0.50000	0.5382	80.00- 120.00	100.00
1.860	1.860 (0.337)	64	690			2.69- 62.69	16.81
26 1,3-Butadiene					CAS #: 106-99-0		
1.903	1.903 (0.344)	54	2625	0.50000	0.4962	80.00- 120.00	100.00(a)
1.911	1.911 (0.346)	39	4020			63.95- 123.95	153.14
29 Bromomethane					CAS #: 74-83-9		
2.262	2.262 (0.409)	94	3246	0.50000	0.4806	80.00- 120.00	100.00(a)
2.254	2.254 (0.408)	96	3167			63.69- 123.69	97.57
35 Freon 11					CAS #: 75-69-4		
2.627	2.627 (0.475)	101	9821	0.50000	0.4947	80.00- 120.00	100.00(a)
2.634	2.634 (0.476)	103	5808			35.20- 95.20	59.14
49 Freon 113					CAS #: 76-13-1		
3.279	3.279 (0.593)	151	7422	0.50000	0.5247	80.00- 120.00	100.00
3.286	3.286 (0.594)	153	4714			33.72- 93.72	63.51
3.286	3.286 (0.594)	101	8563			95.23- 155.23	115.37
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.314	3.314 (0.600)	98	2763	0.50000	0.5299	80.00- 120.00	100.00
3.314	3.314 (0.600)	96	4144			130.14- 190.14	149.98
3.314	3.314 (0.600)	61	6402			218.16- 278.16	231.70
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.203	4.203 (0.760)	73	10450	0.50000	0.4777	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether (continued)							
4.196	4.196 (0.759)	57	3177			0.00- 51.46	30.40
4.203	4.203 (0.760)	41	1696			0.00- 49.34	16.23
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.217	4.217 (0.763)	98	2054	0.50000	0.3953	80.00- 120.00	100.00(a)
4.217	4.217 (0.763)	61	5244			184.16- 244.16	255.31
4.217	4.217 (0.763)	96	3905			127.84- 187.84	190.12
78 Hexane					CAS #: 110-54-3		
4.432	4.432 (0.802)	57	5940	0.50000	0.5027	80.00- 120.00	100.00
4.432	4.432 (0.802)	43	3662			27.64- 87.64	61.65
4.432	4.432 (0.802)	86	1349			0.00- 46.92	22.71
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.711	4.711 (0.852)	63	6258	0.50000	0.4452	80.00- 120.00	100.00(a)
4.718	4.718 (0.854)	65	2683			2.04- 62.04	42.87
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.299	5.299 (0.959)	98	2813	0.50000	0.5020	80.00- 120.00	100.00
5.299	5.299 (0.959)	96	4603			124.38- 184.38	163.63
5.299	5.299 (0.959)	61	5539			162.07- 222.07	196.91
99 Tetrahydrofuran					CAS #: 109-99-9		
5.535	5.535 (1.001)	42	5079	0.50000	0.6582	80.00- 120.00	100.00
5.535	5.535 (1.001)	71	1481			17.72- 77.72	29.16
5.542	5.542 (1.003)	72	1651			20.99- 80.99	32.51
100 Chloroform					CAS #: 67-66-3		
5.592	5.592 (1.012)	83	9108	0.50000	0.5287	80.00- 120.00	100.00
5.585	5.585 (1.010)	85	5415			34.67- 94.67	59.45
102 Cyclohexane					CAS #: 110-82-7		
5.685	5.685 (1.028)	84	5331	0.50000	0.4983	80.00- 120.00	100.00(a)
5.685	5.685 (1.028)	56	5933			77.09- 137.09	111.29
5.678	5.678 (1.027)	41	3245			25.87- 85.87	60.87
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.707	5.707 (1.032)	97	8860	0.50000	0.5188	80.00- 120.00	100.00
5.707	5.707 (1.032)	99	6271			34.33- 94.33	70.78
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.822	5.822 (1.053)	119	8194	0.50000	0.4802	80.00- 120.00	100.00(a)
5.822	5.822 (1.053)	117	8846			74.90- 134.90	107.96
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.088)	57	18284	0.50000	0.5061	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
113 2,2,4-Trimethylpentane (continued)							
6.015	6.015 (1.088)	56	5768			1.80- 61.80	31.55
6.008	6.008 (1.087)	41	4530			0.00- 55.83	24.78
116 Benzene					CAS #: 71-43-2		
6.044	6.044 (0.942)	78	12400	0.50000	0.5184	80.00- 120.00	100.00
6.044	6.044 (0.942)	77	4008			0.00- 54.08	32.32
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.137	6.137 (0.956)	62	5425	0.50000	0.5191	80.00- 120.00	100.00
6.137	6.137 (0.956)	64	1766			2.16- 62.16	32.55
121 Heptane					CAS #: 142-82-5		
6.187	6.187 (0.964)	71	3949	0.50000	0.4769	80.00- 120.00	100.00(a)
6.187	6.187 (0.964)	43	5696			110.94- 170.94	144.24
6.187	6.187 (0.964)	57	3818			53.72- 113.72	96.68
125 Trichloroethene					CAS #: 79-01-6		
6.609	6.609 (1.030)	95	6200	0.50000	0.5493	80.00- 120.00	100.00
6.609	6.609 (1.030)	130	6453			74.97- 134.97	104.08
6.609	6.609 (1.030)	97	3981			35.33- 95.33	64.21
127 Methylcyclohexane					CAS #: 108-87-2		
6.710	6.710 (1.214)	83	7419	0.50000	0.5026	80.00- 120.00	100.00(a)
6.703	6.703 (1.212)	98	3677			16.41- 76.41	49.56
6.710	6.710 (1.214)	55	6217			40.41- 100.41	83.80
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.846	6.846 (1.067)	63	3849	0.50000	0.4494	80.00- 120.00	100.00(a)
6.846	6.846 (1.067)	62	2762			38.78- 98.78	71.76
6.846	6.846 (1.067)	41	2761			20.16- 80.16	71.73
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.103)	83	8526	0.50000	0.4812	80.00- 120.00	100.00(a)
7.075	7.075 (1.103)	85	5297			34.16- 94.16	62.13
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.448	7.448 (1.161)	75	6992	0.50000	0.4698	80.00- 120.00	100.00(a)
7.448	7.448 (1.161)	77	2679			1.57- 61.57	38.32
7.448	7.448 (1.161)	39	4656			13.98- 73.98	66.59
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.562	7.562 (1.179)	58	2676	0.50000	0.4645	80.00- 120.00	100.00(a)
7.562	7.562 (1.179)	43	6785			205.93- 265.93	253.55
7.562	7.562 (1.179)	85	1492			18.04- 78.04	55.75

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.198)	91	15261	0.50000	0.5087	80.00- 120.00	100.00
7.684	7.684 (1.198)	92	7978			27.24- 87.24	52.28
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.927	7.927 (0.894)	75	6497	0.50000	0.4930	80.00- 120.00	100.00(a)
7.927	7.927 (0.894)	77	2969			1.57- 61.57	45.70
7.927	7.927 (0.894)	39	3110			13.98- 73.98	47.87
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.085	8.085 (0.912)	97	5242	0.50000	0.5041	80.00- 120.00	100.00
8.085	8.085 (0.912)	99	3059			31.05- 91.05	58.36
8.085	8.085 (0.912)	83	4662			58.29- 118.29	88.94
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.916)	166	7790	0.50000	0.5105	80.00- 120.00	100.00
8.121	8.121 (0.916)	129	6452			42.46- 102.46	82.82
8.121	8.121 (0.916)	131	5470			40.24- 100.24	70.22
160 Dibromochloromethane					CAS #: 124-48-1		
8.400	8.400 (0.947)	129	9936	0.50000	0.5118	80.00- 120.00	100.00
8.400	8.400 (0.947)	127	7557			47.28- 107.28	76.06
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.515	8.515 (0.960)	107	8048	0.50000	0.4896	80.00- 120.00	100.00(a)
8.515	8.515 (0.960)	109	6912			66.45- 126.45	85.88
165 Chlorobenzene					CAS #: 108-90-7		
8.887	8.887 (1.002)	112	11253	0.50000	0.4728	80.00- 120.00	100.00(a)
8.887	8.887 (1.002)	114	3039			2.06- 62.06	27.01
8.880	8.880 (1.002)	77	10779			26.47- 86.47	95.79
167 Ethyl Benzene					CAS #: 100-41-4		
8.937	8.937 (1.008)	106	4961	0.50000	0.4280	80.00- 120.00	100.00(a)
8.937	8.937 (1.008)	91	17386			289.94- 349.94	350.45
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	6303	0.50000	0.4380	80.00- 120.00	100.00(a)
9.031	9.031 (1.019)	91	14105			167.83- 227.83	223.78
171 o-Xylene					CAS #: 95-47-6		
9.374	9.374 (1.057)	106	5743	0.50000	0.4301	80.00- 120.00	100.00(a)
9.374	9.374 (1.057)	91	14288			181.11- 241.11	248.79
172 Styrene					CAS #: 100-42-5		
9.396	9.396 (1.060)	104	9639	0.50000	0.4232	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
172 Styrene (continued)							
9.389	9.389 (1.059)	78	5557			17.79- 77.79	57.65
174 Bromoform					CAS #: 75-25-2		
9.596	9.596 (1.082)	173	8779	0.50000	0.4479	80.00- 120.00	100.00(a)
9.596	9.596 (1.082)	171	4604			21.45- 81.45	52.44
175 Cumene					CAS #: 98-82-8		
9.661	9.661 (1.090)	105	20031	0.50000	0.4696	80.00- 120.00	100.00(a)
9.661	9.661 (1.090)	120	5207			0.00- 57.47	25.99
9.661	9.661 (1.090)	51	2211			0.00- 38.62	11.04
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.976	9.976 (1.125)	83	11322	0.50000	0.5044	80.00- 120.00	100.00
9.983	9.983 (1.126)	85	7070			34.77- 94.77	62.44
182 Propylbenzene					CAS #: 103-65-1		
10.005	10.005 (1.128)	91	24161	0.50000	0.4718	80.00- 120.00	100.00(a)
10.005	10.005 (1.128)	120	5582			0.00- 53.65	23.10
10.005	10.005 (1.128)	105	1053			0.00- 33.57	4.36
188 4-Ethyltoluene					CAS #: 622-96-8		
10.098	10.098 (1.139)	120	6799	0.50000	0.5013	80.00- 120.00	100.00
10.098	10.098 (1.139)	105	20088			292.89- 352.89	295.46
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.148	10.148 (1.145)	120	7499	0.50000	0.4209	80.00- 120.00	100.00(a)
10.148	10.148 (1.145)	105	16680			175.25- 235.25	222.43
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.478	10.478 (1.182)	120	7136	0.50000	0.4461	80.00- 120.00	100.00(a)
10.478	10.478 (1.182)	105	15017			183.76- 243.76	210.44
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.771	10.771 (1.215)	146	12056	0.50000	0.4686	80.00- 120.00	100.00(a)
10.771	10.771 (1.215)	148	8744			33.69- 93.69	72.53
10.771	10.771 (1.215)	111	4509			8.12- 68.12	37.40
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.850	10.850 (1.224)	146	10924	0.50000	0.4291	80.00- 120.00	100.00(a)
10.850	10.850 (1.224)	148	8011			33.86- 93.86	73.33
10.850	10.850 (1.224)	111	5087			6.71- 66.71	46.57
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.965	10.965 (1.237)	91	13694	0.50000	0.4524	80.00- 120.00	100.00(a)
10.972	10.972 (1.238)	126	3257			0.00- 51.95	23.78

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.180	11.180 (1.261)	146	11176	0.50000	0.4586	80.00- 120.00	100.00(a)
11.180	11.180 (1.261)	148	6958			33.90- 93.90	62.26
11.180	11.180 (1.261)	111	4814			8.86- 68.86	43.07

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092118.d
Lab Smp Id: ICAL Level #2
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msd17.i/21sep15a.b/175q0921a.m
Misc Info: 0.5ppbv(2.0ppbv)

Calibration Date: 21-SEP-2015
Calibration Time: 22:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	116527	69916	163138	119787	2.80
123 1,4-Difluorobenze	475185	285111	665259	472226	-0.62
163 Chlorobenzene-d5	418099	250859	585339	424323	1.49

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/21sep15a.b/17092118.d

Date : 21-SEP-2015 20:32

Client ID:

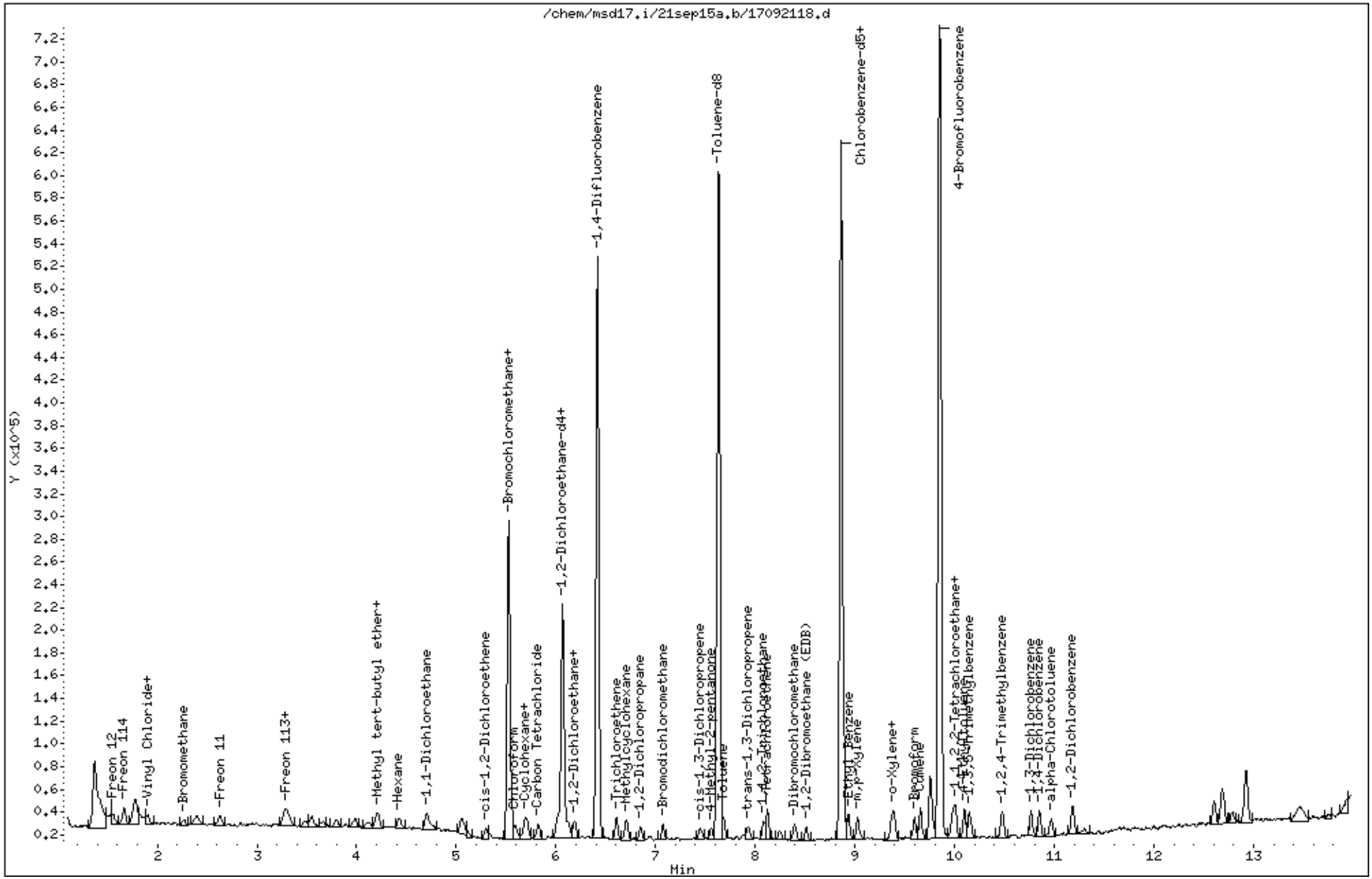
Sample Info: 50ml 2736-257

Column phase: RTX-624

Instrument: msd17.i

Operator: gh

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092411.d
Lab Smp Id: ICAL Level 3
Inj Date : 24-SEP-2015 13:15
Operator : cb Inst ID: msd17.i
Smp Info : 200ml 2736-198
Misc Info : 2.0ppbv(2.0ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921b.m
Meth Date : 25-Sep-2015 15:30 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 13:15 Cal File: 17092411.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT1.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.535	5.535 (1.000)	130	99380	25.0000		80.00- 120.00	100.00
5.535	5.535 (1.000)	128	78100			46.54- 106.54	78.59
5.528	5.528 (1.000)	49	111228			83.83- 143.83	111.92
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.416	6.416 (1.000)	114	416767	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	63772			0.00- 44.86	15.30
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	377917	25.0000		80.00- 120.00	100.00
8.866	8.866 (1.000)	82	201858			23.93- 83.93	53.41
6 Freon 143a					CAS #: 420-46-2		
1.438	1.438 (0.260)	65	4445	2.00000	2.000	0.00- 0.00	100.00
1.438	1.438 (0.260)	69	12640			0.00- 0.00	284.36
1.438	1.438 (0.260)	64	979			0.00- 0.00	22.02

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
7 Freon 134a					CAS #: 811-97-2		
1.488	1.488 (0.269)	83	12236	2.00000	2.000	0.00- 0.00	100.00
1.488	1.488 (0.269)	69	11226			0.00- 0.00	91.75
1.488	1.488 (0.269)	63	1281			0.00- 0.00	10.47
10 1,1-Difluoroethane					CAS #: 75-37-6		
1.545	1.545 (0.279)	65	6929	2.00000	2.000	0.00- 0.00	100.00
1.552	1.552 (0.280)	51	15678			0.00- 0.00	226.27
1.538	1.538 (0.278)	47	3412			0.00- 0.00	49.24
13 Chlorodifluoromethane					CAS #: 75-45-6		
1.588	1.588 (0.287)	67	3430	2.00000	2.000	0.00- 0.00	100.00
1.588	1.588 (0.287)	51	16512			0.00- 0.00	481.40
1.595	1.595 (0.288)	85	216			0.00- 0.00	6.30
16 Freon 142b					CAS #: 75-68-3		
1.724	1.724 (0.312)	65	26100	2.00000	2.000	0.00- 0.00	100.00
1.717	1.717 (0.310)	45	7113			0.00- 0.00	27.25
37 Dichlorofluoromethane					CAS #: 75-43-4		
2.655	2.655 (0.480)	67	30984	2.00000	2.000	0.00- 0.00	100.00
2.655	2.655 (0.480)	69	10229			0.00- 0.00	33.01
3.128	3.128 (0.565)	35	942			0.00- 0.00	3.04
48 Freon 123					CAS #: 306-83-2		
3.228	3.228 (0.583)	83	33009	2.00000	2.000	0.00- 0.00	100.00
3.228	3.228 (0.583)	133	6183			0.00- 0.00	18.73
3.228	3.228 (0.583)	85	22201			0.00- 0.00	67.26
59 Cyclopentene					CAS #: 142-29-0		
3.809	3.809 (0.688)	67	22074	2.00000	2.000	0.00- 0.00	100.00
3.809	3.809 (0.688)	68	8681			0.00- 0.00	39.33
3.809	3.809 (0.688)	53	4554			0.00- 0.00	20.63
84 1-Propanol					CAS #: 71-23-8		
4.862	4.862 (0.878)	42	3361	2.00000	2.000	0.00- 0.00	100.00
4.862	4.862 (0.878)	59	2956			0.00- 0.00	87.95
4.862	4.862 (0.878)	41	1895			0.00- 0.00	56.38
90 2,2-Dichloropropane					CAS #: 594-20-7		
5.256	5.256 (0.950)	77	22639	2.00000	2.000	0.00- 0.00	100.00
5.256	5.256 (0.950)	79	6856			0.00- 0.00	30.28
5.256	5.256 (0.950)	97	4746			0.00- 0.00	20.96
107 1,1-Dichloropropene					CAS #: 563-58-6		
5.857	5.857 (0.913)	110	6207	2.00000	2.000	0.00- 0.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE		RATIO
107 1,1-Dichloropropene (continued)								
5.857	5.857 (0.913)	75	16423			0.00-	0.00	264.59
115 Isobutanol					CAS #: 78-83-1			
6.015	6.015 (1.087)	39	4790	2.00000		0.00-	0.00	100.00(a)
6.015	6.015 (1.087)	41	7126			0.00-	0.00	148.77
6.015	6.015 (1.087)	43	9492			0.00-	0.00	198.16
124 n-Butanol					CAS #: 71-36-3			
6.588	6.588 (1.027)	56	18256	2.00000	2.000	0.00-	0.00	100.00
6.588	6.588 (1.027)	41	10583			0.00-	0.00	57.97
6.588	6.588 (1.027)	43	11725			0.00-	0.00	64.23
157 1,3-Dichloropropane					CAS #: 142-28-9			
8.228	8.228 (1.282)	76	25428	2.00000	2.000	0.00-	0.00	100.00
8.228	8.228 (1.282)	41	13872			0.00-	0.00	54.55
8.228	8.228 (1.282)	78	8548			0.00-	0.00	33.62
159 Butyl Acetate					CAS #: 123-86-4			
8.307	8.307 (1.295)	56	6457	2.00000	2.000	0.00-	0.00	100.00
8.307	8.307 (1.295)	73	2961			0.00-	0.00	45.86
8.307	8.307 (1.295)	43	12372			0.00-	0.00	191.61
168 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6			
8.952	8.952 (1.010)	131	22941	2.00000	2.000	0.00-	0.00	100.00
8.952	8.952 (1.010)	117	18897			0.00-	0.00	82.37
8.952	8.952 (1.010)	95	7754			0.00-	0.00	33.80
176 Cyclohexanone					CAS #: 108-94-1			
9.833	9.833 (1.109)	55	19692	2.00000	2.000	0.00-	0.00	100.00
9.833	9.833 (1.109)	98	9095			0.00-	0.00	46.19
9.833	9.833 (1.109)	42	11968			0.00-	0.00	60.78
180 Bromobenzene					CAS #: 108-86-1			
9.983	9.983 (1.126)	156	27344	2.00000	2.000	0.00-	0.00	100.00
9.983	9.983 (1.126)	158	26315			0.00-	0.00	96.24
9.983	9.983 (1.126)	77	40119			0.00-	0.00	146.72
185 1,2,3-Trichloropropane					CAS #: 96-18-4			
10.033	10.033 (1.132)	110	12550	2.00000	2.000	0.00-	0.00	100.00
10.033	10.033 (1.132)	75	36263			0.00-	0.00	288.95
10.033	10.033 (1.132)	61	8689			0.00-	0.00	69.24
189 2-Chlorotoluene					CAS #: 95-49-8			
10.127	10.127 (1.142)	126	19961	2.00000	2.000	0.00-	0.00	100.00
10.127	10.127 (1.142)	91	54439			0.00-	0.00	272.73

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE		RATIO
189 2-Chlorotoluene (continued)								
10.127	10.127 (1.142)	65	4962			0.00-	0.00	24.86
191 4-Chlorotoluene					CAS #: 106-43-4			
10.220	10.220 (1.153)	126	20109	2.00000	2.000	0.00-	0.00	100.00
10.220	10.220 (1.153)	91	57254			0.00-	0.00	284.72
10.220	10.220 (1.153)	63	6919			0.00-	0.00	34.41
195 tert-Butylbenzene					CAS #: 98-06-6			
10.420	10.420 (1.175)	119	59567	2.00000	2.000	0.00-	0.00	100.00
10.427	10.427 (1.176)	134	14609			0.00-	0.00	24.53
10.420	10.420 (1.175)	91	40354			0.00-	0.00	67.75
197 Pentachloroethane					CAS #: 76-01-7			
10.499	10.499 (1.184)	167	15059	2.00000	2.000	0.00-	0.00	100.00
10.499	10.499 (1.184)	117	15468			0.00-	0.00	102.72
10.499	10.499 (1.184)	169	8201			0.00-	0.00	54.46
203 sec-Butylbenzene					CAS #: 135-98-8			
10.606	10.606 (1.196)	134	18770	2.00000	2.000	0.00-	0.00	100.00
10.606	10.606 (1.196)	105	90393			0.00-	0.00	481.58
10.606	10.606 (1.196)	91	13885			0.00-	0.00	73.97
207 p-Cymene					CAS #: 99-87-6			
10.721	10.721 (1.209)	119	78741	2.00000	2.000	0.00-	0.00	100.00
10.721	10.721 (1.209)	134	19606			0.00-	0.00	24.90
10.721	10.721 (1.209)	91	18110			0.00-	0.00	23.00
210 1,2,3-Trimethylbenzene					CAS #: 526-73-8			
10.850	10.850 (1.224)	120	30241	2.00000	2.000	0.00-	0.00	100.00
10.850	10.850 (1.224)	105	68428			0.00-	0.00	226.28
10.850	10.850 (1.224)	77	9402			0.00-	0.00	31.09
213 Butylbenzene					CAS #: 104-51-8			
11.072	11.072 (1.249)	134	21499	2.00000	2.000	0.00-	0.00	100.00
11.072	11.072 (1.249)	91	90253			0.00-	0.00	419.80
11.072	11.072 (1.249)	92	45042			0.00-	0.00	209.51
221 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8			
11.867	11.867 (1.339)	157	30562	2.00000	2.000	0.00-	0.00	100.00
11.867	11.867 (1.339)	75	25767			0.00-	0.00	84.31
11.867	11.867 (1.339)	155	24286			0.00-	0.00	79.46

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092411.d
Lab Smp Id: ICAL Level 3
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921b.m
Misc Info: 2.0ppbv(2.0ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 08:49
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	102227	61336	143118	99380	-2.78
123 1,4-Difluorobenze	417792	250675	584909	416767	-0.25
163 Chlorobenzene-d5	379305	227583	531027	377917	-0.37

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.54	0.13
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.87	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092411.d

Date : 24-SEP-2015 13:15

Client ID:

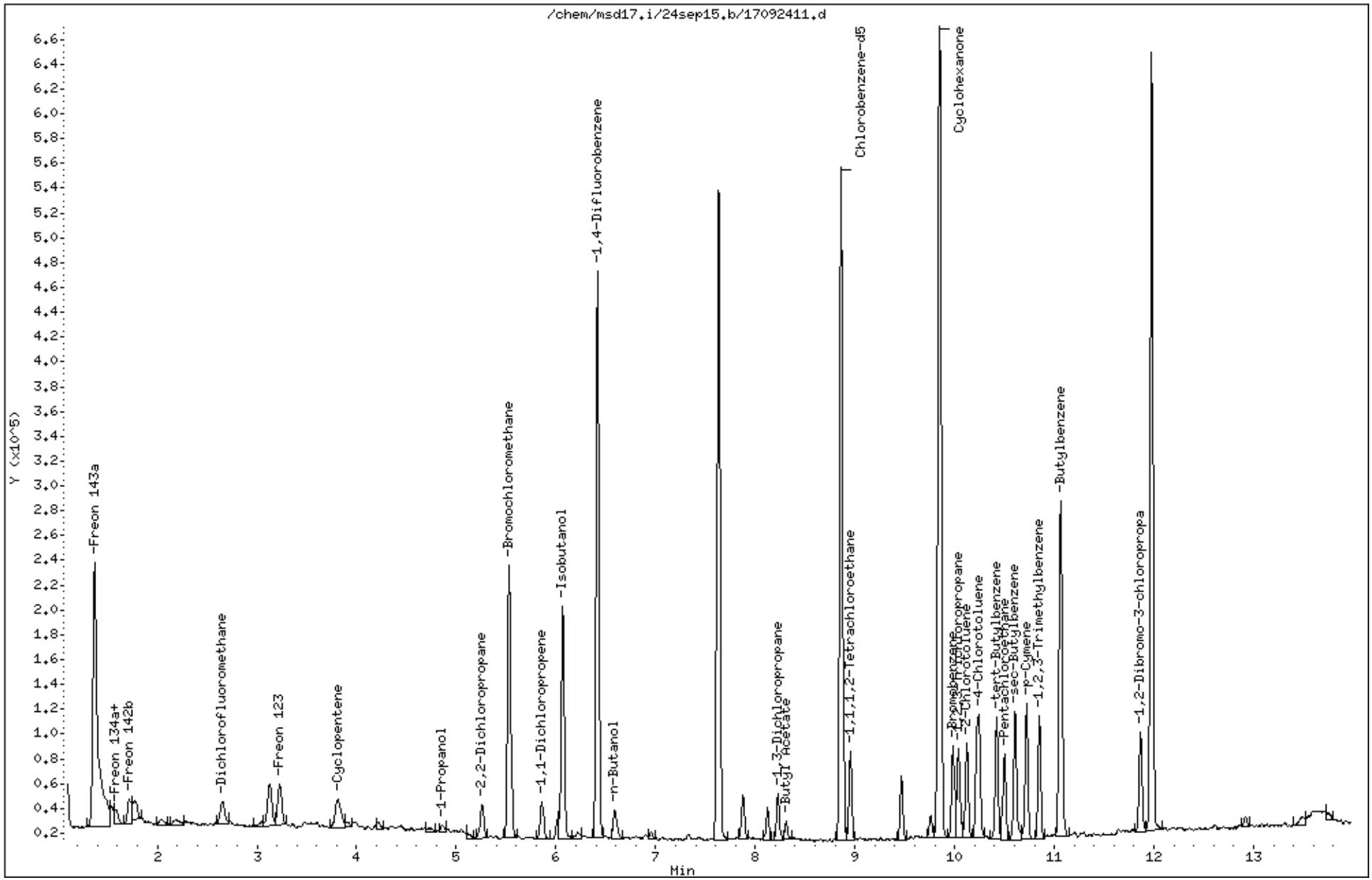
Sample Info: 200ml 2736-198

Column phase: RTX-624

Instrument: msd17.i

Operator: cb

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092408.d
Lab Smp Id: ICAL Level 3
Inj Date : 24-SEP-2015 12:00
Operator : cb Inst ID: msd17.i
Smp Info : 80ml 2736-223
Misc Info : 2.0ppbv(5.0ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921b.m
Meth Date : 25-Sep-2015 15:50 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 13:15 Cal File: 17092411.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Combo.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.528	5.528 (1.000)	130	99095	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	77820			46.54- 106.54	78.53
5.528	5.528 (1.000)	49	116853			83.83- 143.83	117.92
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.416	6.416 (1.000)	114	410857	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	62533			0.00- 44.86	15.22
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.852	8.852 (1.000)	117	363548	25.0000		80.00- 120.00	100.00
8.852	8.852 (1.000)	82	192348			23.93- 83.93	52.91
32 Vinyl Bromide					CAS #: 593-60-2		
2.591	2.591 (0.469)	106	12882	2.00000	2.050	0.00- 0.00	100.00
2.584	2.584 (0.467)	108	13210			0.00- 0.00	102.55

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
94 Ethyl Acetate					CAS #: 141-78-6		
5.342	5.342 (0.966)	70	1981	2.00000	2.227	0.00- 0.00	100.00
5.342	5.342 (0.966)	61	2202			0.00- 0.00	111.16
5.342	5.342 (0.966)	45	2853			0.00- 0.00	144.02
63 Acetonitrile					CAS #: 75-05-8		
3.916	3.916 (0.708)	40	8250	2.00000	2.484	0.00- 0.00	100.00
3.909	3.909 (0.707)	41	16155			0.00- 0.00	195.82
3.909	3.909 (0.707)	38	2062			0.00- 0.00	24.99
64 Cyclopentane					CAS #: 287-92-3		
3.916	3.916 (0.708)	70	7510	2.00000	2.000	0.00- 0.00	100.00
3.916	3.916 (0.708)	55	9772			0.00- 0.00	130.12
74 Acrylonitrile					CAS #: 107-13-1		
4.332	4.332 (0.784)	52	9338	2.00000	2.141	0.00- 0.00	100.00
4.332	4.332 (0.784)	53	12037			0.00- 0.00	128.90
134 Methyl Methacrylate					CAS #: 80-62-6		
6.903	6.903 (0.780)	41	15876	2.00000	1.894	0.00- 0.00	100.00(a)
6.903	6.903 (0.780)	69	13829			0.00- 0.00	87.11
6.903	6.903 (0.780)	100	4934			0.00- 0.00	31.08
137 Dibromomethane					CAS #: 74-95-3		
6.961	6.961 (0.786)	174	15805	2.00000	1.734	0.00- 0.00	100.00(a)
6.953	6.953 (0.786)	93	15604			0.00- 0.00	98.73
6.953	6.953 (0.786)	95	13678			0.00- 0.00	86.54
173 2-Heptanone					CAS #: 110-43-0		
6.180	6.180 (1.118)	58	699	2.00000	2.536	0.00- 0.00	100.00
6.187	6.187 (1.119)	43	17712			0.00- 0.00	2533.91
34 Pentane					CAS #: 109-66-0		
2.706	2.706 (0.489)	43	18875	2.00000	1.914	0.00- 0.00	100.00(a)
2.713	2.713 (0.491)	57	3561			0.00- 0.00	18.87
2.706	2.706 (0.489)	72	2063			0.00- 0.00	10.93
148 Octane					CAS #: 111-65-9		
7.684	7.684 (1.198)	57	11156	2.00000	1.943	0.00- 0.00	100.00(a)
7.684	7.684 (1.198)	85	12574			0.00- 0.00	112.71
7.684	7.684 (1.198)	43	23365			0.00- 0.00	209.44
170 Nonane					CAS #: 111-84-2		
8.930	8.930 (1.009)	43	23424	2.00000	1.817	0.00- 0.00	100.00(a)
8.930	8.930 (1.009)	57	23629			0.00- 0.00	100.88
8.930	8.930 (1.009)	85	9610			0.00- 0.00	41.03

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
187 Decane					CAS #: 124-18-5		
10.012	10.012 (1.131)	57	27068	2.00000	1.636	0.00- 0.00	100.00(a)
10.019	10.019 (1.132)	71	12935			0.00- 0.00	47.79
10.019	10.019 (1.132)	142	1809			0.00- 0.00	6.68
215 Undecane					CAS #: 1120-21-4		
11.001	11.001 (1.243)	57	28773	2.00000	1.558	0.00- 0.00	100.00(a)
11.001	11.001 (1.243)	43	23484			0.00- 0.00	81.62
225 Dodecane					CAS #: 112-40-3		
11.917	11.917 (1.346)	57	22653	2.00000	1.386	0.00- 0.00	100.00(a)
11.917	11.917 (1.346)	43	18113			0.00- 0.00	79.96

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092408.d
Lab Smp Id: ICAL Level 3
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921b.m
Misc Info: 2.0ppbv(5.0ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 08:49
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	102227	61336	143118	99095	-3.06
123 1,4-Difluorobenze	417792	250675	584909	410857	-1.66
163 Chlorobenzene-d5	379305	227583	531027	363548	-4.15

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.85	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092408.d

Date : 24-SEP-2015 12:00

Client ID:

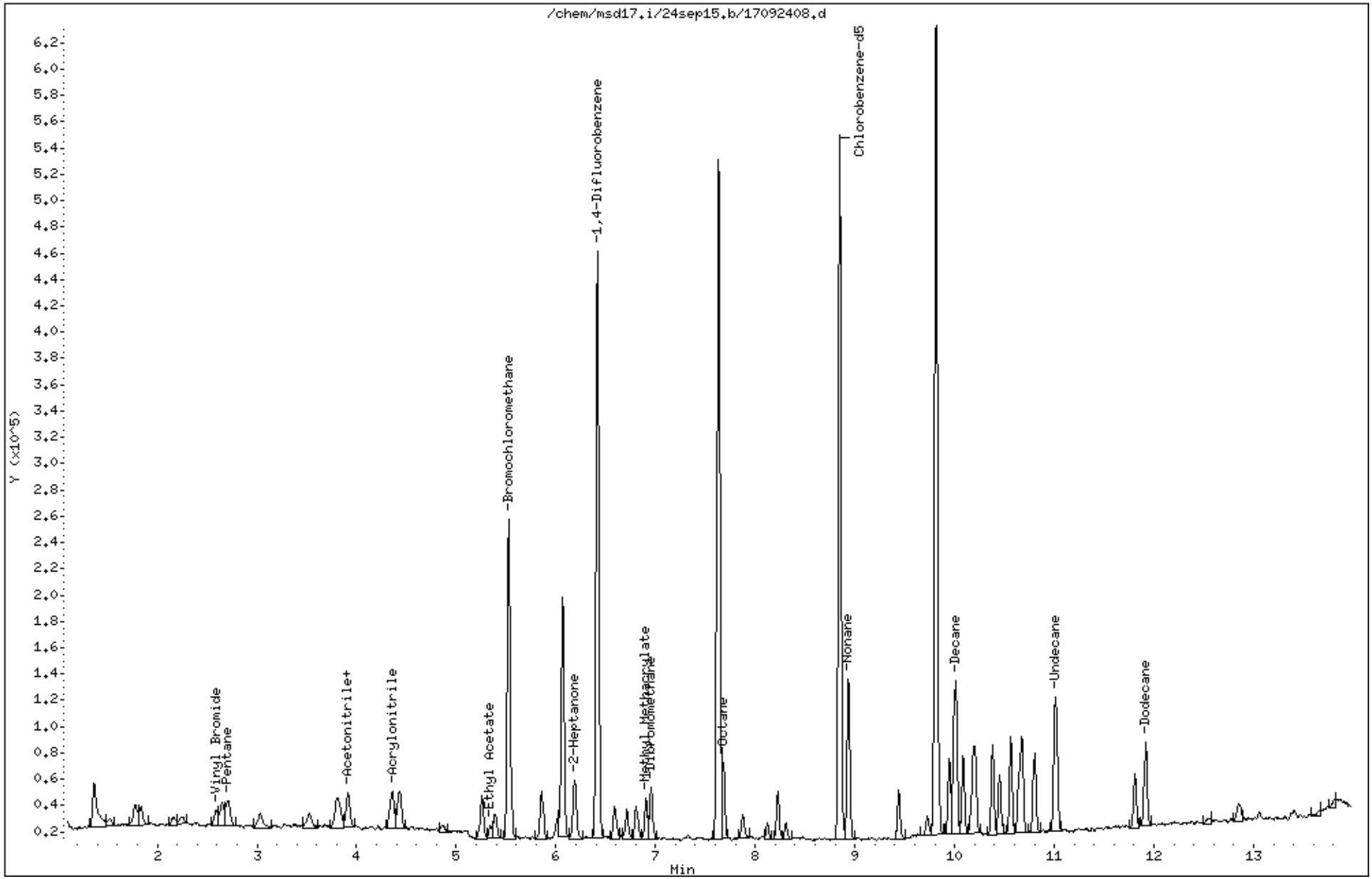
Sample Info: 80ml 2736-223

Column phase: RTX-624

Instrument: msd17.i

Operator: cb

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092405.d
Lab Smp Id: ICAL Level 3
Inj Date : 24-SEP-2015 10:29
Operator : cb Inst ID: msd17.i
Smp Info : 200ml 2736-111
Misc Info : 2.0ppbv(2.0ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921b.m
Meth Date : 25-Sep-2015 15:28 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 10:29 Cal File: 17092405.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 123TCB.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.535	5.535 (1.000)	130	101626	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	77625			46.54- 106.54	76.38
5.528	5.528 (1.000)	49	113831			83.83- 143.83	112.01
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.416	6.416 (1.000)	114	419310	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	63769			0.00- 44.86	15.21
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	379484	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	203080			23.93- 83.93	53.51
229 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
13.135	13.135 (1.482)	180	24569	2.00000	2.000	0.00- 0.00	100.00
13.135	13.135 (1.482)	182	24328			0.00- 0.00	99.02
13.135	13.135 (1.482)	145	7754			0.00- 0.00	31.56

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092405.d
Lab Smp Id: ICAL Level 3
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921b.m
Misc Info: 2.0ppbv(2.0ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 08:49
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	102227	61336	143118	101626	-0.59
123 1,4-Difluorobenze	417792	250675	584909	419310	0.36
163 Chlorobenzene-d5	379305	227583	531027	379484	0.05

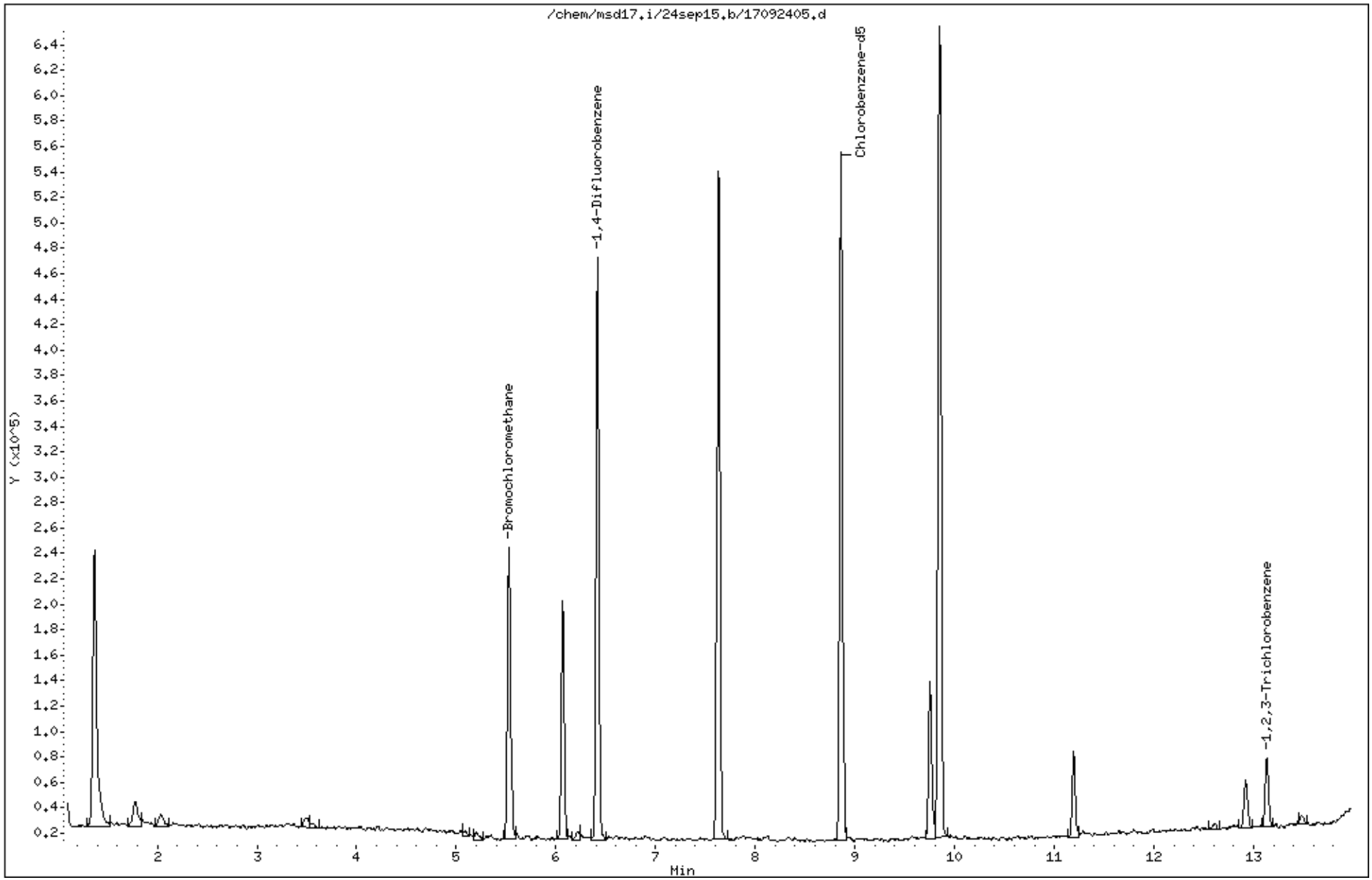
		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.54	0.13
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.87	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092405.d
Date : 24-SEP-2015 10:29
Client ID:
Sample Info: 200ml 2736-111

Instrument: msd17.i
Operator: cb
Column diameter: 0.25

Column phase: RTX-624



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/21sep15a.b/17092119.d
Lab Smp Id: ICAL Level #3
Inj Date : 21-SEP-2015 21:07
Operator : gh Inst ID: msd17.i
Smp Info : 200ml 2736-257
Misc Info : 2.0ppbv(2.0pbbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/21sep15a.b/175q0921a.m
Meth Date : 25-Sep-2015 15:15 cbond Quant Type: ISTD
Cal Date : 21-SEP-2015 21:07 Cal File: 17092119.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12mdlnoNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.535	5.535 (1.000)	130	109646	25.0000		80.00- 120.00	100.00
5.535	5.535 (1.000)	128	86155			46.54- 106.54	78.58
5.528	5.528 (1.000)	49	125534			83.83- 143.83	114.49
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.416	6.416 (1.000)	114	467141	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	71465			0.00- 44.86	15.30
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	415351	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	220173			23.93- 83.93	53.01
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.065	6.065 (1.096)	65	152545	25.0000	25.819	80.00- 120.00	100.00
6.065	6.065 (1.096)	67	83827			25.51- 85.51	54.95

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.634	7.634 (1.190)	98	474343	25.0000	24.628	80.00- 120.00	100.00
7.627	7.627 (1.189)	70	49513			0.00- 40.39	10.44
7.627	7.627 (1.189)	100	300906			33.97- 93.97	63.44
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.854	9.854 (1.111)	174	255833	25.0000	24.124	80.00- 120.00	100.00
9.847	9.847 (1.111)	95	288370			79.64- 139.64	112.72
9.854	9.854 (1.111)	176	246971			65.80- 125.80	96.54
9 Propylene					CAS #: 115-07-1		
1.524	1.524 (0.275)	41	9046	2.00000	2.079	80.00- 120.00	100.00
1.524	1.524 (0.275)	42	5543			37.10- 97.10	61.28
1.524	1.524 (0.275)	39	9714			44.98- 104.98	107.38
11 Freon 12					CAS #: 75-71-8		
1.560	1.560 (0.282)	85	37699	2.00000	2.136	80.00- 120.00	100.00
1.560	1.560 (0.282)	87	12599			2.33- 62.33	33.42
15 Freon 114					CAS #: 76-14-2		
1.674	1.674 (0.302)	135	27048	2.00000	2.112	80.00- 120.00	100.00
1.674	1.674 (0.302)	137	8780			2.02- 62.02	32.46
17 Chloromethane					CAS #: 74-87-3		
1.767	1.767 (0.319)	50	14359	2.00000	2.325	80.00- 120.00	100.00(a)
1.767	1.767 (0.319)	52	4618			2.35- 62.35	32.16
23 Butane					CAS #: 106-97-8		
1.839	1.839 (0.332)	58	3039	2.00000	2.244	80.00- 120.00	100.00
1.839	1.839 (0.332)	43	19609			657.81- 717.81	645.25
25 Vinyl Chloride					CAS #: 75-01-4		
1.882	1.882 (0.340)	62	15103	2.00000	2.164	80.00- 120.00	100.00
1.875	1.875 (0.339)	64	5868			2.69- 62.69	38.85
26 1,3-Butadiene					CAS #: 106-99-0		
1.903	1.903 (0.344)	54	10216	2.00000	2.110	80.00- 120.00	100.00
1.903	1.903 (0.344)	39	10899			63.95- 123.95	106.69
29 Bromomethane					CAS #: 74-83-9		
2.261	2.261 (0.409)	94	11083	2.00000	1.793	80.00- 120.00	100.00(a)
2.261	2.261 (0.409)	96	11058			63.69- 123.69	99.77
30 Chloroethane					CAS #: 75-00-3		
2.383	2.383 (0.431)	64	7474	2.00000	2.112	80.00- 120.00	100.00
2.376	2.376 (0.429)	66	2456			1.86- 61.86	32.86

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.383	2.383 (0.431)	49	1852			0.00- 55.51	24.78
31 Isopentane					CAS #: 78-78-4		
2.405	2.405 (0.434)	43	13533	2.00000	1.972	80.00- 120.00	100.00(a)
2.405	2.405 (0.434)	57	11465			44.35- 104.35	84.72
35 Freon 11					CAS #: 75-69-4		
2.634	2.634 (0.476)	101	37241	2.00000	2.049	80.00- 120.00	100.00
2.634	2.634 (0.476)	103	24318			35.20- 95.20	65.30
42 Ethanol					CAS #: 64-17-5		
3.021	3.021 (0.546)	45	6736	2.00000	2.768	80.00- 120.00	100.00
3.014	3.014 (0.544)	43	1211			0.00- 50.36	17.98
3.021	3.021 (0.546)	46	2652			10.31- 70.31	39.37
49 Freon 113					CAS #: 76-13-1		
3.286	3.286 (0.594)	151	24929	2.00000	1.925	80.00- 120.00	100.00
3.286	3.286 (0.594)	153	16362			33.72- 93.72	65.63
3.286	3.286 (0.594)	101	30850			95.23- 155.23	123.75
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.322	3.322 (0.600)	98	9788	2.00000	2.051	80.00- 120.00	100.00
3.322	3.322 (0.600)	96	15170			130.14- 190.14	154.99
3.322	3.322 (0.600)	61	24117			218.16- 278.16	246.39
52 Acetone					CAS #: 67-64-1		
3.494	3.494 (0.631)	58	7784	2.00000	2.360	80.00- 120.00	100.00(a)
3.494	3.494 (0.631)	43	26546			266.49- 326.49	341.03
56 Carbon Disulfide					CAS #: 75-15-0		
3.551	3.551 (0.642)	76	46429	2.00000	2.106	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.665	3.665 (0.662)	45	21186	2.00000	2.071	80.00- 120.00	100.00
3.665	3.665 (0.662)	43	3627			0.00- 50.02	17.12
3.673	3.673 (0.664)	59	1190			0.00- 34.32	5.62
58 3-Chloropropene					CAS #: 107-05-1		
3.794	3.794 (0.686)	76	7649	2.00000	2.152	80.00- 120.00	100.00
3.794	3.794 (0.686)	41	16232			185.01- 245.01	212.21
66 Methylene Chloride					CAS #: 75-09-2		
3.981	3.981 (0.719)	49	16585	2.00000	2.146	80.00- 120.00	100.00(a)
3.981	3.981 (0.719)	84	14800			59.02- 119.02	89.24
3.981	3.981 (0.719)	51	6300			1.78- 61.78	37.99

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.117	4.117 (0.744)	59	27368	2.00000	2.130	80.00- 120.00	100.00
4.117	4.117 (0.744)	41	6053			0.00- 50.26	22.12
4.124	4.124 (0.745)	57	3756			0.00- 40.80	13.72
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.203	4.203 (0.759)	73	41155	2.00000	2.055	80.00- 120.00	100.00
4.203	4.203 (0.759)	57	9899			0.00- 51.46	24.05
4.203	4.203 (0.759)	41	7127			0.00- 49.34	17.32
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.224	4.224 (0.763)	98	10025	2.00000	2.108	80.00- 120.00	100.00
4.224	4.224 (0.763)	61	21079			184.16- 244.16	210.26
4.224	4.224 (0.763)	96	15410			127.84- 187.84	153.72
78 Hexane					CAS #: 110-54-3		
4.432	4.432 (0.801)	57	22348	2.00000	2.066	80.00- 120.00	100.00
4.432	4.432 (0.801)	43	13080			27.64- 87.64	58.53
4.432	4.432 (0.801)	86	3665			0.00- 46.92	16.40
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.711	4.711 (0.851)	63	26050	2.00000	2.025	80.00- 120.00	100.00
4.711	4.711 (0.851)	65	8939			2.04- 62.04	34.31
83 Isopropyl ether					CAS #: 108-20-3		
4.704	4.704 (0.850)	45	41909	2.00000	2.003	80.00- 120.00	100.00
4.704	4.704 (0.850)	87	12838			1.31- 61.31	30.63
4.704	4.704 (0.850)	59	5734			0.00- 42.69	13.68
86 Vinyl Acetate					CAS #: 108-05-4		
4.761	4.761 (0.860)	86	3879	2.00000	1.976	80.00- 120.00	100.00(a)
4.761	4.761 (0.860)	43	35440			891.41- 951.41	913.64
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.062	5.062 (0.915)	59	42265	2.00000	1.936	80.00- 120.00	100.00(a)
5.062	5.062 (0.915)	87	17993			13.52- 73.52	42.57
5.062	5.062 (0.915)	41	7918			0.00- 47.26	18.73
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.299	5.299 (0.957)	98	10928	2.00000	2.131	80.00- 120.00	100.00
5.299	5.299 (0.957)	96	16433			124.38- 184.38	150.38
5.299	5.299 (0.957)	61	20343			162.07- 222.07	186.15
92 2-Butanone					CAS #: 78-93-3		
5.334	5.334 (0.964)	72	7820	2.00000	2.157	80.00- 120.00	100.00
5.334	5.334 (0.964)	43	25553			306.33- 366.33	326.76

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.334	5.334 (0.964)	57	2831			0.00- 59.26	36.20
99 Tetrahydrofuran					CAS #: 109-99-9		
5.535	5.535 (1.000)	42	14476	2.00000	2.049	80.00- 120.00	100.00
5.535	5.535 (1.000)	71	5624			17.72- 77.72	38.85
5.535	5.535 (1.000)	72	7257			20.99- 80.99	50.13
100 Chloroform					CAS #: 67-66-3		
5.592	5.592 (1.010)	83	31784	2.00000	2.016	80.00- 120.00	100.00
5.592	5.592 (1.010)	85	19812			34.67- 94.67	62.33
102 Cyclohexane					CAS #: 110-82-7		
5.693	5.693 (1.028)	84	19521	2.00000	1.994	80.00- 120.00	100.00
5.685	5.685 (1.027)	56	21955			77.09- 137.09	112.47
5.685	5.685 (1.027)	41	11402			25.87- 85.87	58.41
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.707	5.707 (1.031)	97	32027	2.00000	2.049	80.00- 120.00	100.00
5.707	5.707 (1.031)	99	20708			34.33- 94.33	64.66
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.822	5.822 (1.052)	119	32117	2.00000	2.056	80.00- 120.00	100.00
5.822	5.822 (1.052)	117	32088			74.90- 134.90	99.91
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.087)	57	64683	2.00000	1.956	80.00- 120.00	100.00
6.015	6.015 (1.087)	56	21494			1.80- 61.80	33.23
6.015	6.015 (1.087)	41	17691			0.00- 55.83	27.35
116 Benzene					CAS #: 71-43-2		
6.044	6.044 (0.942)	78	44057	2.00000	1.862	80.00- 120.00	100.00
6.044	6.044 (0.942)	77	10813			0.00- 54.08	24.54
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.115	6.115 (1.105)	87	10192	2.00000	1.945	80.00- 120.00	100.00(a)
6.108	6.108 (1.104)	73	42339			376.57- 436.57	415.41
6.108	6.108 (1.104)	55	10850			64.52- 124.52	106.46
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.137	6.137 (0.956)	62	19611	2.00000	1.897	80.00- 120.00	100.00
6.130	6.130 (0.955)	64	6321			2.16- 62.16	32.23
121 Heptane					CAS #: 142-82-5		
6.187	6.187 (0.964)	71	15183	2.00000	1.854	80.00- 120.00	100.00
6.187	6.187 (0.964)	43	22953			110.94- 170.94	151.18

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.187	6.187 (0.964)	57	12962			53.72- 113.72	85.37
125 Trichloroethene					CAS #: 79-01-6		
6.609	6.609 (1.030)	95	20966	2.00000	1.878	80.00- 120.00	100.00
6.609	6.609 (1.030)	130	20983			74.97- 134.97	100.08
6.609	6.609 (1.030)	97	14299			35.33- 95.33	68.20
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.211)	83	25978	2.00000	1.922	80.00- 120.00	100.00(a)
6.710	6.710 (1.212)	98	11558			16.41- 76.41	44.49
6.710	6.710 (1.212)	55	19543			40.41- 100.41	75.23
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.846	6.846 (1.067)	63	15816	2.00000	1.867	80.00- 120.00	100.00
6.846	6.846 (1.067)	62	11823			38.78- 98.78	74.75
6.846	6.846 (1.067)	41	8550			20.16- 80.16	54.06
136 1,4-Dioxane					CAS #: 123-91-1		
6.946	6.946 (1.083)	88	10001	2.00000	1.951	80.00- 120.00	100.00(a)
6.939	6.939 (1.081)	58	6523			31.02- 91.02	65.22
6.946	6.946 (1.083)	57	2646			0.00- 51.33	26.46
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.103)	83	33779	2.00000	1.927	80.00- 120.00	100.00
7.075	7.075 (1.103)	85	23453			34.16- 94.16	69.43
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.448	7.448 (1.161)	75	28355	2.00000	1.926	80.00- 120.00	100.00
7.448	7.448 (1.161)	77	9723			1.57- 61.57	34.29
7.448	7.448 (1.161)	39	13221			13.98- 73.98	46.63
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.562	7.562 (1.179)	58	10993	2.00000	1.929	80.00- 120.00	100.00
7.562	7.562 (1.179)	43	27627			205.93- 265.93	251.31
7.562	7.562 (1.179)	85	6118			18.04- 78.04	55.65
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.198)	91	54320	2.00000	1.830	80.00- 120.00	100.00
7.684	7.684 (1.198)	92	30456			27.24- 87.24	56.07
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.927	7.927 (0.894)	75	23996	2.00000	1.860	80.00- 120.00	100.00
7.927	7.927 (0.894)	77	8589			1.57- 61.57	35.79
7.927	7.927 (0.894)	39	10559			13.98- 73.98	44.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.085	8.085 (0.912)	97	18900	2.00000	1.857	80.00- 120.00	100.00
8.085	8.085 (0.912)	99	12417			31.05- 91.05	65.70
8.085	8.085 (0.912)	83	17736			58.29- 118.29	93.84
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.916)	166	28786	2.00000	1.927	80.00- 120.00	100.00
8.121	8.121 (0.916)	129	21733			42.46- 102.46	75.50
8.121	8.121 (0.916)	131	19706			40.24- 100.24	68.46
158 2-Hexanone					CAS #: 591-78-6		
8.250	8.250 (0.930)	58	14296	2.00000	1.990	80.00- 120.00	100.00(a)
8.250	8.250 (0.930)	43	25820			205.93- 265.93	180.61
8.250	8.250 (0.930)	100	3312			11.40- 71.40	23.17
160 Dibromochloromethane					CAS #: 124-48-1		
8.400	8.400 (0.947)	129	36543	2.00000	1.923	80.00- 120.00	100.00
8.400	8.400 (0.947)	127	28134			47.28- 107.28	76.99
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.515	8.515 (0.960)	107	29536	2.00000	1.836	80.00- 120.00	100.00
8.515	8.515 (0.960)	109	27694			66.45- 126.45	93.76
165 Chlorobenzene					CAS #: 108-90-7		
8.887	8.887 (1.002)	112	45739	2.00000	1.963	80.00- 120.00	100.00
8.887	8.887 (1.002)	114	13794			2.06- 62.06	30.16
8.887	8.887 (1.002)	77	30452			26.47- 86.47	66.58
167 Ethyl Benzene					CAS #: 100-41-4		
8.930	8.930 (1.007)	106	21113	2.00000	1.861	80.00- 120.00	100.00
8.930	8.930 (1.007)	91	67005			289.94- 349.94	317.36
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	26444	2.00000	1.877	80.00- 120.00	100.00
9.031	9.031 (1.019)	91	52202			167.83- 227.83	197.41
171 o-Xylene					CAS #: 95-47-6		
9.374	9.374 (1.057)	106	23412	2.00000	1.791	80.00- 120.00	100.00
9.374	9.374 (1.057)	91	51719			181.11- 241.11	220.91
172 Styrene					CAS #: 100-42-5		
9.396	9.396 (1.060)	104	38442	2.00000	1.724	80.00- 120.00	100.00
9.396	9.396 (1.060)	78	19228			17.79- 77.79	50.02
174 Bromoform					CAS #: 75-25-2		
9.596	9.596 (1.082)	173	35081	2.00000	1.828	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.596	9.596 (1.082)	171	18924			21.45- 81.45	53.94
175 Cumene					CAS #: 98-82-8		
9.661	9.661 (1.090)	105	73479	2.00000	1.760	80.00- 120.00	100.00
9.661	9.661 (1.090)	120	21050			0.00- 57.47	28.65
9.661	9.661 (1.090)	51	7821			0.00- 38.62	10.64
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.976	9.976 (1.125)	83	42559	2.00000	1.937	80.00- 120.00	100.00
9.983	9.983 (1.126)	85	26988			34.77- 94.77	63.41
182 Propylbenzene					CAS #: 103-65-1		
10.005	10.005 (1.128)	91	90554	2.00000	1.806	80.00- 120.00	100.00
10.005	10.005 (1.128)	120	20624			0.00- 53.65	22.78
10.005	10.005 (1.128)	105	3685			0.00- 33.57	4.07
188 4-Ethyltoluene					CAS #: 622-96-8		
10.098	10.098 (1.139)	120	23291	2.00000	1.754	80.00- 120.00	100.00
10.098	10.098 (1.139)	105	80066			292.89- 352.89	343.76
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.155	10.155 (1.145)	120	31412	2.00000	1.801	80.00- 120.00	100.00
10.148	10.148 (1.145)	105	62876			175.25- 235.25	200.17
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.478	10.478 (1.182)	120	28158	2.00000	1.798	80.00- 120.00	100.00
10.478	10.478 (1.182)	105	59253			183.76- 243.76	210.43
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.771	10.771 (1.215)	146	48023	2.00000	1.907	80.00- 120.00	100.00
10.771	10.771 (1.215)	148	30700			33.69- 93.69	63.93
10.771	10.771 (1.215)	111	18123			8.12- 68.12	37.74
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.850	10.850 (1.224)	146	47575	2.00000	1.909	80.00- 120.00	100.00
10.850	10.850 (1.224)	148	30025			33.86- 93.86	63.11
10.850	10.850 (1.224)	111	18491			6.71- 66.71	38.87
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.972	10.972 (1.238)	91	49661	2.00000	1.676	80.00- 120.00	100.00
10.972	10.972 (1.238)	126	11576			0.00- 51.95	23.31
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.179	11.179 (1.261)	146	45230	2.00000	1.896	80.00- 120.00	100.00
11.179	11.179 (1.261)	148	30096			33.90- 93.90	66.54

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.179	11.179 (1.261)	111	17454			8.86- 68.86	38.59
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.605	12.605 (1.422)	180	38979	2.00000	1.881	80.00- 120.00	100.00(a)
12.598	12.598 (1.421)	182	35550			65.21- 125.21	91.20
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.691	12.691 (1.431)	225	34859	2.00000	1.959	80.00- 120.00	100.00(a)
12.691	12.691 (1.431)	223	22314			33.22- 93.22	64.01

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092119.d
Lab Smp Id: ICAL Level #3
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msd17.i/21sep15a.b/175q0921a.m
Misc Info: 2.0ppbv(2.0pbbv)

Calibration Date: 21-SEP-2015
Calibration Time: 22:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	116527	69916	163138	109646	-5.91
123 1,4-Difluorobenze	475185	285111	665259	467141	-1.69
163 Chlorobenzene-d5	418099	250859	585339	415351	-0.66

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.54	0.13
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/21sep15a.b/17092119.d

Date : 21-SEP-2015 21:07

Client ID:

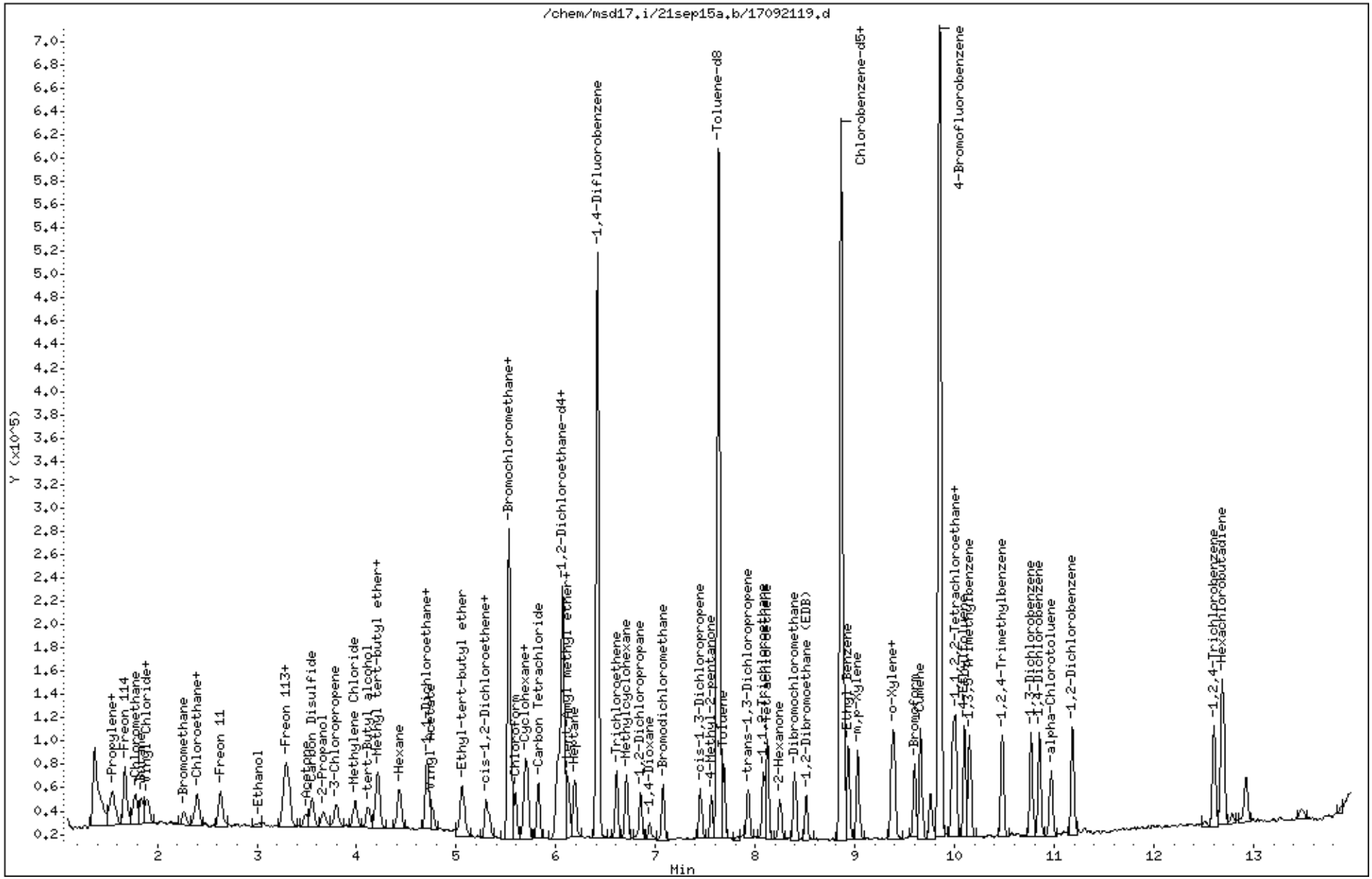
Sample Info: 200ml 2736-257

Column phase: RTX-624

Instrument: msd17.i

Operator: gh

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/21sep15a.b/17092120.d
Lab Smp Id: ICAL Level #4
Inj Date : 21-SEP-2015 21:52
Operator : gh Inst ID: msd17.i
Smp Info : 200ml 2737-258
Misc Info : 5.0ppbv(5.0ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/21sep15a.b/175q0921a.m
Meth Date : 25-Sep-2015 15:15 cbond Quant Type: ISTD
Cal Date : 21-SEP-2015 21:52 Cal File: 17092120.d
Als bottle: 3 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12mdlnoNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.528	5.528 (1.000)	130	112944	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	87359			46.54- 106.54	77.35
5.528	5.528 (1.000)	49	127652			83.83- 143.83	113.02
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.416	6.416 (1.000)	114	465394	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	72804			0.00- 44.86	15.64
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	418681	25.0000		80.00- 120.00	100.00
8.866	8.866 (1.000)	82	224070			23.93- 83.93	53.52
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.065	6.065 (1.097)	65	154481	25.0000	25.383	80.00- 120.00	100.00
6.065	6.065 (1.097)	67	84205			25.51- 85.51	54.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.189)	98	479645	25.0000	24.997	80.00- 120.00	100.00
7.627	7.627 (1.189)	70	50037			0.00- 40.39	10.43
7.627	7.627 (1.189)	100	302272			33.97- 93.97	63.02
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.854	9.854 (1.111)	174	260133	25.0000	24.334	80.00- 120.00	100.00
9.847	9.847 (1.111)	95	293552			79.64- 139.64	112.85
9.854	9.854 (1.111)	176	246683			65.80- 125.80	94.83
9 Propylene					CAS #: 115-07-1		
1.524	1.524 (0.276)	41	21142	5.00000	4.718	80.00- 120.00	100.00
1.524	1.524 (0.276)	42	15078			37.10- 97.10	71.32
1.524	1.524 (0.276)	39	18989			44.98- 104.98	89.82
11 Freon 12					CAS #: 75-71-8		
1.559	1.559 (0.282)	85	86674	5.00000	4.768	80.00- 120.00	100.00
1.559	1.559 (0.282)	87	27826			2.33- 62.33	32.10
15 Freon 114					CAS #: 76-14-2		
1.674	1.674 (0.303)	135	62368	5.00000	4.727	80.00- 120.00	100.00
1.674	1.674 (0.303)	137	20254			2.02- 62.02	32.47
17 Chloromethane					CAS #: 74-87-3		
1.767	1.767 (0.320)	50	30127	5.00000	4.736	80.00- 120.00	100.00(a)
1.774	1.774 (0.321)	52	11418			2.35- 62.35	37.90
23 Butane					CAS #: 106-97-8		
1.839	1.839 (0.333)	58	7357	5.00000	5.274	80.00- 120.00	100.00
1.839	1.839 (0.333)	43	44662			657.81- 717.81	607.07
25 Vinyl Chloride					CAS #: 75-01-4		
1.882	1.882 (0.340)	62	33356	5.00000	4.640	80.00- 120.00	100.00
1.882	1.882 (0.340)	64	11256			2.69- 62.69	33.75
26 1,3-Butadiene					CAS #: 106-99-0		
1.903	1.903 (0.344)	54	23855	5.00000	4.782	80.00- 120.00	100.00
1.903	1.903 (0.344)	39	22032			63.95- 123.95	92.36
29 Bromomethane					CAS #: 74-83-9		
2.261	2.261 (0.409)	94	28780	5.00000	4.520	80.00- 120.00	100.00(a)
2.269	2.269 (0.410)	96	27324			63.69- 123.69	94.94
30 Chloroethane					CAS #: 75-00-3		
2.383	2.383 (0.431)	64	17834	5.00000	4.894	80.00- 120.00	100.00
2.383	2.383 (0.431)	66	5445			1.86- 61.86	30.53

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.383	2.383 (0.431)	49	4809			0.00- 55.51	26.97
31 Isopentane					CAS #: 78-78-4		
2.405	2.405 (0.435)	43	34285	5.00000	4.850	80.00- 120.00	100.00
2.405	2.405 (0.435)	57	25815			44.35- 104.35	75.30
35 Freon 11					CAS #: 75-69-4		
2.634	2.634 (0.476)	101	89788	5.00000	4.797	80.00- 120.00	100.00
2.634	2.634 (0.476)	103	55682			35.20- 95.20	62.01
42 Ethanol					CAS #: 64-17-5		
3.006	3.006 (0.544)	45	9702	5.00000	3.871	80.00- 120.00	100.00
3.006	3.006 (0.544)	43	4400			0.00- 50.36	45.35
2.999	2.999 (0.543)	46	4130			10.31- 70.31	42.57
49 Freon 113					CAS #: 76-13-1		
3.286	3.286 (0.594)	151	62162	5.00000	4.661	80.00- 120.00	100.00
3.286	3.286 (0.594)	153	38815			33.72- 93.72	62.44
3.286	3.286 (0.594)	101	78180			95.23- 155.23	125.77
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.322	3.322 (0.601)	98	23001	5.00000	4.678	80.00- 120.00	100.00
3.322	3.322 (0.601)	96	36541			130.14- 190.14	158.87
3.322	3.322 (0.601)	61	54810			218.16- 278.16	238.29
52 Acetone					CAS #: 67-64-1		
3.479	3.479 (0.629)	58	16221	5.00000	4.775	80.00- 120.00	100.00(a)
3.486	3.486 (0.631)	43	46009			266.49- 326.49	283.64
56 Carbon Disulfide					CAS #: 75-15-0		
3.551	3.551 (0.642)	76	108257	5.00000	4.768	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.658	3.658 (0.662)	45	40991	5.00000	3.890	80.00- 120.00	100.00
3.658	3.658 (0.662)	43	7872			0.00- 50.02	19.20
3.658	3.658 (0.662)	59	1859			0.00- 34.32	4.54
58 3-Chloropropene					CAS #: 107-05-1		
3.794	3.794 (0.686)	76	17100	5.00000	4.671	80.00- 120.00	100.00
3.794	3.794 (0.686)	41	36976			185.01- 245.01	216.23
66 Methylene Chloride					CAS #: 75-09-2		
3.981	3.981 (0.720)	49	39718	5.00000	4.988	80.00- 120.00	100.00(a)
3.981	3.981 (0.720)	84	34337			59.02- 119.02	86.45
3.981	3.981 (0.720)	51	12690			1.78- 61.78	31.95

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.117	4.117 (0.745)	59	41700	5.00000	3.151	80.00- 120.00	100.00
4.117	4.117 (0.745)	41	9829			0.00- 50.26	23.57
4.117	4.117 (0.745)	57	5421			0.00- 40.80	13.00
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.203	4.203 (0.760)	73	95390	5.00000	4.625	80.00- 120.00	100.00
4.195	4.195 (0.759)	57	21440			0.00- 51.46	22.48
4.195	4.195 (0.759)	41	20453			0.00- 49.34	21.44
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.224	4.224 (0.764)	98	23987	5.00000	4.896	80.00- 120.00	100.00
4.224	4.224 (0.764)	61	49470			184.16- 244.16	206.24
4.224	4.224 (0.764)	96	38197			127.84- 187.84	159.24
78 Hexane					CAS #: 110-54-3		
4.432	4.432 (0.802)	57	53167	5.00000	4.772	80.00- 120.00	100.00
4.432	4.432 (0.802)	43	29754			27.64- 87.64	55.96
4.432	4.432 (0.802)	86	8831			0.00- 46.92	16.61
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.711	4.711 (0.852)	63	63208	5.00000	4.769	80.00- 120.00	100.00
4.711	4.711 (0.852)	65	21666			2.04- 62.04	34.28
83 Isopropyl ether					CAS #: 108-20-3		
4.704	4.704 (0.851)	45	97526	5.00000	4.525	80.00- 120.00	100.00
4.704	4.704 (0.851)	87	31304			1.31- 61.31	32.10
4.704	4.704 (0.851)	59	12095			0.00- 42.69	12.40
86 Vinyl Acetate					CAS #: 108-05-4		
4.754	4.754 (0.860)	86	8481	5.00000	4.194	80.00- 120.00	100.00
4.754	4.754 (0.860)	43	77663			891.41- 951.41	915.73
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.062	5.062 (0.916)	59	99693	5.00000	4.432	80.00- 120.00	100.00
5.055	5.055 (0.914)	87	42965			13.52- 73.52	43.10
5.062	5.062 (0.916)	41	18636			0.00- 47.26	18.69
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.299	5.299 (0.959)	98	23640	5.00000	4.475	80.00- 120.00	100.00
5.299	5.299 (0.959)	96	38746			124.38- 184.38	163.90
5.299	5.299 (0.959)	61	46197			162.07- 222.07	195.42
92 2-Butanone					CAS #: 78-93-3		
5.327	5.327 (0.964)	72	15502	5.00000	4.150	80.00- 120.00	100.00
5.327	5.327 (0.964)	43	48914			306.33- 366.33	315.53

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.334	5.334 (0.965)	57	4264			0.00- 59.26	27.51
99 Tetrahydrofuran					CAS #: 109-99-9		
5.535	5.535 (1.001)	42	28792	5.00000	3.957	80.00- 120.00	100.00
5.535	5.535 (1.001)	71	14976			17.72- 77.72	52.01
5.535	5.535 (1.001)	72	15454			20.99- 80.99	53.67
100 Chloroform					CAS #: 67-66-3		
5.592	5.592 (1.012)	83	76376	5.00000	4.702	80.00- 120.00	100.00
5.592	5.592 (1.012)	85	49046			34.67- 94.67	64.22
102 Cyclohexane					CAS #: 110-82-7		
5.693	5.693 (1.030)	84	46203	5.00000	4.581	80.00- 120.00	100.00
5.693	5.693 (1.030)	56	50264			77.09- 137.09	108.79
5.693	5.693 (1.030)	41	25787			25.87- 85.87	55.81
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.707	5.707 (1.032)	97	73371	5.00000	4.556	80.00- 120.00	100.00
5.707	5.707 (1.032)	99	48468			34.33- 94.33	66.06
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.821	5.821 (1.053)	119	72361	5.00000	4.498	80.00- 120.00	100.00
5.821	5.821 (1.053)	117	79120			74.90- 134.90	109.34
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.088)	57	151923	5.00000	4.460	80.00- 120.00	100.00
6.015	6.015 (1.088)	56	47206			1.80- 61.80	31.07
6.015	6.015 (1.088)	41	40695			0.00- 55.83	26.79
116 Benzene					CAS #: 71-43-2		
6.044	6.044 (0.942)	78	108596	5.00000	4.606	80.00- 120.00	100.00
6.044	6.044 (0.942)	77	27133			0.00- 54.08	24.99
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.108	6.108 (1.105)	87	22480	5.00000	4.164	80.00- 120.00	100.00
6.108	6.108 (1.105)	73	100041			376.57- 436.57	445.02
6.108	6.108 (1.105)	55	22460			64.52- 124.52	99.91
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.137	6.137 (0.956)	62	47594	5.00000	4.621	80.00- 120.00	100.00
6.137	6.137 (0.956)	64	16953			2.16- 62.16	35.62
121 Heptane					CAS #: 142-82-5		
6.187	6.187 (0.964)	71	36564	5.00000	4.481	80.00- 120.00	100.00
6.187	6.187 (0.964)	43	48254			110.94- 170.94	131.97

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.187	6.187 (0.964)	57	31001			53.72- 113.72	84.79
125 Trichloroethene					CAS #: 79-01-6		
6.609	6.609 (1.030)	95	48785	5.00000	4.386	80.00- 120.00	100.00
6.609	6.609 (1.030)	130	52216			74.97- 134.97	107.03
6.609	6.609 (1.030)	97	33667			35.33- 95.33	69.01
127 Methylcyclohexane					CAS #: 108-87-2		
6.710	6.710 (1.214)	83	60516	5.00000	4.348	80.00- 120.00	100.00
6.703	6.703 (1.212)	98	27887			16.41- 76.41	46.08
6.703	6.703 (1.212)	55	47266			40.41- 100.41	78.10
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.846	6.846 (1.067)	63	40889	5.00000	4.845	80.00- 120.00	100.00
6.846	6.846 (1.067)	62	25917			38.78- 98.78	63.38
6.846	6.846 (1.067)	41	21058			20.16- 80.16	51.50
136 1,4-Dioxane					CAS #: 123-91-1		
6.939	6.939 (1.081)	88	16373	5.00000	3.206	80.00- 120.00	100.00
6.939	6.939 (1.081)	58	9995			31.02- 91.02	61.05
6.939	6.939 (1.081)	57	3881			0.00- 51.33	23.70
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.103)	83	81329	5.00000	4.658	80.00- 120.00	100.00
7.075	7.075 (1.103)	85	51888			34.16- 94.16	63.80
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.447	7.447 (1.161)	75	66309	5.00000	4.521	80.00- 120.00	100.00
7.447	7.447 (1.161)	77	21756			1.57- 61.57	32.81
7.447	7.447 (1.161)	39	27983			13.98- 73.98	42.20
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.562	7.562 (1.179)	58	16058	5.00000	2.828	80.00- 120.00	100.00
7.562	7.562 (1.179)	43	38772			205.93- 265.93	241.45
7.562	7.562 (1.179)	85	7083			18.04- 78.04	44.11
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.198)	91	132426	5.00000	4.479	80.00- 120.00	100.00
7.684	7.684 (1.198)	92	73320			27.24- 87.24	55.37
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.927	7.927 (0.894)	75	57197	5.00000	4.398	80.00- 120.00	100.00
7.927	7.927 (0.894)	77	19801			1.57- 61.57	34.62
7.927	7.927 (0.894)	39	27890			13.98- 73.98	48.76

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.085	8.085 (0.912)	97	48089	5.00000	4.687	80.00- 120.00	100.00
8.085	8.085 (0.912)	99	29888			31.05- 91.05	62.15
8.085	8.085 (0.912)	83	41206			58.29- 118.29	85.69
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.916)	166	69489	5.00000	4.615	80.00- 120.00	100.00
8.121	8.121 (0.916)	129	51896			42.46- 102.46	74.68
8.121	8.121 (0.916)	131	50485			40.24- 100.24	72.65
158 2-Hexanone					CAS #: 591-78-6		
8.250	8.250 (0.930)	58	14399	5.00000	1.989	80.00- 120.00	100.00(a)
8.250	8.250 (0.930)	43	24831			205.93- 265.93	172.45
8.250	8.250 (0.930)	100	3109			11.40- 71.40	21.59
160 Dibromochloromethane					CAS #: 124-48-1		
8.400	8.400 (0.947)	129	83264	5.00000	4.347	80.00- 120.00	100.00
8.400	8.400 (0.947)	127	67506			47.28- 107.28	81.07
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.515	8.515 (0.960)	107	74904	5.00000	4.618	80.00- 120.00	100.00
8.515	8.515 (0.960)	109	71024			66.45- 126.45	94.82
165 Chlorobenzene					CAS #: 108-90-7		
8.887	8.887 (1.002)	112	106019	5.00000	4.514	80.00- 120.00	100.00
8.887	8.887 (1.002)	114	34344			2.06- 62.06	32.39
8.887	8.887 (1.002)	77	64761			26.47- 86.47	61.08
167 Ethyl Benzene					CAS #: 100-41-4		
8.930	8.930 (1.007)	106	51166	5.00000	4.474	80.00- 120.00	100.00
8.930	8.930 (1.007)	91	158783			289.94- 349.94	310.33
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	60310	5.00000	4.247	80.00- 120.00	100.00
9.031	9.031 (1.019)	91	120517			167.83- 227.83	199.83
171 o-Xylene					CAS #: 95-47-6		
9.374	9.374 (1.057)	106	57797	5.00000	4.387	80.00- 120.00	100.00
9.374	9.374 (1.057)	91	122841			181.11- 241.11	212.54
172 Styrene					CAS #: 100-42-5		
9.396	9.396 (1.060)	104	94402	5.00000	4.200	80.00- 120.00	100.00
9.396	9.396 (1.060)	78	44884			17.79- 77.79	47.55
174 Bromoform					CAS #: 75-25-2		
9.596	9.596 (1.082)	173	83191	5.00000	4.302	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.596	9.596 (1.082)	171	42862			21.45- 81.45	51.52
175 Cumene					CAS #: 98-82-8		
9.661	9.661 (1.090)	105	178026	5.00000	4.230	80.00- 120.00	100.00
9.661	9.661 (1.090)	120	48893			0.00- 57.47	27.46
9.661	9.661 (1.090)	51	16114			0.00- 38.62	9.05
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.976	9.976 (1.125)	83	94887	5.00000	4.284	80.00- 120.00	100.00
9.976	9.976 (1.125)	85	61487			34.77- 94.77	64.80
182 Propylbenzene					CAS #: 103-65-1		
10.005	10.005 (1.128)	91	213004	5.00000	4.216	80.00- 120.00	100.00
10.005	10.005 (1.128)	120	50530			0.00- 53.65	23.72
10.005	10.005 (1.128)	105	7749			0.00- 33.57	3.64
188 4-Ethyltoluene					CAS #: 622-96-8		
10.098	10.098 (1.139)	120	56424	5.00000	4.216	80.00- 120.00	100.00
10.098	10.098 (1.139)	105	178871			292.89- 352.89	317.01
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.155	10.155 (1.145)	120	72937	5.00000	4.148	80.00- 120.00	100.00
10.148	10.148 (1.145)	105	152697			175.25- 235.25	209.35
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.477	10.477 (1.182)	120	64933	5.00000	4.114	80.00- 120.00	100.00
10.477	10.477 (1.182)	105	140019			183.76- 243.76	215.64
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.771	10.771 (1.215)	146	107216	5.00000	4.223	80.00- 120.00	100.00
10.771	10.771 (1.215)	148	70347			33.69- 93.69	65.61
10.771	10.771 (1.215)	111	40067			8.12- 68.12	37.37
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.850	10.850 (1.224)	146	108118	5.00000	4.304	80.00- 120.00	100.00
10.850	10.850 (1.224)	148	69729			33.86- 93.86	64.49
10.850	10.850 (1.224)	111	40106			6.71- 66.71	37.09
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.965	10.965 (1.237)	91	107871	5.00000	3.612	80.00- 120.00	100.00
10.972	10.972 (1.238)	126	21658			0.00- 51.95	20.08
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.179	11.179 (1.261)	146	101633	5.00000	4.226	80.00- 120.00	100.00
11.179	11.179 (1.261)	148	65008			33.90- 93.90	63.96

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.179	11.179 (1.261)	111	39054			8.86- 68.86	38.43
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.605	12.605 (1.422)	180	80500	5.00000	3.854	80.00- 120.00	100.00
12.605	12.605 (1.422)	182	78218			65.21- 125.21	97.17
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.691	12.691 (1.431)	225	72961	5.00000	4.068	80.00- 120.00	100.00
12.691	12.691 (1.431)	223	46175			33.22- 93.22	63.29

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092120.d
Lab Smp Id: ICAL Level #4
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msd17.i/21sep15a.b/175q0921a.m
Misc Info: 5.0ppbv(5.0ppbv)

Calibration Date: 21-SEP-2015
Calibration Time: 22:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	116527	69916	163138	112944	-3.07
123 1,4-Difluorobenze	475185	285111	665259	465394	-2.06
163 Chlorobenzene-d5	418099	250859	585339	418681	0.14

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/21sep15a.b/17092120.d

Date : 21-SEP-2015 21:52

Client ID:

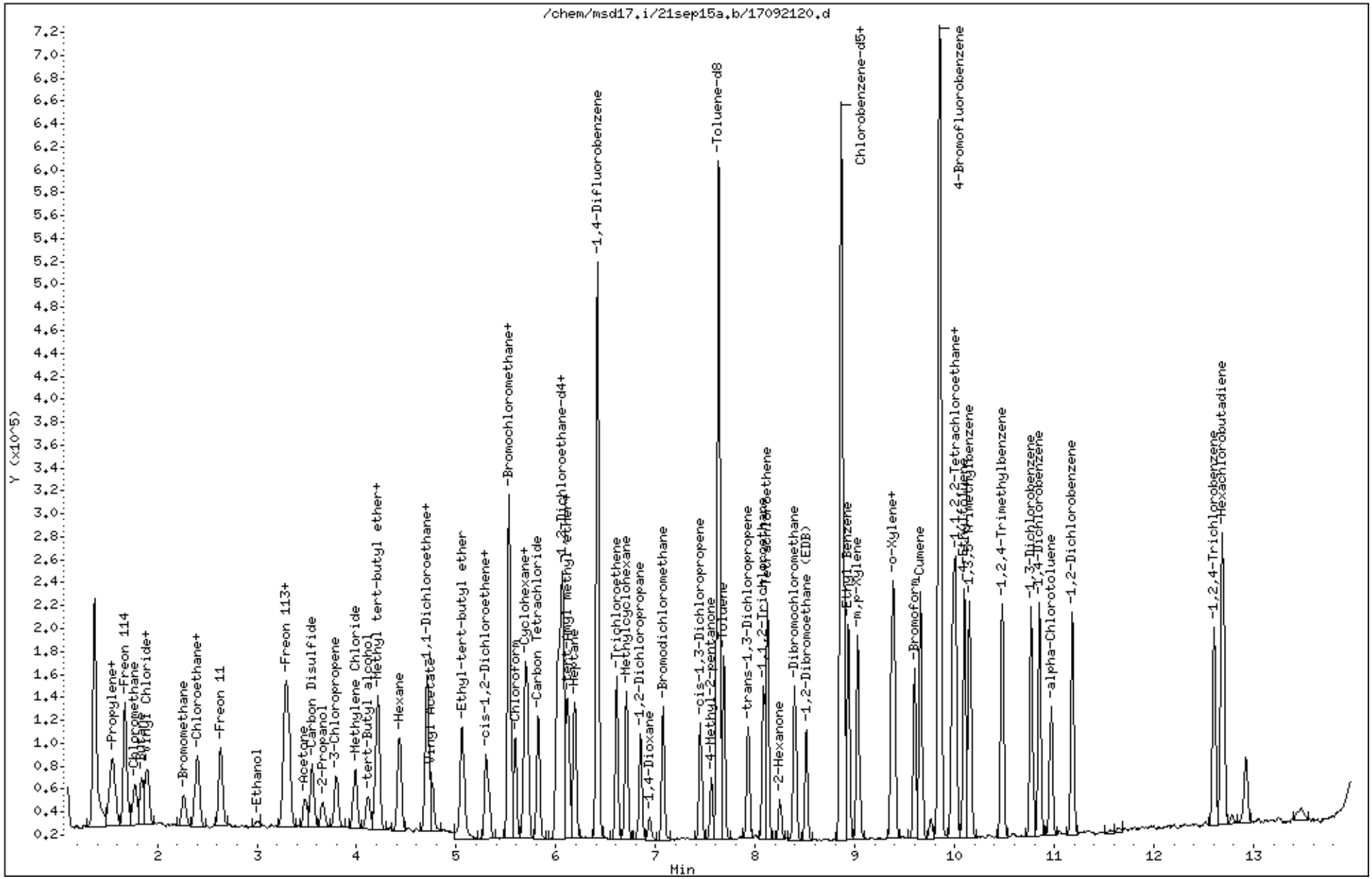
Sample Info: 200ml 2737-258

Column phase: RTX-624

Instrument: msd17.i

Operator: gh

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092415.d
Lab Smp Id: ICAL Level 5
Inj Date : 24-SEP-2015 15:59
Operator : cb Inst ID: msd17.i
Smp Info : 20ml 2736-262
Misc Info : 2.0ppbv(20ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921c.m
Meth Date : 25-Sep-2015 15:58 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 15:59 Cal File: 17092415.d
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Naphcrv.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.521	5.521 (1.000)	130	102544	25.0000		80.00- 120.00	100.00
5.521	5.521 (1.000)	128	83053			46.54- 106.54	80.99
5.521	5.521 (1.000)	49	116480			83.83- 143.83	113.59
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.409	6.409 (1.000)	114	420054	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	66642			0.00- 44.86	15.87
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	392554	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	208378			23.93- 83.93	53.08
228 Naphthalene					CAS #: 91-20-3		
12.805	12.805 (1.444)	128	38576	2.00000	1.634	0.00- 30.00	100.00(a)
12.805	12.805 (1.444)	127	5483			0.00- 30.00	14.21

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092415.d
Lab Smp Id: ICAL Level 5
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921c.m
Misc Info: 2.0ppbv(20ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 08:49
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	102227	61336	143118	102544	0.31
123 1,4-Difluorobenze	417792	250675	584909	420054	0.54
163 Chlorobenzene-d5	379305	227583	531027	392554	3.49

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.52	-0.13
123 1,4-Difluorobenze	6.42	6.09	6.75	6.41	-0.11
163 Chlorobenzene-d5	8.86	8.53	9.19	8.87	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092415.d

Date : 24-SEP-2015 15:59

Client ID:

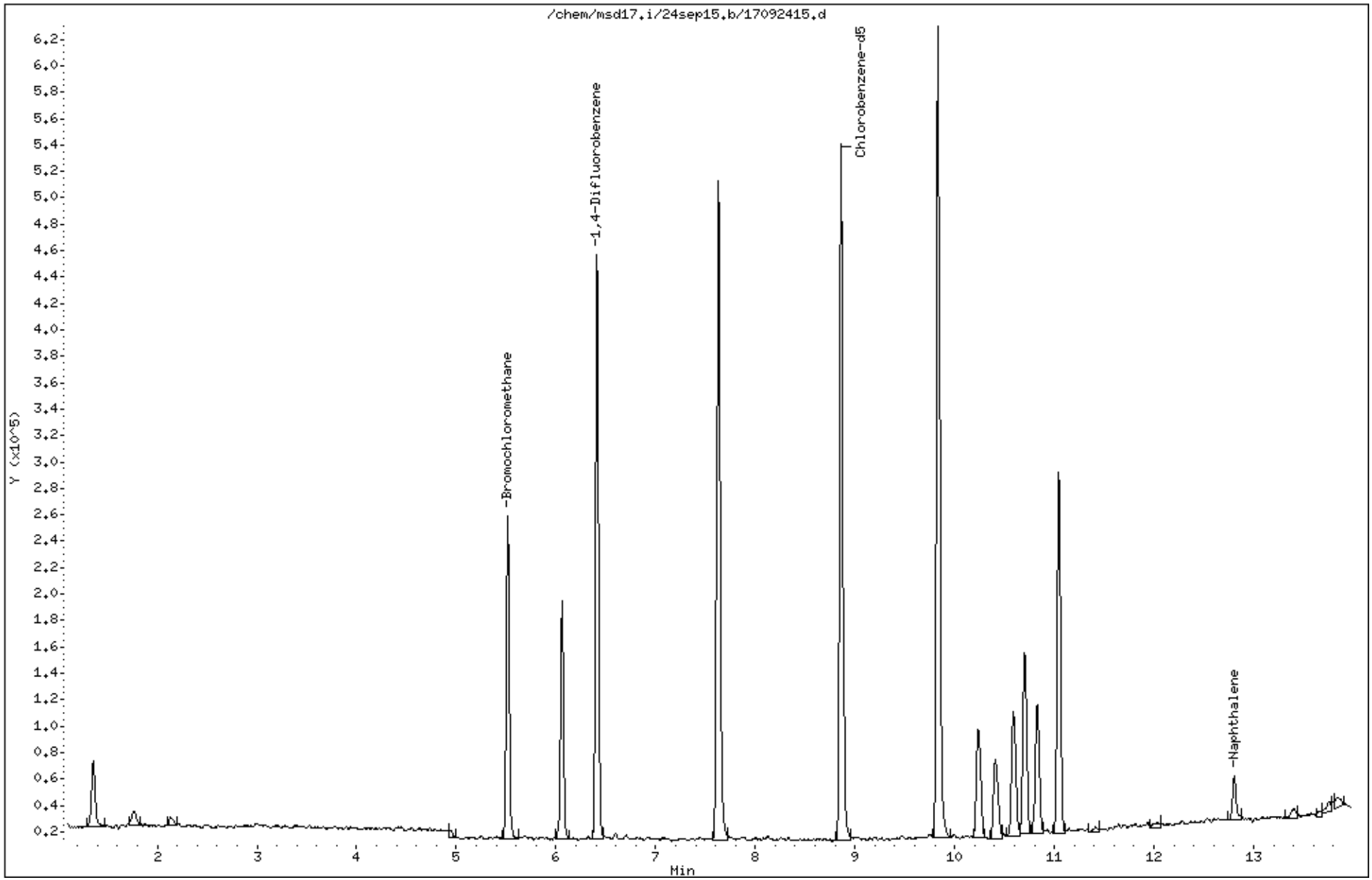
Instrument: msd17.i

Sample Info: 20ml 2736-262

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/21sep15a.b/17092121.d
Lab Smp Id: ICAL Level #5
Inj Date : 21-SEP-2015 22:31
Operator : gh Inst ID: msd17.i
Smp Info : 20ml 2737-240
Misc Info : 20ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/21sep15a.b/175q0921a.m
Meth Date : 25-Sep-2015 15:15 cbond Quant Type: ISTD
Cal Date : 21-SEP-2015 22:31 Cal File: 17092121.d
Als bottle: 2 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12noNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.528	5.528 (1.000)	130	116580	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	91994			46.54- 106.54	78.91
5.528	5.528 (1.000)	49	131106			83.83- 143.83	112.46
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.416	6.416 (1.000)	114	472978	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	71236			0.00- 44.86	15.06
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.866	8.866 (1.000)	117	426962	25.0000		80.00- 120.00	100.00
8.866	8.866 (1.000)	82	225856			23.93- 83.93	52.90
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.065	6.065 (1.097)	65	155816	25.0000	24.804	80.00- 120.00	100.00
6.065	6.065 (1.097)	67	85278			25.51- 85.51	54.73

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.189)	98	484772	25.0000	24.859	80.00- 120.00	100.00
7.627	7.627 (1.189)	70	50902			0.00- 40.39	10.50
7.627	7.627 (1.189)	100	310665			33.97- 93.97	64.08
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.840	9.840 (1.110)	174	271311	25.0000	24.888	80.00- 120.00	100.00
9.833	9.833 (1.109)	95	296477			79.64- 139.64	109.28
9.840	9.840 (1.110)	176	259686			65.80- 125.80	95.72
9 Propylene					CAS #: 115-07-1		
1.517	1.517 (0.274)	41	106465	20.0000	23.017	80.00- 120.00	100.00
1.517	1.517 (0.274)	42	73164			37.10- 97.10	68.72
1.517	1.517 (0.274)	39	79092			44.98- 104.98	74.29
11 Freon 12					CAS #: 75-71-8		
1.552	1.552 (0.281)	85	429721	20.0000	22.902	80.00- 120.00	100.00
1.552	1.552 (0.281)	87	140052			2.33- 62.33	32.59
15 Freon 114					CAS #: 76-14-2		
1.667	1.667 (0.302)	135	310335	20.0000	22.786	80.00- 120.00	100.00
1.667	1.667 (0.302)	137	100039			2.02- 62.02	32.24
17 Chloromethane					CAS #: 74-87-3		
1.753	1.753 (0.317)	50	151839	20.0000	23.126	80.00- 120.00	100.00
1.753	1.753 (0.317)	52	49402			2.35- 62.35	32.54
23 Butane					CAS #: 106-97-8		
1.839	1.839 (0.333)	58	30815	20.0000	21.400	80.00- 120.00	100.00
1.839	1.839 (0.333)	43	212419			657.81- 717.81	689.34
25 Vinyl Chloride					CAS #: 75-01-4		
1.875	1.875 (0.339)	62	165162	20.0000	22.257	80.00- 120.00	100.00
1.875	1.875 (0.339)	64	53343			2.69- 62.69	32.30
26 1,3-Butadiene					CAS #: 106-99-0		
1.896	1.896 (0.343)	54	116359	20.0000	22.600	80.00- 120.00	100.00
1.896	1.896 (0.343)	39	112535			63.95- 123.95	96.71
29 Bromomethane					CAS #: 74-83-9		
2.254	2.254 (0.408)	94	162522	20.0000	24.727	80.00- 120.00	100.00
2.254	2.254 (0.408)	96	152776			63.69- 123.69	94.00
30 Chloroethane					CAS #: 75-00-3		
2.376	2.376 (0.430)	64	85040	20.0000	22.607	80.00- 120.00	100.00
2.376	2.376 (0.430)	66	27198			1.86- 61.86	31.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.376	2.376 (0.430)	49	22137			0.00- 55.51	26.03
31 Isopentane					CAS #: 78-78-4		
2.405	2.405 (0.435)	43	171021	20.0000	23.438	80.00- 120.00	100.00
2.405	2.405 (0.435)	57	125008			44.35- 104.35	73.10
35 Freon 11					CAS #: 75-69-4		
2.634	2.634 (0.476)	101	440281	20.0000	22.788	80.00- 120.00	100.00
2.634	2.634 (0.476)	103	284428			35.20- 95.20	64.60
42 Ethanol					CAS #: 64-17-5		
2.985	2.985 (0.540)	45	56830	20.0000	21.968	80.00- 120.00	100.00
2.992	2.992 (0.541)	43	14467			0.00- 50.36	25.46
2.992	2.992 (0.541)	46	21561			10.31- 70.31	37.94
49 Freon 113					CAS #: 76-13-1		
3.286	3.286 (0.594)	151	320314	20.0000	23.268	80.00- 120.00	100.00
3.286	3.286 (0.594)	153	206569			33.72- 93.72	64.49
3.286	3.286 (0.594)	101	402248			95.23- 155.23	125.58
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.314	3.314 (0.600)	98	114846	20.0000	22.630	80.00- 120.00	100.00
3.314	3.314 (0.600)	96	177965			130.14- 190.14	154.96
3.314	3.314 (0.600)	61	286795			218.16- 278.16	249.72
52 Acetone					CAS #: 67-64-1		
3.479	3.479 (0.629)	58	77675	20.0000	22.154	80.00- 120.00	100.00
3.472	3.472 (0.628)	43	237583			266.49- 326.49	305.87
56 Carbon Disulfide					CAS #: 75-15-0		
3.551	3.551 (0.642)	76	536081	20.0000	22.874	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.651	3.651 (0.660)	45	258147	20.0000	23.734	80.00- 120.00	100.00
3.651	3.651 (0.660)	43	53921			0.00- 50.02	20.89
3.651	3.651 (0.660)	59	12078			0.00- 34.32	4.68
58 3-Chloropropene					CAS #: 107-05-1		
3.794	3.794 (0.686)	76	85966	20.0000	22.752	80.00- 120.00	100.00
3.794	3.794 (0.686)	41	187094			185.01- 245.01	217.64
66 Methylene Chloride					CAS #: 75-09-2		
3.974	3.974 (0.719)	49	183775	20.0000	22.361	80.00- 120.00	100.00
3.981	3.981 (0.720)	84	163843			59.02- 119.02	89.15
3.981	3.981 (0.720)	51	57083			1.78- 61.78	31.06

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.110	4.110 (0.743)	59	330395	20.0000	24.190	80.00- 120.00	100.00
4.110	4.110 (0.743)	41	67242			0.00- 50.26	20.35
4.110	4.110 (0.743)	57	34562			0.00- 40.80	10.46
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.196	4.196 (0.759)	73	498195	20.0000	23.402	80.00- 120.00	100.00
4.196	4.196 (0.759)	57	110218			0.00- 51.46	22.12
4.196	4.196 (0.759)	41	100017			0.00- 49.34	20.08
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.217	4.217 (0.763)	98	122198	20.0000	24.167	80.00- 120.00	100.00
4.217	4.217 (0.763)	61	252578			184.16- 244.16	206.70
4.217	4.217 (0.763)	96	187366			127.84- 187.84	153.33
78 Hexane					CAS #: 110-54-3		
4.425	4.425 (0.800)	57	271039	20.0000	23.568	80.00- 120.00	100.00
4.425	4.425 (0.800)	43	156729			27.64- 87.64	57.83
4.432	4.432 (0.802)	86	48639			0.00- 46.92	17.95
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.711	4.711 (0.852)	63	323534	20.0000	23.651	80.00- 120.00	100.00
4.711	4.711 (0.852)	65	104747			2.04- 62.04	32.38
83 Isopropyl ether					CAS #: 108-20-3		
4.697	4.697 (0.850)	45	535717	20.0000	24.082	80.00- 120.00	100.00
4.697	4.697 (0.850)	87	170369			1.31- 61.31	31.80
4.704	4.704 (0.851)	59	66501			0.00- 42.69	12.41
86 Vinyl Acetate					CAS #: 108-05-4		
4.754	4.754 (0.860)	86	49143	20.0000	23.544	80.00- 120.00	100.00
4.754	4.754 (0.860)	43	452767			891.41- 951.41	921.33
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.055	5.055 (0.914)	59	568599	20.0000	24.491	80.00- 120.00	100.00
5.055	5.055 (0.914)	87	242845			13.52- 73.52	42.71
5.055	5.055 (0.914)	41	101505			0.00- 47.26	17.85
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.299	5.299 (0.959)	98	123554	20.0000	22.658	80.00- 120.00	100.00
5.299	5.299 (0.959)	96	190477			124.38- 184.38	154.16
5.299	5.299 (0.959)	61	234391			162.07- 222.07	189.71
92 2-Butanone					CAS #: 78-93-3		
5.327	5.327 (0.964)	72	88376	20.0000	22.924	80.00- 120.00	100.00
5.327	5.327 (0.964)	43	304596			306.33- 366.33	344.66

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.327	5.327 (0.964)	57	27923			0.00- 59.26	31.60
99 Tetrahydrofuran					CAS #: 109-99-9		
5.528	5.528 (1.000)	42	162612	20.0000	21.653	80.00- 120.00	100.00
5.528	5.528 (1.000)	71	80764			17.72- 77.72	49.67
5.528	5.528 (1.000)	72	82463			20.99- 80.99	50.71
100 Chloroform					CAS #: 67-66-3		
5.592	5.592 (1.012)	83	382389	20.0000	22.807	80.00- 120.00	100.00
5.592	5.592 (1.012)	85	249450			34.67- 94.67	65.23
102 Cyclohexane					CAS #: 110-82-7		
5.685	5.685 (1.028)	84	241523	20.0000	23.198	80.00- 120.00	100.00
5.685	5.685 (1.028)	56	255895			77.09- 137.09	105.95
5.685	5.685 (1.028)	41	136795			25.87- 85.87	56.64
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.707	5.707 (1.032)	97	386519	20.0000	23.255	80.00- 120.00	100.00
5.707	5.707 (1.032)	99	248118			34.33- 94.33	64.19
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.822	5.822 (1.053)	119	394720	20.0000	23.769	80.00- 120.00	100.00
5.822	5.822 (1.053)	117	406239			74.90- 134.90	102.92
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.088)	57	843719	20.0000	23.995	80.00- 120.00	100.00
6.015	6.015 (1.088)	56	268236			1.80- 61.80	31.79
6.015	6.015 (1.088)	41	219619			0.00- 55.83	26.03
116 Benzene					CAS #: 71-43-2		
6.044	6.044 (0.942)	78	573849	20.0000	23.950	80.00- 120.00	100.00
6.044	6.044 (0.942)	77	140016			0.00- 54.08	24.40
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.108	6.108 (1.105)	87	137984	20.0000	24.764	80.00- 120.00	100.00
6.108	6.108 (1.105)	73	560903			376.57- 436.57	406.50
6.108	6.108 (1.105)	55	133908			64.52- 124.52	97.05
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.130	6.130 (0.955)	62	238845	20.0000	22.820	80.00- 120.00	100.00
6.137	6.137 (0.956)	64	78170			2.16- 62.16	32.73
121 Heptane					CAS #: 142-82-5		
6.187	6.187 (0.964)	71	204256	20.0000	24.630	80.00- 120.00	100.00
6.187	6.187 (0.964)	43	281502			110.94- 170.94	137.82

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.187	6.187 (0.964)	57	170667			53.72- 113.72	83.56
125 Trichloroethene					CAS #: 79-01-6		
6.609	6.609 (1.030)	95	265230	20.0000	23.460	80.00- 120.00	100.00
6.609	6.609 (1.030)	130	282211			74.97- 134.97	106.40
6.609	6.609 (1.030)	97	175445			35.33- 95.33	66.15
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.212)	83	349287	20.0000	24.311	80.00- 120.00	100.00
6.703	6.703 (1.212)	98	166174			16.41- 76.41	47.58
6.703	6.703 (1.212)	55	248114			40.41- 100.41	71.03
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.846	6.846 (1.067)	63	211010	20.0000	24.601	80.00- 120.00	100.00
6.846	6.846 (1.067)	62	142421			38.78- 98.78	67.49
6.846	6.846 (1.067)	41	106343			20.16- 80.16	50.40
136 1,4-Dioxane					CAS #: 123-91-1		
6.939	6.939 (1.081)	88	127200	20.0000	24.509	80.00- 120.00	100.00
6.939	6.939 (1.081)	58	79428			31.02- 91.02	62.44
6.939	6.939 (1.081)	57	24874			0.00- 51.33	19.56
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.103)	83	418266	20.0000	23.570	80.00- 120.00	100.00
7.075	7.075 (1.103)	85	267419			34.16- 94.16	63.94
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.448	7.448 (1.161)	75	360115	20.0000	24.158	80.00- 120.00	100.00
7.448	7.448 (1.161)	77	115808			1.57- 61.57	32.16
7.448	7.448 (1.161)	39	156249			13.98- 73.98	43.39
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.555	7.555 (1.178)	58	147740	20.0000	25.604	80.00- 120.00	100.00
7.555	7.555 (1.178)	43	358300			205.93- 265.93	242.52
7.562	7.562 (1.179)	85	74632			18.04- 78.04	50.52
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.198)	91	725573	20.0000	24.149	80.00- 120.00	100.00
7.684	7.684 (1.198)	92	412425			27.24- 87.24	56.84
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.928	7.928 (0.894)	75	313988	20.0000	23.676	80.00- 120.00	100.00
7.928	7.928 (0.894)	77	100557			1.57- 61.57	32.03
7.928	7.928 (0.894)	39	135192			13.98- 73.98	43.06

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.085	8.085 (0.912)	97	247526	20.0000	23.658	80.00- 120.00	100.00
8.085	8.085 (0.912)	99	153555			31.05- 91.05	62.04
8.085	8.085 (0.912)	83	221828			58.29- 118.29	89.62
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.916)	166	365183	20.0000	23.782	80.00- 120.00	100.00
8.121	8.121 (0.916)	129	264485			42.46- 102.46	72.43
8.121	8.121 (0.916)	131	255733			40.24- 100.24	70.03
158 2-Hexanone					CAS #: 591-78-6		
8.250	8.250 (0.931)	58	189433	20.0000	25.657	80.00- 120.00	100.00
8.250	8.250 (0.931)	43	322928			205.93- 265.93	170.47
8.250	8.250 (0.931)	100	41991			11.40- 71.40	22.17
160 Dibromochloromethane					CAS #: 124-48-1		
8.393	8.393 (0.947)	129	459007	20.0000	23.500	80.00- 120.00	100.00
8.393	8.393 (0.947)	127	357216			47.28- 107.28	77.82
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.515	8.515 (0.960)	107	392265	20.0000	23.715	80.00- 120.00	100.00
8.508	8.508 (0.960)	109	374663			66.45- 126.45	95.51
165 Chlorobenzene					CAS #: 108-90-7		
8.887	8.887 (1.002)	112	564263	20.0000	23.561	80.00- 120.00	100.00
8.887	8.887 (1.002)	114	183047			2.06- 62.06	32.44
8.887	8.887 (1.002)	77	329804			26.47- 86.47	58.45
167 Ethyl Benzene					CAS #: 100-41-4		
8.930	8.930 (1.007)	106	281780	20.0000	24.159	80.00- 120.00	100.00
8.930	8.930 (1.007)	91	891544			289.94- 349.94	316.40
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	349344	20.0000	24.124	80.00- 120.00	100.00
9.031	9.031 (1.019)	91	700854			167.83- 227.83	200.62
171 o-Xylene					CAS #: 95-47-6		
9.367	9.367 (1.057)	106	327188	20.0000	24.351	80.00- 120.00	100.00
9.367	9.367 (1.057)	91	687796			181.11- 241.11	210.21
172 Styrene					CAS #: 100-42-5		
9.389	9.389 (1.059)	104	560851	20.0000	24.471	80.00- 120.00	100.00
9.389	9.389 (1.059)	78	266019			17.79- 77.79	47.43
174 Bromoform					CAS #: 75-25-2		
9.589	9.589 (1.082)	173	473315	20.0000	23.999	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.589	9.589 (1.082)	171	238247			21.45- 81.45	50.34
175 Cumene					CAS #: 98-82-8		
9.654	9.654 (1.089)	105	1028653	20.0000	23.966	80.00- 120.00	100.00
9.654	9.654 (1.089)	120	276568			0.00- 57.47	26.89
9.654	9.654 (1.089)	51	88023			0.00- 38.62	8.56
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.962	9.962 (1.124)	83	528402	20.0000	23.395	80.00- 120.00	100.00
9.962	9.962 (1.124)	85	348222			34.77- 94.77	65.90
182 Propylbenzene					CAS #: 103-65-1		
9.990	9.990 (1.127)	91	1209775	20.0000	23.478	80.00- 120.00	100.00
9.990	9.990 (1.127)	120	287653			0.00- 53.65	23.78
9.990	9.990 (1.127)	105	43348			0.00- 33.57	3.58
188 4-Ethyltoluene					CAS #: 622-96-8		
10.084	10.084 (1.137)	120	316862	20.0000	23.220	80.00- 120.00	100.00
10.084	10.084 (1.137)	105	1029784			292.89- 352.89	324.99
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.134	10.134 (1.143)	120	434676	20.0000	24.244	80.00- 120.00	100.00
10.134	10.134 (1.143)	105	890076			175.25- 235.25	204.77
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.449	10.449 (1.179)	120	375379	20.0000	23.322	80.00- 120.00	100.00
10.449	10.449 (1.179)	105	814197			183.76- 243.76	216.90
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.735	10.735 (1.211)	146	597309	20.0000	23.071	80.00- 120.00	100.00
10.735	10.735 (1.211)	148	382680			33.69- 93.69	64.07
10.735	10.735 (1.211)	111	228494			8.12- 68.12	38.25
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.814	10.814 (1.220)	146	592118	20.0000	23.116	80.00- 120.00	100.00
10.814	10.814 (1.220)	148	377830			33.86- 93.86	63.81
10.814	10.814 (1.220)	111	223681			6.71- 66.71	37.78
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.929	10.929 (1.233)	91	713420	20.0000	23.423	80.00- 120.00	100.00
10.936	10.936 (1.233)	126	159267			0.00- 51.95	22.32
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.144	11.144 (1.257)	146	561399	20.0000	22.892	80.00- 120.00	100.00
11.144	11.144 (1.257)	148	357801			33.90- 93.90	63.73

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.144	11.144 (1.257)	111	223856			8.86- 68.86	39.87
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.540	12.540 (1.414)	180	436897	20.0000	20.511	80.00- 120.00	100.00
12.540	12.540 (1.414)	182	415696			65.21- 125.21	95.15
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.626	12.626 (1.424)	225	377437	20.0000	20.636	80.00- 120.00	100.00
12.626	12.626 (1.424)	223	243287			33.22- 93.22	64.46

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092121.d
Lab Smp Id: ICAL Level #5
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msd17.i/21sep15a.b/175q0921a.m
Misc Info: 20ppbv(200ppbv)

Calibration Date: 21-SEP-2015
Calibration Time: 22:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	116527	69916	163138	116580	0.05
123 1,4-Difluorobenze	475185	285111	665259	472978	-0.46
163 Chlorobenzene-d5	418099	250859	585339	426962	2.12

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/21sep15a.b/17092121.d

Date : 21-SEP-2015 22:31

Client ID:

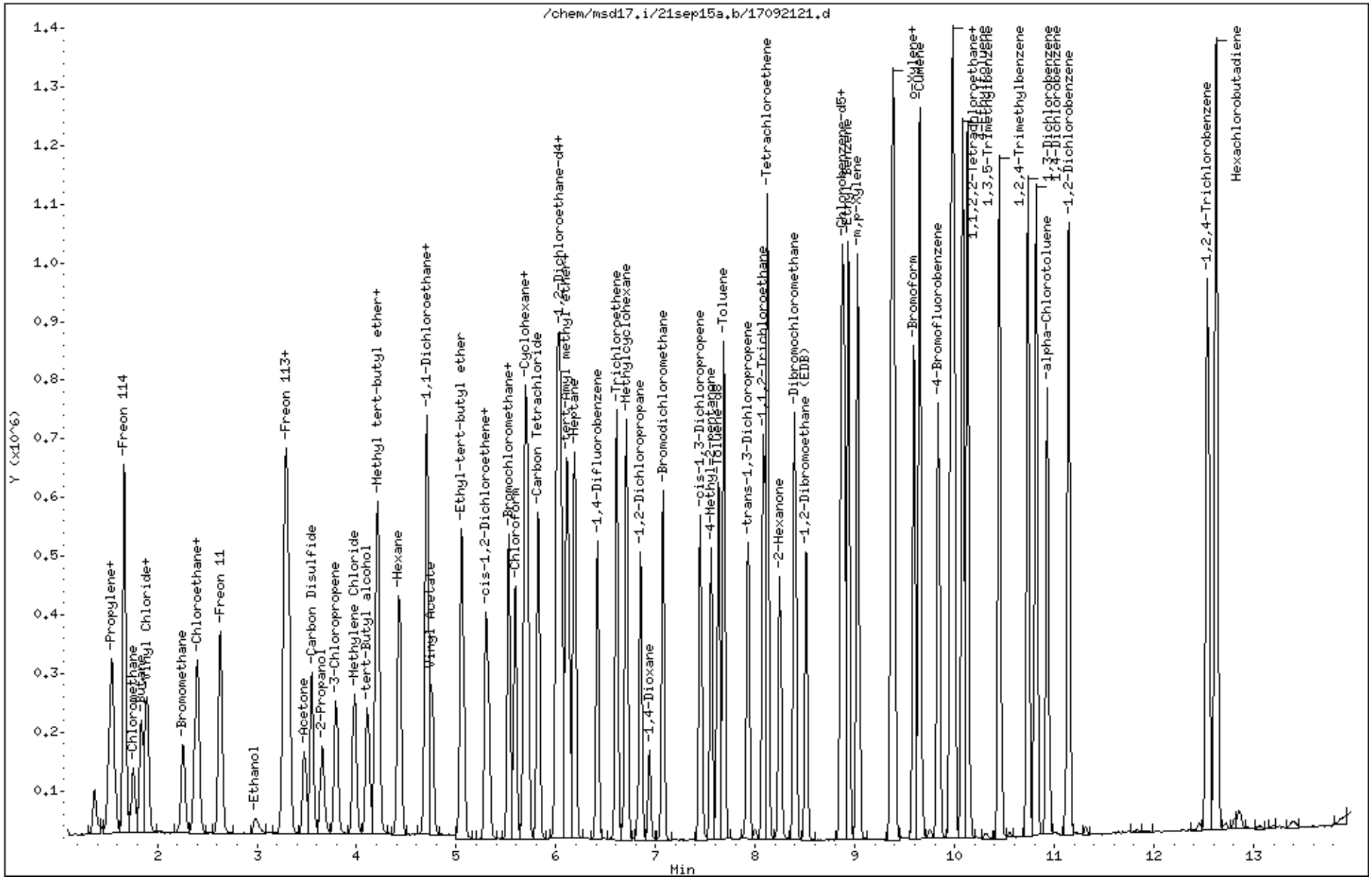
Sample Info: 20ml 2737-240

Column phase: RTX-624

Instrument: msd17.i

Operator: gh

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092416.d
Lab Smp Id: ICAL Level 6
Inj Date : 24-SEP-2015 16:22
Operator : cb Inst ID: msd17.i
Smp Info : 50ml 2736-262
Misc Info : 5.0ppbv(20ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921c.m
Meth Date : 25-Sep-2015 15:58 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 16:22 Cal File: 17092416.d
Als bottle: 7 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Naphcrv.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.521	5.521 (1.000)	130	103006	25.0000		80.00- 120.00	100.00
5.521	5.521 (1.000)	128	78750			46.54- 106.54	76.45
5.521	5.521 (1.000)	49	114423			83.83- 143.83	111.08
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.409	6.409 (1.000)	114	406535	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	63795			0.00- 44.86	15.69
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	381821	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	204942			23.93- 83.93	53.67
228 Naphthalene					CAS #: 91-20-3		
12.877	12.877 (1.452)	128	76686	5.00000	4.215	0.00- 30.00	100.00
12.877	12.877 (1.452)	127	10326			0.00- 30.00	13.47

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092416.d
Lab Smp Id: ICAL Level 6
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921c.m
Misc Info: 5.0ppbv(20ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 16:22
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	103006	61804	144208	103006	0.00
123 1,4-Difluorobenze	406535	243921	569149	406535	0.00
163 Chlorobenzene-d5	381821	229093	534549	381821	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.52	0.00
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092416.d

Page 1

Date : 24-SEP-2015 16:22

Client ID:

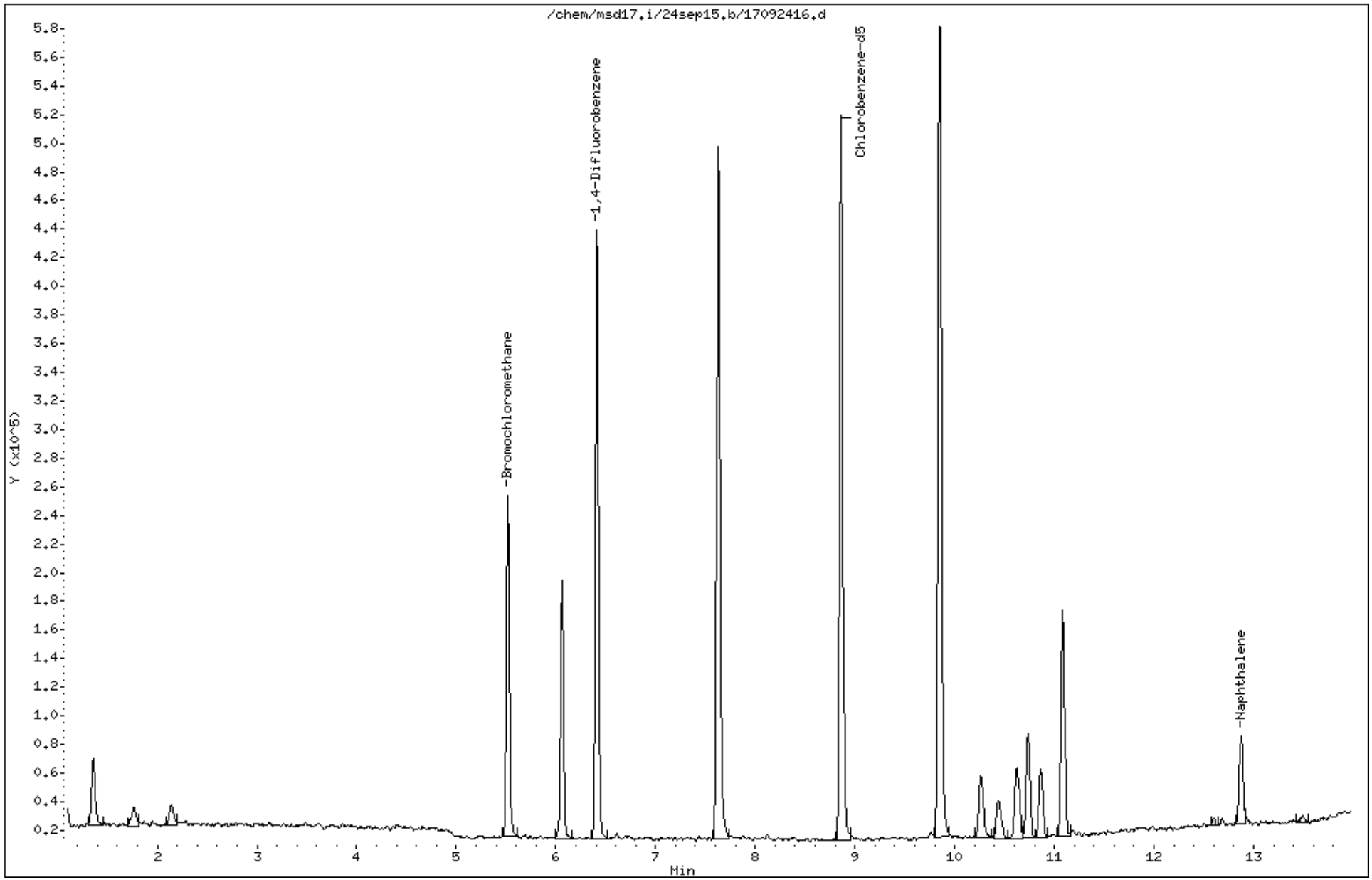
Instrument: msd17.i

Sample Info: 50ml 2736-262

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092412.d
Lab Smp Id: ICAL Level 6
Inj Date : 24-SEP-2015 13:50
Operator : cb Inst ID: msd17.i
Smp Info : 50ml 2736-197
Misc Info : 50ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921b.m
Meth Date : 25-Sep-2015 15:30 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 13:50 Cal File: 17092412.d
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT1.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.528	5.528 (1.000)	130	107258	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	83295			46.54- 106.54	77.66
5.528	5.528 (1.000)	49	121787			83.83- 143.83	113.55
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.416	6.416 (1.000)	114	429141	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	63393			0.00- 44.86	14.77
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.851	8.851 (1.000)	117	371322	25.0000		80.00- 120.00	100.00
8.851	8.851 (1.000)	82	198471			23.93- 83.93	53.45
6 Freon 143a					CAS #: 420-46-2		
1.438	1.438 (0.260)	65	123646	50.0000	65.491	0.00- 0.00	100.00
1.438	1.438 (0.260)	69	425420			0.00- 0.00	344.06
1.438	1.438 (0.260)	64	30950			0.00- 0.00	25.03

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
7 Freon 134a					CAS #: 811-97-2		
1.481	1.481 (0.268)	83	277985	50.0000	52.226	0.00- 0.00	100.00
1.481	1.481 (0.268)	69	251165			0.00- 0.00	90.35
1.481	1.481 (0.268)	63	35009			0.00- 0.00	12.59
10 1,1-Difluoroethane					CAS #: 75-37-6		
1.538	1.538 (0.278)	65	156574	50.0000	53.720	0.00- 0.00	100.00
1.538	1.538 (0.278)	51	269227			0.00- 0.00	171.95
1.538	1.538 (0.278)	47	66387			0.00- 0.00	42.40
13 Chlorodifluoromethane					CAS #: 75-45-6		
1.588	1.588 (0.287)	67	71794	50.0000	49.682	0.00- 0.00	100.00
1.581	1.581 (0.286)	51	459361			0.00- 0.00	639.83
1.588	1.588 (0.287)	85	8102			0.00- 0.00	11.29
16 Freon 142b					CAS #: 75-68-3		
1.717	1.717 (0.311)	65	611877	50.0000	46.892	0.00- 0.00	100.00
1.717	1.717 (0.311)	45	140077			0.00- 0.00	22.89
37 Dichlorofluoromethane					CAS #: 75-43-4		
2.648	2.648 (0.479)	67	713071	50.0000	46.574	0.00- 0.00	100.00
2.648	2.648 (0.479)	69	238350			0.00- 0.00	33.43
2.713	2.713 (0.491)	35	569			0.00- 0.00	0.08
48 Freon 123					CAS #: 306-83-2		
3.229	3.229 (0.584)	83	829198	50.0000	48.626	0.00- 0.00	100.00
3.229	3.229 (0.584)	133	148092			0.00- 0.00	17.86
3.229	3.229 (0.584)	85	552069			0.00- 0.00	66.58
59 Cyclopentene					CAS #: 142-29-0		
3.809	3.809 (0.689)	67	458114	50.0000	44.660	0.00- 0.00	100.00
3.809	3.809 (0.689)	68	183728			0.00- 0.00	40.11
3.809	3.809 (0.689)	53	84011			0.00- 0.00	18.34
84 1-Propanol					CAS #: 71-23-8		
4.855	4.855 (0.878)	42	46797	50.0000	37.519	0.00- 0.00	100.00
4.855	4.855 (0.878)	59	69703			0.00- 0.00	148.95
4.855	4.855 (0.878)	41	34272			0.00- 0.00	73.24
90 2,2-Dichloropropane					CAS #: 594-20-7		
5.256	5.256 (0.951)	77	504155	50.0000	46.293	0.00- 0.00	100.00
5.256	5.256 (0.951)	79	159053			0.00- 0.00	31.55
5.256	5.256 (0.951)	97	104638			0.00- 0.00	20.76
107 1,1-Dichloropropene					CAS #: 563-58-6		
5.857	5.857 (0.913)	110	143250	50.0000	48.352	0.00- 0.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
107 1,1-Dichloropropene (continued)							
5.857	5.857 (0.913)	75	384012			0.00- 0.00	268.07
115 Isobutanol					CAS #: 78-83-1		
6.015	6.015 (1.088)	39	73371	50.0000		0.00- 0.00	100.00(a)
6.015	6.015 (1.088)	41	185493			0.00- 0.00	252.82
6.015	6.015 (1.088)	43	251041			0.00- 0.00	342.15
124 n-Butanol					CAS #: 71-36-3		
6.581	6.581 (1.026)	56	413813	50.0000	47.434	0.00- 0.00	100.00
6.581	6.581 (1.026)	41	259453			0.00- 0.00	62.70
6.581	6.581 (1.026)	43	215413			0.00- 0.00	52.06
157 1,3-Dichloropropane					CAS #: 142-28-9		
8.228	8.228 (1.282)	76	587161	50.0000	48.147	0.00- 0.00	100.00
8.228	8.228 (1.282)	41	306792			0.00- 0.00	52.25
8.228	8.228 (1.282)	78	187627			0.00- 0.00	31.95
159 Butyl Acetate					CAS #: 123-86-4		
8.307	8.307 (1.295)	56	120191	50.0000	43.044	0.00- 0.00	100.00
8.307	8.307 (1.295)	73	61375			0.00- 0.00	51.06
8.307	8.307 (1.295)	43	279339			0.00- 0.00	232.41
168 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.937	8.937 (1.010)	131	540183	50.0000	49.603	0.00- 0.00	100.00
8.937	8.937 (1.010)	117	378747			0.00- 0.00	70.11
8.937	8.937 (1.010)	95	206034			0.00- 0.00	38.14
176 Cyclohexanone					CAS #: 108-94-1		
9.797	9.797 (1.107)	55	411690	50.0000	47.028	0.00- 0.00	100.00
9.797	9.797 (1.107)	98	207761			0.00- 0.00	50.47
9.797	9.797 (1.107)	42	266127			0.00- 0.00	64.64
180 Bromobenzene					CAS #: 108-86-1		
9.947	9.947 (1.124)	156	601224	50.0000	47.343	0.00- 0.00	100.00
9.947	9.947 (1.124)	158	580396			0.00- 0.00	96.54
9.947	9.947 (1.124)	77	879243			0.00- 0.00	146.24
185 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.998	9.998 (1.129)	110	296788	50.0000	49.334	0.00- 0.00	100.00
9.998	9.998 (1.129)	75	781261			0.00- 0.00	263.24
9.998	9.998 (1.129)	61	196912			0.00- 0.00	66.35
189 2-Chlorotoluene					CAS #: 95-49-8		
10.084	10.084 (1.139)	126	445207	50.0000	47.030	0.00- 0.00	100.00
10.084	10.084 (1.139)	91	1245796			0.00- 0.00	279.82

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
189 2-Chlorotoluene (continued)							
10.084	10.084 (1.139)	65	111130			0.00- 0.00	24.96
191 4-Chlorotoluene					CAS #: 106-43-4		
10.184	10.184 (1.151)	126	458940	50.0000	46.957	0.00- 0.00	100.00
10.184	10.184 (1.151)	91	1286910			0.00- 0.00	280.41
10.177	10.177 (1.150)	63	167476			0.00- 0.00	36.49
195 tert-Butylbenzene					CAS #: 98-06-6		
10.384	10.384 (1.173)	119	1416068	50.0000	48.382	0.00- 0.00	100.00
10.384	10.384 (1.173)	134	352179			0.00- 0.00	24.87
10.377	10.377 (1.172)	91	925626			0.00- 0.00	65.37
197 Pentachloroethane					CAS #: 76-01-7		
10.456	10.456 (1.181)	167	508378	50.0000	53.362	0.00- 0.00	100.00
10.456	10.456 (1.181)	117	496698			0.00- 0.00	97.70
10.456	10.456 (1.181)	169	248052			0.00- 0.00	48.79
203 sec-Butylbenzene					CAS #: 135-98-8		
10.563	10.563 (1.193)	134	443796	50.0000	48.709	0.00- 0.00	100.00
10.563	10.563 (1.193)	105	2160407			0.00- 0.00	486.80
10.563	10.563 (1.193)	91	331763			0.00- 0.00	74.76
207 p-Cymene					CAS #: 99-87-6		
10.678	10.678 (1.206)	119	1897822	50.0000	49.161	0.00- 0.00	100.00
10.678	10.678 (1.206)	134	513329			0.00- 0.00	27.05
10.678	10.678 (1.206)	91	420939			0.00- 0.00	22.18
210 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
10.800	10.800 (1.220)	120	729967	50.0000	48.663	0.00- 0.00	100.00
10.800	10.800 (1.220)	105	1701343			0.00- 0.00	233.07
10.800	10.800 (1.220)	77	204603			0.00- 0.00	28.03
213 Butylbenzene					CAS #: 104-51-8		
11.022	11.022 (1.245)	134	517446	50.0000	51.384	0.00- 0.00	100.00
11.022	11.022 (1.245)	91	1911302			0.00- 0.00	369.37
11.022	11.022 (1.245)	92	1003563			0.00- 0.00	193.95
221 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.810	11.810 (1.334)	157	668111	50.0000	46.264	0.00- 0.00	100.00
11.810	11.810 (1.334)	75	554689			0.00- 0.00	83.02
11.810	11.810 (1.334)	155	510589			0.00- 0.00	76.42

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092412.d
Lab Smp Id: ICAL Level 6
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921b.m
Misc Info: 50ppbv(200ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 13:50
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	107258	64355	150161	107258	0.00
123 1,4-Difluorobenze	429141	257485	600797	429141	0.00
163 Chlorobenzene-d5	371322	222793	519851	371322	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.85	8.52	9.18	8.85	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092412.d

Date : 24-SEP-2015 13:50

Client ID:

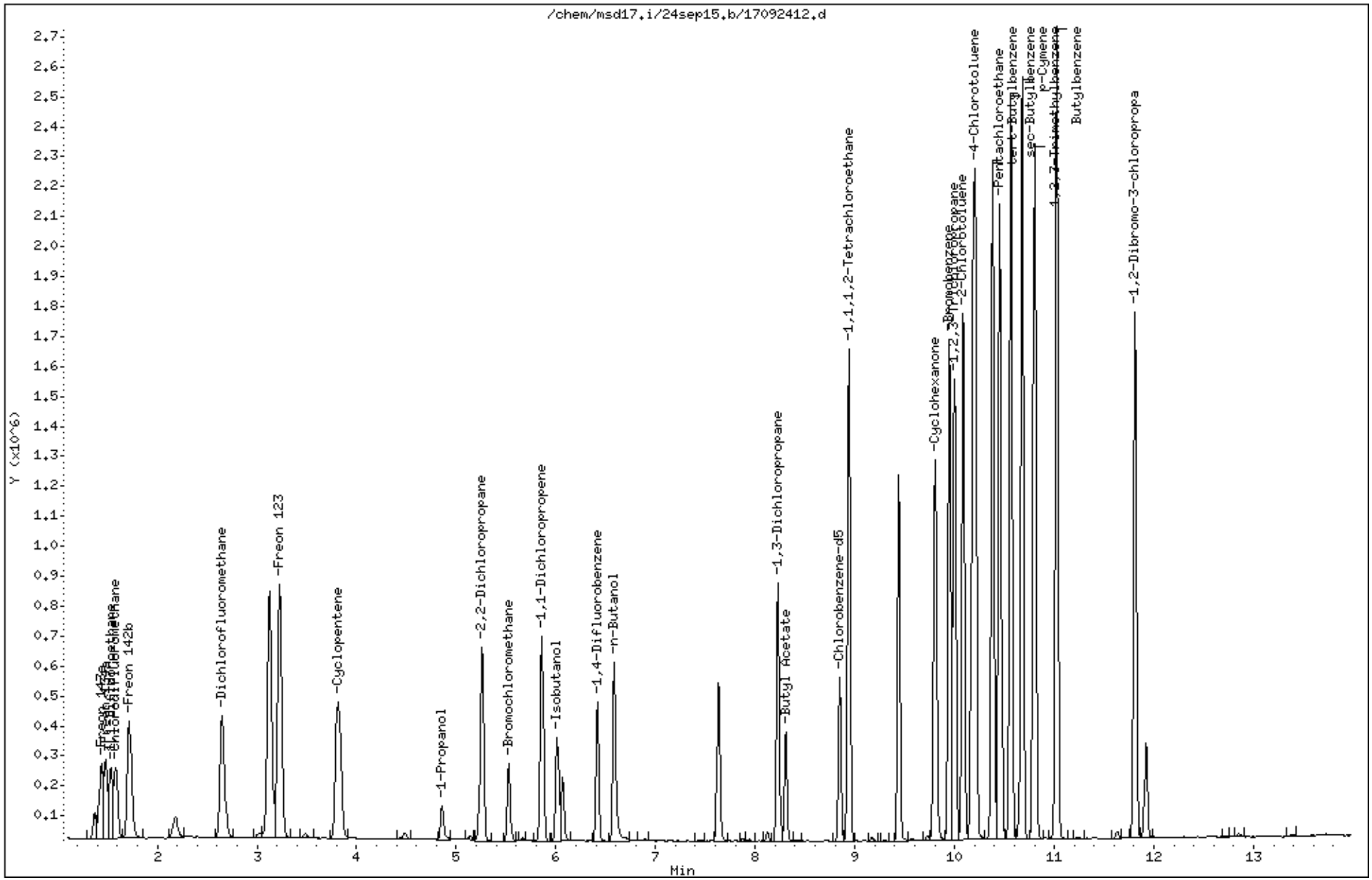
Sample Info: 50ml 2736-197

Instrument: msd17.i

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092409.d
Lab Smp Id: ICAL Level 6
Inj Date : 24-SEP-2015 12:23
Operator : cb Inst ID: msd17.i
Smp Info : 50ml 2736-222
Misc Info : 50ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921b.m
Meth Date : 25-Sep-2015 15:50 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 13:50 Cal File: 17092412.d
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Combo.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.528	5.528 (1.000)	130	109679	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	84514			46.54- 106.54	77.06
5.528	5.528 (1.000)	49	126299			83.83- 143.83	115.15
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.416	6.416 (1.000)	114	409952	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	62302			0.00- 44.86	15.20
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.852	8.852 (1.000)	117	352896	25.0000		80.00- 120.00	100.00
8.852	8.852 (1.000)	82	186052			23.93- 83.93	52.72
32 Vinyl Bromide						CAS #: 593-60-2	
2.584	2.584 (0.467)	106	334007	50.0000	48.029	0.00- 0.00	100.00
2.584	2.584 (0.467)	108	322897			0.00- 0.00	96.67

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
94 Ethyl Acetate					CAS #: 141-78-6		
5.342	5.342 (0.966)	70	43701	50.0000	44.382	0.00- 0.00	100.00
5.342	5.342 (0.966)	61	58261			0.00- 0.00	133.32
5.342	5.342 (0.966)	45	58032			0.00- 0.00	132.79
63 Acetonitrile					CAS #: 75-05-8		
3.902	3.902 (0.706)	40	178011	50.0000	48.425	0.00- 0.00	100.00
3.902	3.902 (0.706)	41	433117			0.00- 0.00	243.31
3.902	3.902 (0.706)	38	49831			0.00- 0.00	27.99
64 Cyclopentane					CAS #: 287-92-3		
3.916	3.916 (0.708)	70	193037	50.0000	46.448	0.00- 0.00	100.00
3.916	3.916 (0.708)	55	231519			0.00- 0.00	119.94
74 Acrylonitrile					CAS #: 107-13-1		
4.324	4.324 (0.782)	52	229658	50.0000	47.568	0.00- 0.00	100.00
4.324	4.324 (0.782)	53	300953			0.00- 0.00	131.04
134 Methyl Methacrylate					CAS #: 80-62-6		
6.903	6.903 (0.780)	41	409985	50.0000	50.379	0.00- 0.00	100.00
6.903	6.903 (0.780)	69	376942			0.00- 0.00	91.94
6.903	6.903 (0.780)	100	140098			0.00- 0.00	34.17
137 Dibromomethane					CAS #: 74-95-3		
6.960	6.960 (0.786)	174	449635	50.0000	50.815	0.00- 0.00	100.00
6.953	6.953 (0.786)	93	433828			0.00- 0.00	96.48
6.953	6.953 (0.786)	95	364339			0.00- 0.00	81.03
173 2-Heptanone					CAS #: 110-43-0		
6.187	6.187 (1.119)	58	13009	50.0000	42.639	0.00- 0.00	100.00
6.187	6.187 (1.119)	43	468602			0.00- 0.00	3602.14
34 Pentane					CAS #: 109-66-0		
2.706	2.706 (0.489)	43	523876	50.0000	48.011	0.00- 0.00	100.00
2.706	2.706 (0.489)	57	89801			0.00- 0.00	17.14
2.706	2.706 (0.489)	72	64349			0.00- 0.00	12.28
148 Octane					CAS #: 111-65-9		
7.684	7.684 (1.198)	57	286993	50.0000	50.092	0.00- 0.00	100.00
7.684	7.684 (1.198)	85	361489			0.00- 0.00	125.96
7.677	7.677 (1.196)	43	616902			0.00- 0.00	214.95
170 Nonane					CAS #: 111-84-2		
8.930	8.930 (1.009)	43	642660	50.0000	51.367	0.00- 0.00	100.00
8.930	8.930 (1.009)	57	626416			0.00- 0.00	97.47
8.930	8.930 (1.009)	85	284749			0.00- 0.00	44.31

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
187 Decane					CAS #: 124-18-5		
10.019	10.019 (1.132)	57	857730	50.0000	53.417	0.00- 0.00	100.00
10.019	10.019 (1.132)	71	383195			0.00- 0.00	44.68
10.019	10.019 (1.132)	142	49740			0.00- 0.00	5.80
215 Undecane					CAS #: 1120-21-4		
11.008	11.008 (1.244)	57	930121	50.0000	51.874	0.00- 0.00	100.00
11.000	11.000 (1.243)	43	744446			0.00- 0.00	80.04
225 Dodecane					CAS #: 112-40-3		
11.917	11.917 (1.346)	57	777481	50.0000	49.016	0.00- 0.00	100.00
11.917	11.917 (1.346)	43	588605			0.00- 0.00	75.71

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092409.d
Lab Smp Id: ICAL Level 6
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921b.m
Misc Info: 50ppbv(200ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 12:23
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	109679	65807	153551	109679	0.00
123 1,4-Difluorobenze	409952	245971	573933	409952	0.00
163 Chlorobenzene-d5	352896	211738	494054	352896	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.85	8.52	9.18	8.85	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092409.d

Page 1

Date : 24-SEP-2015 12:23

Client ID:

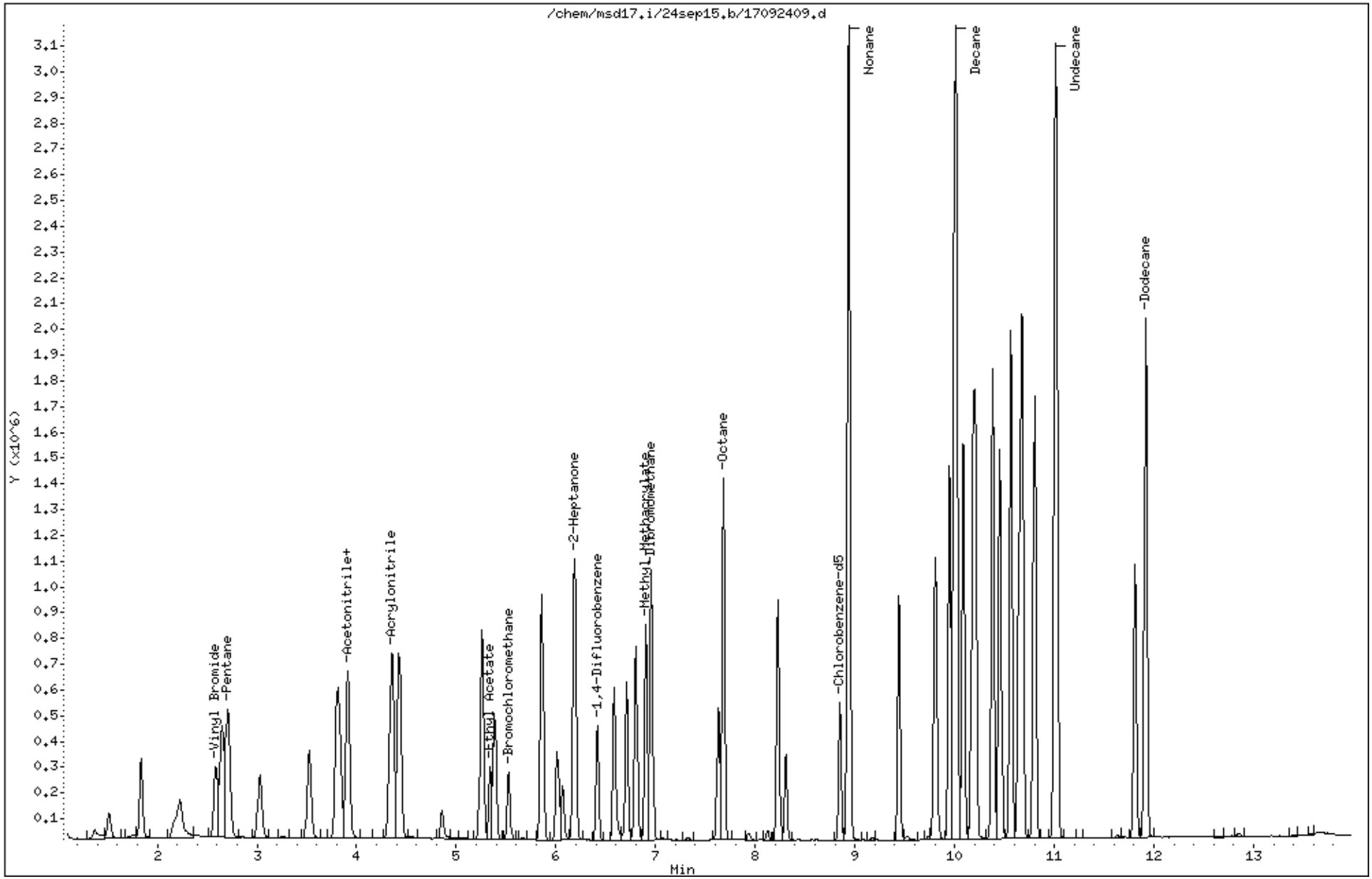
Instrument: msd17.i

Sample Info: 50ml 2736-222

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092406.d
Lab Smp Id: ICAL Level 6
Inj Date : 24-SEP-2015 11:04
Operator : cb Inst ID: msd17.i
Smp Info : 50ml 2736-107
Misc Info : 50ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921b.m
Meth Date : 25-Sep-2015 15:28 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 11:04 Cal File: 17092406.d
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 123TCB.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.528	5.528 (1.000)	130	106181	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	79778			46.54- 106.54	75.13
5.528	5.528 (1.000)	49	115956			83.83- 143.83	109.21
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.416	6.416 (1.000)	114	407033	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	59169			0.00- 44.86	14.54
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.852	8.852 (1.000)	117	361309	25.0000		80.00- 120.00	100.00
8.852	8.852 (1.000)	82	193356			23.93- 83.93	53.52
229 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
13.056	13.056 (1.475)	180	462177	50.0000	41.754	0.00- 0.00	100.00
13.056	13.056 (1.475)	182	444331			0.00- 0.00	96.14
13.056	13.056 (1.475)	145	141455			0.00- 0.00	30.61

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092406.d
Lab Smp Id: ICAL Level 6
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921b.m
Misc Info: 50ppbv(200ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 11:04
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	106181	63709	148653	106181	0.00
123 1,4-Difluorobenze	407033	244220	569846	407033	0.00
163 Chlorobenzene-d5	361309	216785	505833	361309	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.85	8.52	9.18	8.85	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092406.d

Date : 24-SEP-2015 11:04

Client ID:

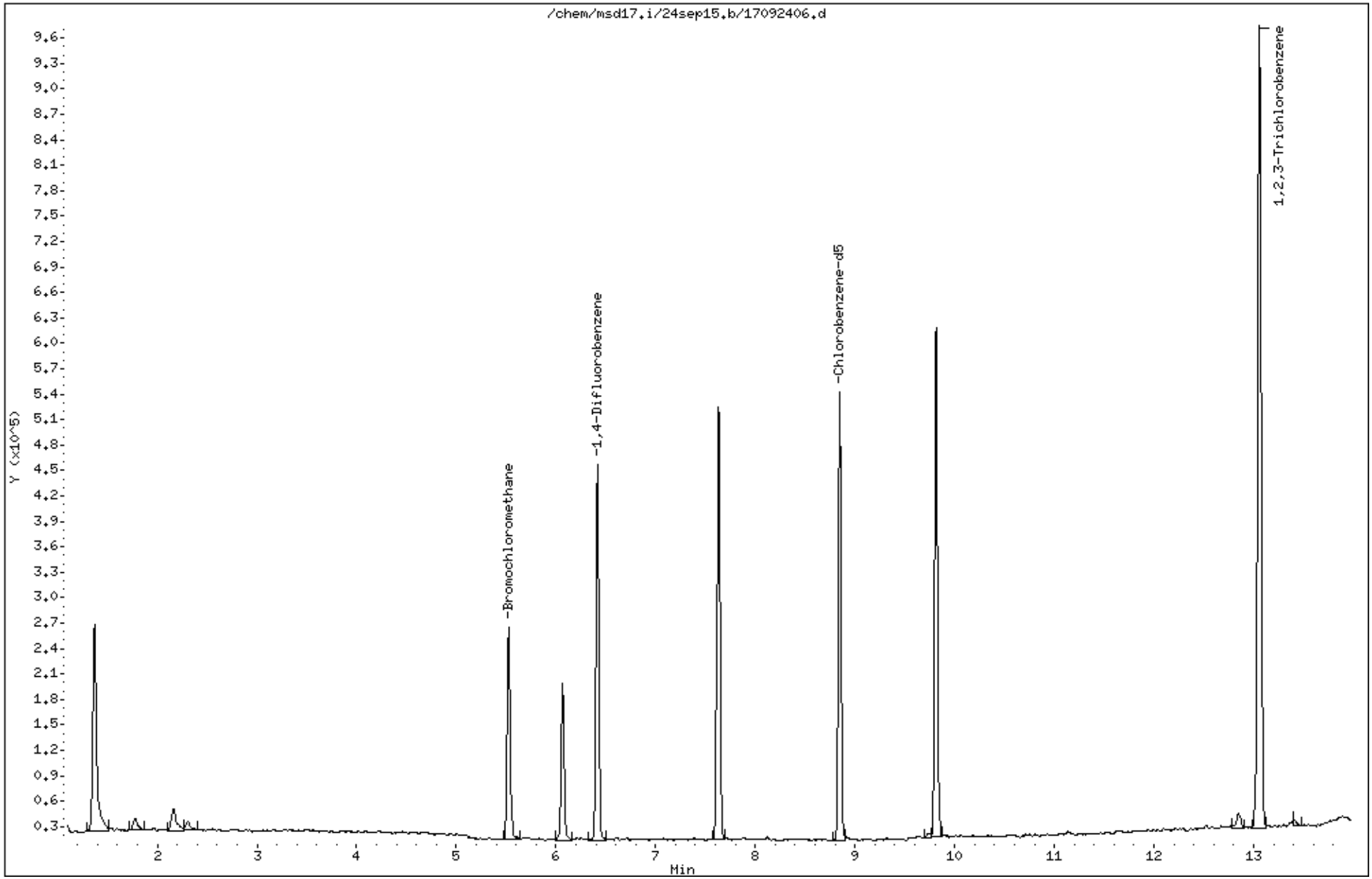
Instrument: msd17.i

Sample Info: 50ml 2736-107

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/21sep15a.b/17092122.d
Lab Smp Id: ICAL Level #6
Inj Date : 21-SEP-2015 22:55
Operator : gh Inst ID: msd17.i
Smp Info : 50ml 2737-240
Misc Info : 50ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/21sep15a.b/175q0921a.m
Meth Date : 25-Sep-2015 15:15 cbond Quant Type: ISTD
Cal Date : 21-SEP-2015 22:55 Cal File: 17092122.d
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12noNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.528	5.528 (1.000)	130	116527	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	89187			46.54- 106.54	76.54
5.528	5.528 (1.000)	49	132641			83.83- 143.83	113.83
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.416	6.416 (1.000)	114	475185	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	70590			0.00- 44.86	14.86
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.866	8.866 (1.000)	117	418099	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	225474			23.93- 83.93	53.93
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.065	6.065 (1.097)	65	159029	25.0000	25.327	80.00- 120.00	100.00
6.065	6.065 (1.097)	67	88280			25.51- 85.51	55.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.189)	98	489120	25.0000	24.965	80.00- 120.00	100.00
7.627	7.627 (1.189)	70	50805			0.00- 40.39	10.39
7.627	7.627 (1.189)	100	312890			33.97- 93.97	63.97
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.854	9.854 (1.111)	174	276278	25.0000	25.881	80.00- 120.00	100.00
9.847	9.847 (1.111)	95	302922			79.64- 139.64	109.64
9.847	9.847 (1.111)	176	264680			65.80- 125.80	95.80
9 Propylene					CAS #: 115-07-1		
1.517	1.517 (0.274)	41	223494	50.0000	48.340	80.00- 120.00	100.00
1.517	1.517 (0.274)	42	149958			37.10- 97.10	67.10
1.517	1.517 (0.274)	39	167612			44.98- 104.98	75.00
11 Freon 12					CAS #: 75-71-8		
1.552	1.552 (0.281)	85	924522	50.0000	49.295	80.00- 120.00	100.00
1.552	1.552 (0.281)	87	298917			2.33- 62.33	32.33
15 Freon 114					CAS #: 76-14-2		
1.674	1.674 (0.303)	135	676891	50.0000	49.722	80.00- 120.00	100.00
1.674	1.674 (0.303)	137	216758			2.02- 62.02	32.02
17 Chloromethane					CAS #: 74-87-3		
1.760	1.760 (0.318)	50	311572	50.0000	47.477	80.00- 120.00	100.00
1.760	1.760 (0.318)	52	100790			2.35- 62.35	32.35
23 Butane					CAS #: 106-97-8		
1.839	1.839 (0.333)	58	66950	50.0000	46.516	80.00- 120.00	100.00
1.839	1.839 (0.333)	43	460487			657.81- 717.81	687.81
25 Vinyl Chloride					CAS #: 75-01-4		
1.875	1.875 (0.339)	62	352090	50.0000	47.469	80.00- 120.00	100.00
1.875	1.875 (0.339)	64	115112			2.69- 62.69	32.69
26 1,3-Butadiene					CAS #: 106-99-0		
1.903	1.903 (0.344)	54	249965	50.0000	48.572	80.00- 120.00	100.00
1.903	1.903 (0.344)	39	234827			63.95- 123.95	93.94
29 Bromomethane					CAS #: 74-83-9		
2.262	2.262 (0.409)	94	336367	50.0000	51.200	80.00- 120.00	100.00
2.262	2.262 (0.409)	96	315139			63.69- 123.69	93.69
30 Chloroethane					CAS #: 75-00-3		
2.383	2.383 (0.431)	64	180384	50.0000	47.974	80.00- 120.00	100.00
2.376	2.376 (0.430)	66	57466			1.86- 61.86	31.86

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.383	2.383 (0.431)	49	46021			0.00- 55.51	25.51
31 Isopentane					CAS #: 78-78-4		
2.405	2.405 (0.435)	43	353440	50.0000	48.460	80.00- 120.00	100.00
2.405	2.405 (0.435)	57	262782			44.35- 104.35	74.35
35 Freon 11					CAS #: 75-69-4		
2.634	2.634 (0.476)	101	936693	50.0000	48.503	80.00- 120.00	100.00
2.634	2.634 (0.476)	103	610729			35.20- 95.20	65.20
42 Ethanol					CAS #: 64-17-5		
2.992	2.992 (0.541)	45	118445	50.0000	45.806	80.00- 120.00	100.00
2.992	2.992 (0.541)	43	24121			0.00- 50.36	20.36
2.992	2.992 (0.541)	46	47750			10.31- 70.31	40.31
49 Freon 113					CAS #: 76-13-1		
3.286	3.286 (0.594)	151	672179	50.0000	48.851	80.00- 120.00	100.00
3.286	3.286 (0.594)	153	428313			33.72- 93.72	63.72
3.286	3.286 (0.594)	101	841765			95.23- 155.23	125.23
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.315	3.315 (0.600)	98	240214	50.0000	47.355	80.00- 120.00	100.00
3.315	3.315 (0.600)	96	384687			130.14- 190.14	160.14
3.315	3.315 (0.600)	61	596105			218.16- 278.16	248.16
52 Acetone					CAS #: 67-64-1		
3.479	3.479 (0.629)	58	169379	50.0000	48.331	80.00- 120.00	100.00
3.479	3.479 (0.629)	43	502184			266.49- 326.49	296.49
56 Carbon Disulfide					CAS #: 75-15-0		
3.551	3.551 (0.642)	76	1131425	50.0000	48.299	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.651	3.651 (0.660)	45	552053	50.0000	50.780	80.00- 120.00	100.00
3.651	3.651 (0.660)	43	110507			0.00- 50.02	20.02
3.651	3.651 (0.660)	59	23843			0.00- 34.32	4.32
58 3-Chloropropene					CAS #: 107-05-1		
3.794	3.794 (0.686)	76	182789	50.0000	48.400	80.00- 120.00	100.00
3.794	3.794 (0.686)	41	393028			185.01- 245.01	215.02
66 Methylene Chloride					CAS #: 75-09-2		
3.981	3.981 (0.720)	49	386270	50.0000	47.021	80.00- 120.00	100.00
3.981	3.981 (0.720)	84	343871			59.02- 119.02	89.02
3.981	3.981 (0.720)	51	122744			1.78- 61.78	31.78

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.110	4.110 (0.743)	59	694391	50.0000	50.863	80.00- 120.00	100.00
4.110	4.110 (0.743)	41	140705			0.00- 50.26	20.26
4.110	4.110 (0.743)	57	74979			0.00- 40.80	10.80
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.196	4.196 (0.759)	73	1036218	50.0000	48.697	80.00- 120.00	100.00
4.196	4.196 (0.759)	57	222361			0.00- 51.46	21.46
4.196	4.196 (0.759)	41	200361			0.00- 49.34	19.34
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.224	4.224 (0.764)	98	251688	50.0000	49.798	80.00- 120.00	100.00
4.217	4.217 (0.763)	61	539016			184.16- 244.16	214.16
4.217	4.217 (0.763)	96	397270			127.84- 187.84	157.84
78 Hexane					CAS #: 110-54-3		
4.432	4.432 (0.802)	57	550786	50.0000	47.915	80.00- 120.00	100.00
4.432	4.432 (0.802)	43	317464			27.64- 87.64	57.64
4.432	4.432 (0.802)	86	93218			0.00- 46.92	16.92
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.711	4.711 (0.852)	63	678109	50.0000	49.593	80.00- 120.00	100.00
4.711	4.711 (0.852)	65	217299			2.04- 62.04	32.04
83 Isopropyl ether					CAS #: 108-20-3		
4.697	4.697 (0.850)	45	1083839	50.0000	48.744	80.00- 120.00	100.00
4.704	4.704 (0.851)	87	339300			1.31- 61.31	31.31
4.704	4.704 (0.851)	59	137573			0.00- 42.69	12.69
86 Vinyl Acetate					CAS #: 108-05-4		
4.754	4.754 (0.860)	86	101775	50.0000	48.782	80.00- 120.00	100.00
4.754	4.754 (0.860)	43	937766			891.41- 951.41	921.41
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.055	5.055 (0.914)	59	1136016	50.0000	48.953	80.00- 120.00	100.00
5.055	5.055 (0.914)	87	494412			13.52- 73.52	43.52
5.055	5.055 (0.914)	41	196083			0.00- 47.26	17.26
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.299	5.299 (0.959)	98	263651	50.0000	48.372	80.00- 120.00	100.00
5.299	5.299 (0.959)	96	407034			124.38- 184.38	154.38
5.299	5.299 (0.959)	61	506404			162.07- 222.07	192.07
92 2-Butanone					CAS #: 78-93-3		
5.327	5.327 (0.964)	72	189459	50.0000	49.165	80.00- 120.00	100.00
5.327	5.327 (0.964)	43	637192			306.33- 366.33	336.32

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.327	5.327 (0.964)	57	55434			0.00- 59.26	29.26
99 Tetrahydrofuran					CAS #: 109-99-9		
5.528	5.528 (1.000)	42	350424	50.0000	46.682	80.00- 120.00	100.00
5.528	5.528 (1.000)	71	167219			17.72- 77.72	47.72
5.528	5.528 (1.000)	72	178666			20.99- 80.99	50.99
100 Chloroform					CAS #: 67-66-3		
5.592	5.592 (1.012)	83	805945	50.0000	48.091	80.00- 120.00	100.00
5.592	5.592 (1.012)	85	521178			34.67- 94.67	64.67
102 Cyclohexane					CAS #: 110-82-7		
5.693	5.693 (1.030)	84	504900	50.0000	48.517	80.00- 120.00	100.00
5.686	5.686 (1.028)	56	540705			77.09- 137.09	107.09
5.686	5.686 (1.028)	41	282071			25.87- 85.87	55.87
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.714	5.714 (1.034)	97	793534	50.0000	47.765	80.00- 120.00	100.00
5.714	5.714 (1.034)	99	510495			34.33- 94.33	64.33
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.822	5.822 (1.053)	119	806774	50.0000	48.603	80.00- 120.00	100.00
5.822	5.822 (1.053)	117	846291			74.90- 134.90	104.90
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.088)	57	1729103	50.0000	49.197	80.00- 120.00	100.00
6.015	6.015 (1.088)	56	549907			1.80- 61.80	31.80
6.015	6.015 (1.088)	41	446594			0.00- 55.83	25.83
116 Benzene					CAS #: 71-43-2		
6.044	6.044 (0.942)	78	1162296	50.0000	48.284	80.00- 120.00	100.00
6.044	6.044 (0.942)	77	279937			0.00- 54.08	24.08
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.108	6.108 (1.105)	87	280295	50.0000	50.328	80.00- 120.00	100.00
6.108	6.108 (1.105)	73	1139604			376.57- 436.57	406.57
6.108	6.108 (1.105)	55	264931			64.52- 124.52	94.52
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.130	6.130 (0.955)	62	511784	50.0000	48.670	80.00- 120.00	100.00
6.137	6.137 (0.956)	64	164593			2.16- 62.16	32.16
121 Heptane					CAS #: 142-82-5		
6.187	6.187 (0.964)	71	413738	50.0000	49.659	80.00- 120.00	100.00
6.187	6.187 (0.964)	43	583136			110.94- 170.94	140.94

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.187	6.187 (0.964)	57	346377			53.72- 113.72	83.72
125 Trichloroethene					CAS #: 79-01-6		
6.610	6.610 (1.030)	95	543996	50.0000	47.895	80.00- 120.00	100.00
6.610	6.610 (1.030)	130	571039			74.97- 134.97	104.97
6.610	6.610 (1.030)	97	355417			35.33- 95.33	65.33
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.212)	83	716383	50.0000	49.884	80.00- 120.00	100.00
6.703	6.703 (1.212)	98	332490			16.41- 76.41	46.41
6.703	6.703 (1.212)	55	504402			40.41- 100.41	70.41
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.846	6.846 (1.067)	63	425824	50.0000	49.415	80.00- 120.00	100.00
6.846	6.846 (1.067)	62	292898			38.78- 98.78	68.78
6.846	6.846 (1.067)	41	213581			20.16- 80.16	50.16
136 1,4-Dioxane					CAS #: 123-91-1		
6.939	6.939 (1.081)	88	268826	50.0000	51.558	80.00- 120.00	100.00
6.939	6.939 (1.081)	58	164051			31.02- 91.02	61.02
6.939	6.939 (1.081)	57	57344			0.00- 51.33	21.33
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.103)	83	867996	50.0000	48.686	80.00- 120.00	100.00
7.075	7.075 (1.103)	85	556890			34.16- 94.16	64.16
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.448	7.448 (1.161)	75	736876	50.0000	49.204	80.00- 120.00	100.00
7.448	7.448 (1.161)	77	232660			1.57- 61.57	31.57
7.448	7.448 (1.161)	39	324045			13.98- 73.98	43.98
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.555	7.555 (1.178)	58	313025	50.0000	53.996	80.00- 120.00	100.00
7.555	7.555 (1.178)	43	738528			205.93- 265.93	235.93
7.555	7.555 (1.178)	85	150390			18.04- 78.04	48.04
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.198)	91	1474654	50.0000	48.852	80.00- 120.00	100.00
7.684	7.684 (1.198)	92	844034			27.24- 87.24	57.24
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.928	7.928 (0.894)	75	664633	50.0000	51.179	80.00- 120.00	100.00
7.928	7.928 (0.894)	77	210117			1.57- 61.57	31.61
7.928	7.928 (0.894)	39	281368			13.98- 73.98	42.33

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.085	8.085 (0.912)	97	513144	50.0000	50.086	80.00- 120.00	100.00
8.085	8.085 (0.912)	99	313273			31.05- 91.05	61.05
8.085	8.085 (0.912)	83	453045			58.29- 118.29	88.29
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.916)	166	743463	50.0000	49.443	80.00- 120.00	100.00
8.121	8.121 (0.916)	129	538746			42.46- 102.46	72.46
8.121	8.121 (0.916)	131	522188			40.24- 100.24	70.24
158 2-Hexanone					CAS #: 591-78-6		
8.243	8.243 (0.930)	58	397914	50.0000	55.036	80.00- 120.00	100.00
8.243	8.243 (0.930)	43	690542			205.93- 265.93	173.54
8.250	8.250 (0.931)	100	93019			11.40- 71.40	23.38
160 Dibromochloromethane					CAS #: 124-48-1		
8.393	8.393 (0.947)	129	948070	50.0000	49.567	80.00- 120.00	100.00
8.393	8.393 (0.947)	127	732657			47.28- 107.28	77.28
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.508	8.508 (0.960)	107	813151	50.0000	50.202	80.00- 120.00	100.00
8.508	8.508 (0.960)	109	784293			66.45- 126.45	96.45
165 Chlorobenzene					CAS #: 108-90-7		
8.887	8.887 (1.002)	112	1178074	50.0000	50.235	80.00- 120.00	100.00
8.887	8.887 (1.002)	114	377735			2.06- 62.06	32.06
8.887	8.887 (1.002)	77	665303			26.47- 86.47	56.47
167 Ethyl Benzene					CAS #: 100-41-4		
8.930	8.930 (1.007)	106	591665	50.0000	51.803	80.00- 120.00	100.00
8.930	8.930 (1.007)	91	1892789			289.94- 349.94	319.91
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	739384	50.0000	52.140	80.00- 120.00	100.00
9.031	9.031 (1.019)	91	1462754			167.83- 227.83	197.83
171 o-Xylene					CAS #: 95-47-6		
9.374	9.374 (1.057)	106	689539	50.0000	52.407	80.00- 120.00	100.00
9.374	9.374 (1.057)	91	1455706			181.11- 241.11	211.11
172 Styrene					CAS #: 100-42-5		
9.396	9.396 (1.060)	104	1185176	50.0000	52.808	80.00- 120.00	100.00
9.389	9.389 (1.059)	78	566370			17.79- 77.79	47.79
174 Bromoform					CAS #: 75-25-2		
9.597	9.597 (1.082)	173	1000291	50.0000	51.794	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.597	9.597 (1.082)	171	514639			21.45- 81.45	51.45
175 Cumene					CAS #: 98-82-8		
9.661	9.661 (1.090)	105	2158791	50.0000	51.363	80.00- 120.00	100.00
9.661	9.661 (1.090)	120	593032			0.00- 57.47	27.47
9.661	9.661 (1.090)	51	186045			0.00- 38.62	8.62
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.976	9.976 (1.125)	83	1116702	50.0000	50.489	80.00- 120.00	100.00
9.976	9.976 (1.125)	85	723315			34.77- 94.77	64.77
182 Propylbenzene					CAS #: 103-65-1		
10.005	10.005 (1.128)	91	2605016	50.0000	51.628	80.00- 120.00	100.00
10.005	10.005 (1.128)	120	616195			0.00- 53.65	23.65
10.005	10.005 (1.128)	105	93029			0.00- 33.57	3.57
188 4-Ethyltoluene					CAS #: 622-96-8		
10.098	10.098 (1.139)	120	699809	50.0000	52.370	80.00- 120.00	100.00
10.098	10.098 (1.139)	105	2259630			292.89- 352.89	322.89
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.148	10.148 (1.145)	120	916144	50.0000	52.182	80.00- 120.00	100.00
10.148	10.148 (1.145)	105	1880409			175.25- 235.25	205.25
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.478	10.478 (1.182)	120	830534	50.0000	52.694	80.00- 120.00	100.00
10.478	10.478 (1.182)	105	1775318			183.76- 243.76	213.76
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.771	10.771 (1.215)	146	1294722	50.0000	51.068	80.00- 120.00	100.00
10.771	10.771 (1.215)	148	824564			33.69- 93.69	63.69
10.771	10.771 (1.215)	111	493506			8.12- 68.12	38.12
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.850	10.850 (1.224)	146	1310697	50.0000	52.254	80.00- 120.00	100.00
10.850	10.850 (1.224)	148	836955			33.86- 93.86	63.86
10.850	10.850 (1.224)	111	481102			6.71- 66.71	36.71
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.965	10.965 (1.237)	91	1606093	50.0000	53.848	80.00- 120.00	100.00
10.965	10.965 (1.237)	126	352670			0.00- 51.95	21.96
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.180	11.180 (1.261)	146	1237934	50.0000	51.549	80.00- 120.00	100.00
11.180	11.180 (1.261)	148	791064			33.90- 93.90	63.90

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.180	11.180 (1.261)	111	481014			8.86- 68.86	38.86
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.598	12.598 (1.421)	180	1084943	50.0000	52.014	80.00- 120.00	100.00
12.598	12.598 (1.421)	182	1032972			65.21- 125.21	95.21
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.691	12.691 (1.431)	225	902121	50.0000	50.368	80.00- 120.00	100.00
12.691	12.691 (1.431)	223	570336			33.22- 93.22	63.22

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092122.d
Lab Smp Id: ICAL Level #6
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msd17.i/21sep15a.b/175q0921a.m
Misc Info: 50ppbv(200ppbv)

Calibration Date: 21-SEP-2015
Calibration Time: 22:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	116527	69916	163138	116527	0.00
123 1,4-Difluorobenze	475185	285111	665259	475185	0.00
163 Chlorobenzene-d5	418099	250859	585339	418099	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/21sep15a.b/17092122.d

Date : 21-SEP-2015 22:55

Client ID:

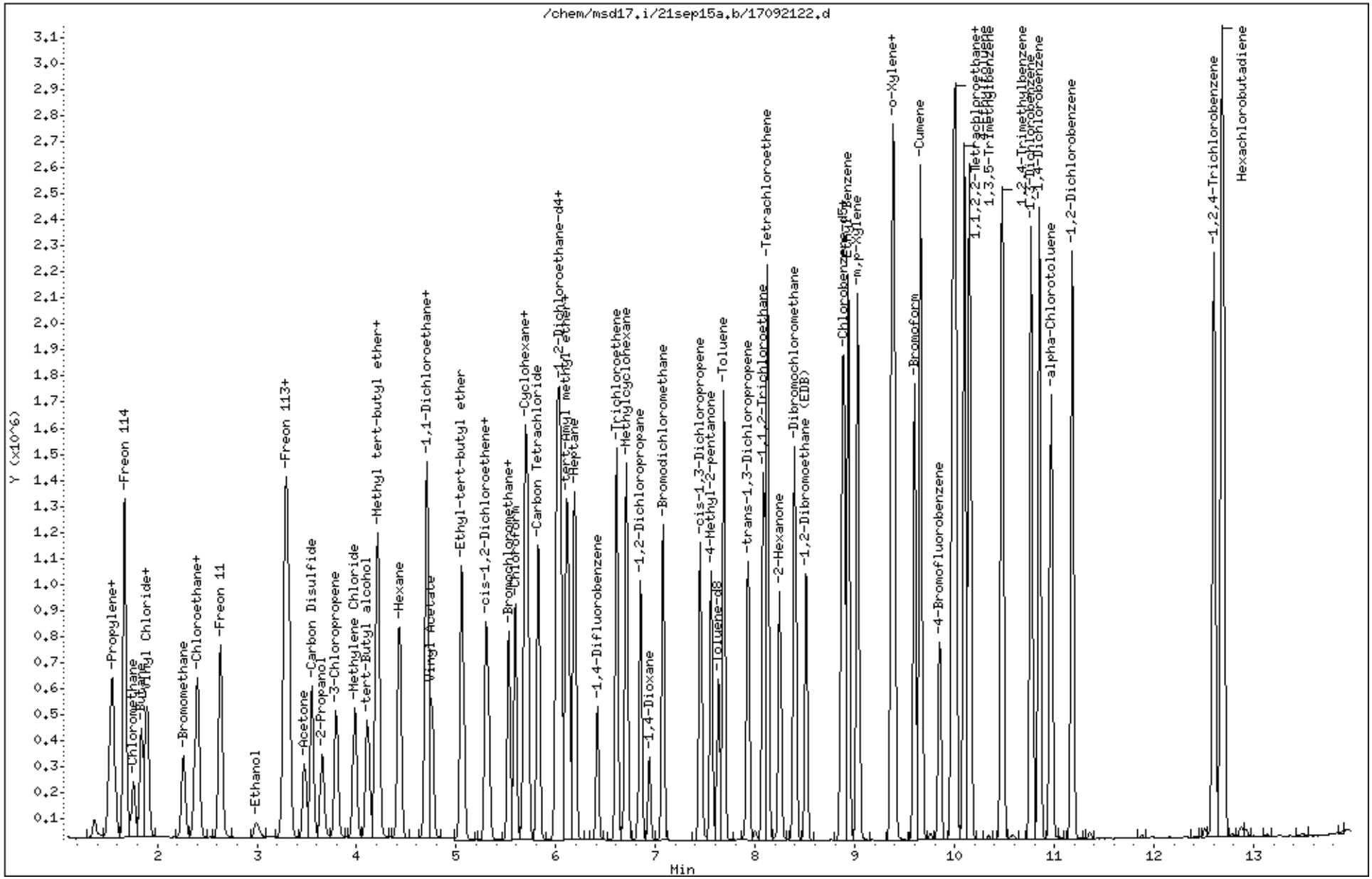
Sample Info: 50ml 2737-240

Column phase: RTX-624

Instrument: msd17.i

Operator: gh

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092417.d
Lab Smp Id: ICAL Level 7
Inj Date : 24-SEP-2015 16:58
Operator : cb Inst ID: msd17.i
Smp Info : 100ml 2736-262
Misc Info : 10ppbv(20ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921c.m
Meth Date : 25-Sep-2015 15:58 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 16:58 Cal File: 17092417.d
Als bottle: 7 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Naphcrv.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.521	5.521 (1.000)	130	100829	25.0000		80.00- 120.00	100.00
5.521	5.521 (1.000)	128	81558			46.54- 106.54	80.89
5.521	5.521 (1.000)	49	113223			83.83- 143.83	112.29
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.409	6.409 (1.000)	114	412467	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	65291			0.00- 44.86	15.83
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.844	8.844 (1.000)	117	379049	25.0000		80.00- 120.00	100.00
8.844	8.844 (1.000)	82	204478			23.93- 83.93	53.95
228 Naphthalene					CAS #: 91-20-3		
12.798	12.798 (1.447)	128	152086	10.0000	7.502	0.00- 30.00	100.00
12.798	12.798 (1.447)	127	22187			0.00- 30.00	14.59

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092417.d
Lab Smp Id: ICAL Level 7
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921c.m
Misc Info: 10ppbv(20ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 08:49
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	102227	61336	143118	100829	-1.37
123 1,4-Difluorobenze	417792	250675	584909	412467	-1.27
163 Chlorobenzene-d5	379305	227583	531027	379049	-0.07

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.52	-0.13
123 1,4-Difluorobenze	6.42	6.09	6.75	6.41	-0.11
163 Chlorobenzene-d5	8.86	8.53	9.19	8.84	-0.16

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092417.d

Page 1

Date : 24-SEP-2015 16:58

Client ID:

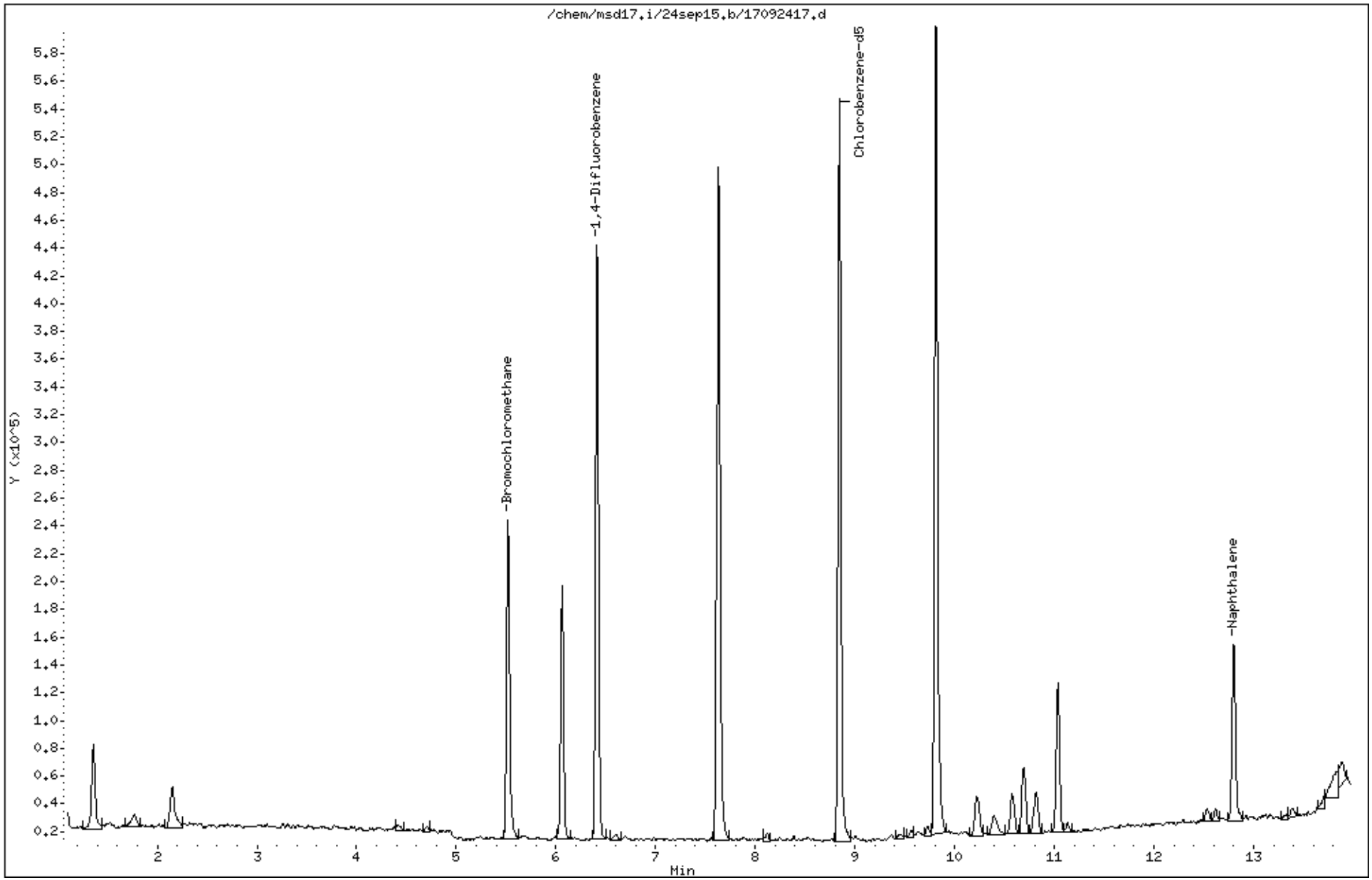
Instrument: msd17.i

Sample Info: 100ml 2736-262

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/21sep15a.b/17092123.d
Lab Smp Id: ICAL Level #7
Inj Date : 21-SEP-2015 23:31
Operator : gh Inst ID: msd17.i
Smp Info : 100ml 2737-240
Misc Info : 100ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/21sep15a.b/175q0921a.m
Meth Date : 25-Sep-2015 15:04 cbond Quant Type: ISTD
Cal Date : 21-SEP-2015 23:31 Cal File: 17092123.d
Als bottle: 2 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12noNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.528	5.528 (1.000)	130	122053	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	89305			46.54- 106.54	73.17
5.528	5.528 (1.000)	49	133058			83.83- 143.83	109.02
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.416	6.416 (1.000)	114	478988	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	73617			0.00- 44.86	15.37
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.852	8.852 (1.000)	117	439963	25.0000		80.00- 120.00	100.00
8.852	8.852 (1.000)	82	232713			23.93- 83.93	52.89
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.065	6.065 (1.097)	65	161988	25.0000	24.630	80.00- 120.00	100.00
6.065	6.065 (1.097)	67	93750			25.51- 85.51	57.87

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.189)	98	502925	25.0000	25.466	80.00- 120.00	100.00
7.627	7.627 (1.189)	70	52648			0.00- 40.39	10.47
7.627	7.627 (1.189)	100	320638			33.97- 93.97	63.75
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.819	9.819 (1.109)	174	284162	25.0000	25.296	80.00- 120.00	100.00
9.811	9.811 (1.108)	95	309487			79.64- 139.64	108.91
9.819	9.819 (1.109)	176	274586			65.80- 125.80	96.63
9 Propylene					CAS #: 115-07-1		
1.517	1.517 (0.274)	41	458709	100.000	94.723	80.00- 120.00	100.00
1.517	1.517 (0.274)	42	304170			37.10- 97.10	66.31
1.517	1.517 (0.274)	39	334083			44.98- 104.98	72.83
11 Freon 12					CAS #: 75-71-8		
1.552	1.552 (0.281)	85	1874849	100.000	95.439	80.00- 120.00	100.00
1.552	1.552 (0.281)	87	604672			2.33- 62.33	32.25
15 Freon 114					CAS #: 76-14-2		
1.674	1.674 (0.303)	135	1371885	100.000	96.210	80.00- 120.00	100.00
1.674	1.674 (0.303)	137	437426			2.02- 62.02	31.89
17 Chloromethane					CAS #: 74-87-3		
1.760	1.760 (0.318)	50	627947	100.000	91.354	80.00- 120.00	100.00
1.760	1.760 (0.318)	52	207584			2.35- 62.35	33.06
23 Butane					CAS #: 106-97-8		
1.839	1.839 (0.333)	58	136244	100.000	90.375	80.00- 120.00	100.00
1.839	1.839 (0.333)	43	926373			657.81- 717.81	679.94
25 Vinyl Chloride					CAS #: 75-01-4		
1.875	1.875 (0.339)	62	718061	100.000	92.427	80.00- 120.00	100.00
1.875	1.875 (0.339)	64	226374			2.69- 62.69	31.53
26 1,3-Butadiene					CAS #: 106-99-0		
1.903	1.903 (0.344)	54	511190	100.000	94.836	80.00- 120.00	100.00
1.903	1.903 (0.344)	39	484652			63.95- 123.95	94.81
29 Bromomethane					CAS #: 74-83-9		
2.262	2.262 (0.409)	94	680461	100.000	98.886	80.00- 120.00	100.00
2.262	2.262 (0.409)	96	639420			63.69- 123.69	93.97
30 Chloroethane					CAS #: 75-00-3		
2.383	2.383 (0.431)	64	363443	100.000	92.284	80.00- 120.00	100.00
2.383	2.383 (0.431)	66	122797			1.86- 61.86	33.79

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.383	2.383 (0.431)	49	95613			0.00- 55.51	26.31
31 Isopentane					CAS #: 78-78-4		
2.405	2.405 (0.435)	43	716609	100.000	93.805	80.00- 120.00	100.00
2.405	2.405 (0.435)	57	544367			44.35- 104.35	75.96
35 Freon 11					CAS #: 75-69-4		
2.634	2.634 (0.476)	101	1921842	100.000	95.009	80.00- 120.00	100.00
2.634	2.634 (0.476)	103	1238983			35.20- 95.20	64.47
42 Ethanol					CAS #: 64-17-5		
2.992	2.992 (0.541)	45	244313	100.000	90.206	80.00- 120.00	100.00
2.992	2.992 (0.541)	43	50399			0.00- 50.36	20.63
2.992	2.992 (0.541)	46	94934			10.31- 70.31	38.86
49 Freon 113					CAS #: 76-13-1		
3.286	3.286 (0.594)	151	1361600	100.000	94.475	80.00- 120.00	100.00
3.286	3.286 (0.594)	153	869723			33.72- 93.72	63.88
3.286	3.286 (0.594)	101	1714439			95.23- 155.23	125.91
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.322	3.322 (0.601)	98	500441	100.000	94.188	80.00- 120.00	100.00
3.322	3.322 (0.601)	96	786199			130.14- 190.14	157.10
3.315	3.315 (0.600)	61	1226712			218.16- 278.16	245.13
52 Acetone					CAS #: 67-64-1		
3.479	3.479 (0.629)	58	325428	100.000	88.654	80.00- 120.00	100.00
3.479	3.479 (0.629)	43	994667			266.49- 326.49	305.65
56 Carbon Disulfide					CAS #: 75-15-0		
3.551	3.551 (0.642)	76	2296363	100.000	93.591	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.651	3.651 (0.660)	45	1127638	100.000	99.028	80.00- 120.00	100.00
3.651	3.651 (0.660)	43	223865			0.00- 50.02	19.85
3.651	3.651 (0.660)	59	48101			0.00- 34.32	4.27
58 3-Chloropropene					CAS #: 107-05-1		
3.795	3.795 (0.686)	76	372065	100.000	94.057	80.00- 120.00	100.00
3.795	3.795 (0.686)	41	818453			185.01- 245.01	219.98
66 Methylene Chloride					CAS #: 75-09-2		
3.981	3.981 (0.720)	49	798654	100.000	92.819	80.00- 120.00	100.00
3.981	3.981 (0.720)	84	691724			59.02- 119.02	86.61
3.981	3.981 (0.720)	51	249009			1.78- 61.78	31.18

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.110	4.110 (0.743)	59	1457198	100.000	101.90	80.00- 120.00	100.00
4.110	4.110 (0.743)	41	287704			0.00- 50.26	19.74
4.110	4.110 (0.743)	57	147486			0.00- 40.80	10.12
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.196	4.196 (0.759)	73	2125374	100.000	95.359	80.00- 120.00	100.00
4.196	4.196 (0.759)	57	461380			0.00- 51.46	21.71
4.196	4.196 (0.759)	41	405607			0.00- 49.34	19.08
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.224	4.224 (0.764)	98	512910	100.000	96.888	80.00- 120.00	100.00
4.217	4.217 (0.763)	61	1108643			184.16- 244.16	216.15
4.224	4.224 (0.764)	96	822010			127.84- 187.84	160.26
78 Hexane					CAS #: 110-54-3		
4.432	4.432 (0.802)	57	1114600	100.000	92.572	80.00- 120.00	100.00
4.425	4.425 (0.800)	43	640523			27.64- 87.64	57.47
4.432	4.432 (0.802)	86	192809			0.00- 46.92	17.30
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.711	4.711 (0.852)	63	1396292	100.000	97.494	80.00- 120.00	100.00
4.711	4.711 (0.852)	65	441836			2.04- 62.04	31.64
83 Isopropyl ether					CAS #: 108-20-3		
4.697	4.697 (0.850)	45	2189787	100.000	94.023	80.00- 120.00	100.00
4.704	4.704 (0.851)	87	694892			1.31- 61.31	31.73
4.704	4.704 (0.851)	59	276167			0.00- 42.69	12.61
86 Vinyl Acetate					CAS #: 108-05-4		
4.754	4.754 (0.860)	86	217912	100.000	99.718	80.00- 120.00	100.00
4.754	4.754 (0.860)	43	1933743			891.41- 951.41	887.40
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.055	5.055 (0.914)	59	2317179	100.000	95.331	80.00- 120.00	100.00
5.055	5.055 (0.914)	87	997282			13.52- 73.52	43.04
5.055	5.055 (0.914)	41	392720			0.00- 47.26	16.95
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.299	5.299 (0.959)	98	542166	100.000	94.968	80.00- 120.00	100.00
5.299	5.299 (0.959)	96	849574			124.38- 184.38	156.70
5.299	5.299 (0.959)	61	1039452			162.07- 222.07	191.72
92 2-Butanone					CAS #: 78-93-3		
5.327	5.327 (0.964)	72	390840	100.000	96.833	80.00- 120.00	100.00
5.327	5.327 (0.964)	43	1316051			306.33- 366.33	336.72

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.327	5.327 (0.964)	57	117026			0.00- 59.26	29.94
99 Tetrahydrofuran					CAS #: 109-99-9		
5.528	5.528 (1.000)	42	716737	100.000	91.158	80.00- 120.00	100.00
5.528	5.528 (1.000)	71	344205			17.72- 77.72	48.02
5.528	5.528 (1.000)	72	363854			20.99- 80.99	50.77
100 Chloroform					CAS #: 67-66-3		
5.592	5.592 (1.012)	83	1630424	100.000	92.884	80.00- 120.00	100.00
5.592	5.592 (1.012)	85	1072713			34.67- 94.67	65.79
102 Cyclohexane					CAS #: 110-82-7		
5.693	5.693 (1.030)	84	1053141	100.000	96.618	80.00- 120.00	100.00
5.693	5.693 (1.030)	56	1105787			77.09- 137.09	105.00
5.686	5.686 (1.028)	41	572474			25.87- 85.87	54.36
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.714	5.714 (1.034)	97	1628220	100.000	93.570	80.00- 120.00	100.00
5.714	5.714 (1.034)	99	1046725			34.33- 94.33	64.29
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.822	5.822 (1.053)	119	1668499	100.000	95.966	80.00- 120.00	100.00
5.822	5.822 (1.053)	117	1730847			74.90- 134.90	103.74
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.088)	57	3489823	100.000	94.797	80.00- 120.00	100.00
6.015	6.015 (1.088)	56	1104546			1.80- 61.80	31.65
6.015	6.015 (1.088)	41	894052			0.00- 55.83	25.62
116 Benzene					CAS #: 71-43-2		
6.044	6.044 (0.942)	78	2331724	100.000	96.096	80.00- 120.00	100.00
6.044	6.044 (0.942)	77	562702			0.00- 54.08	24.13
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.108	6.108 (1.105)	87	564290	100.000	96.733	80.00- 120.00	100.00
6.108	6.108 (1.105)	73	2342362			376.57- 436.57	415.10
6.108	6.108 (1.105)	55	526272			64.52- 124.52	93.26
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.137	6.137 (0.956)	62	1043460	100.000	98.444	80.00- 120.00	100.00
6.130	6.130 (0.955)	64	336685			2.16- 62.16	32.27
121 Heptane					CAS #: 142-82-5		
6.187	6.187 (0.964)	71	833053	100.000	99.193	80.00- 120.00	100.00
6.187	6.187 (0.964)	43	1164745			110.94- 170.94	139.82

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.187	6.187 (0.964)	57	691780			53.72- 113.72	83.04
125 Trichloroethene					CAS #: 79-01-6		
6.610	6.610 (1.030)	95	1109611	100.000	96.918	80.00- 120.00	100.00
6.610	6.610 (1.030)	130	1151358			74.97- 134.97	103.76
6.610	6.610 (1.030)	97	719375			35.33- 95.33	64.83
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.212)	83	1434093	100.000	95.339	80.00- 120.00	100.00
6.710	6.710 (1.214)	98	671566			16.41- 76.41	46.83
6.703	6.703 (1.212)	55	1013951			40.41- 100.41	70.70
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.846	6.846 (1.067)	63	859940	100.000	99.000	80.00- 120.00	100.00
6.846	6.846 (1.067)	62	592155			38.78- 98.78	68.86
6.846	6.846 (1.067)	41	431819			20.16- 80.16	50.22
136 1,4-Dioxane					CAS #: 123-91-1		
6.939	6.939 (1.081)	88	555160	100.000	105.63	80.00- 120.00	100.00
6.939	6.939 (1.081)	58	341722			31.02- 91.02	61.55
6.939	6.939 (1.081)	57	112941			0.00- 51.33	20.34
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.103)	83	1777040	100.000	98.883	80.00- 120.00	100.00
7.075	7.075 (1.103)	85	1136268			34.16- 94.16	63.94
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.448	7.448 (1.161)	75	1494904	100.000	99.027	80.00- 120.00	100.00
7.448	7.448 (1.161)	77	483581			1.57- 61.57	32.35
7.448	7.448 (1.161)	39	666959			13.98- 73.98	44.62
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.555	7.555 (1.178)	58	631698	100.000	108.10	80.00- 120.00	100.00
7.555	7.555 (1.178)	43	1501133			205.93- 265.93	237.63
7.555	7.555 (1.178)	85	307078			18.04- 78.04	48.61
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.198)	91	2974453	100.000	97.755	80.00- 120.00	100.00
7.684	7.684 (1.198)	92	1704708			27.24- 87.24	57.31
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.928	7.928 (0.896)	75	1354825	100.000	99.141	80.00- 120.00	100.00
7.928	7.928 (0.896)	77	422564			1.57- 61.57	31.19
7.928	7.928 (0.896)	39	574862			13.98- 73.98	42.43

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.085	8.085 (0.913)	97	1035019	100.000	96.003	80.00- 120.00	100.00
8.085	8.085 (0.913)	99	641822			31.05- 91.05	62.01
8.085	8.085 (0.913)	83	911745			58.29- 118.29	88.09
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.917)	166	1495545	100.000	94.517	80.00- 120.00	100.00
8.121	8.121 (0.917)	129	1085648			42.46- 102.46	72.59
8.121	8.121 (0.917)	131	1048144			40.24- 100.24	70.08
158 2-Hexanone					CAS #: 591-78-6		
8.243	8.243 (0.931)	58	833773	100.000	109.59	80.00- 120.00	100.00
8.243	8.243 (0.931)	43	1414583			205.93- 265.93	169.66
8.250	8.250 (0.932)	100	191214			11.40- 71.40	22.93
160 Dibromochloromethane					CAS #: 124-48-1		
8.393	8.393 (0.948)	129	1961692	100.000	97.465	80.00- 120.00	100.00
8.393	8.393 (0.948)	127	1514740			47.28- 107.28	77.22
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.508	8.508 (0.961)	107	1684706	100.000	98.840	80.00- 120.00	100.00
8.508	8.508 (0.961)	109	1593499			66.45- 126.45	94.59
165 Chlorobenzene					CAS #: 108-90-7		
8.873	8.873 (1.002)	112	2416939	100.000	97.940	80.00- 120.00	100.00
8.873	8.873 (1.002)	114	771024			2.06- 62.06	31.90
8.873	8.873 (1.002)	77	1384602			26.47- 86.47	57.29
167 Ethyl Benzene					CAS #: 100-41-4		
8.916	8.916 (1.007)	106	1223081	100.000	101.76	80.00- 120.00	100.00
8.916	8.916 (1.007)	91	3898307			289.94- 349.94	318.73
169 m,p-Xylene					CAS #: 108-38-3		
9.009	9.009 (1.018)	106	1535276	100.000	102.88	80.00- 120.00	100.00
9.009	9.009 (1.018)	91	3086520			167.83- 227.83	201.04
171 o-Xylene					CAS #: 95-47-6		
9.346	9.346 (1.056)	106	1425020	100.000	102.92	80.00- 120.00	100.00
9.346	9.346 (1.056)	91	3016482			181.11- 241.11	211.68
172 Styrene					CAS #: 100-42-5		
9.367	9.367 (1.058)	104	2507654	100.000	106.18	80.00- 120.00	100.00
9.367	9.367 (1.058)	78	1185052			17.79- 77.79	47.26
174 Bromoform					CAS #: 75-25-2		
9.568	9.568 (1.081)	173	2085207	100.000	102.60	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.568	9.568 (1.081)	171	1066791			21.45- 81.45	51.16
175 Cumene					CAS #: 98-82-8		
9.625	9.625 (1.087)	105	4573230	100.000	103.40	80.00- 120.00	100.00
9.632	9.632 (1.088)	120	1238682			0.00- 57.47	27.09
9.625	9.625 (1.087)	51	382981			0.00- 38.62	8.37
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.940	9.940 (1.123)	83	2286457	100.000	98.240	80.00- 120.00	100.00
9.940	9.940 (1.123)	85	1489705			34.77- 94.77	65.15
182 Propylbenzene					CAS #: 103-65-1		
9.969	9.969 (1.126)	91	5451721	100.000	102.68	80.00- 120.00	100.00
9.969	9.969 (1.126)	120	1271096			0.00- 53.65	23.32
9.969	9.969 (1.126)	105	197731			0.00- 33.57	3.63
188 4-Ethyltoluene					CAS #: 622-96-8		
10.062	10.062 (1.137)	120	1393399	100.000	99.092	80.00- 120.00	100.00(H)
10.062	10.062 (1.137)	105	4856224			292.89- 352.89	348.52
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.112	10.112 (1.142)	120	1988815	100.000	107.65	80.00- 120.00	100.00
10.112	10.112 (1.142)	105	3855193			175.25- 235.25	193.84
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.435	10.435 (1.179)	120	1751548	100.000	105.61	80.00- 120.00	100.00
10.435	10.435 (1.179)	105	3780696			183.76- 243.76	215.85
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.800	10.800 (1.220)	146	2741571	100.000	102.76	80.00- 120.00	100.00
10.800	10.800 (1.220)	148	1751398			33.69- 93.69	63.88
10.800	10.800 (1.220)	111	1007540			8.12- 68.12	36.75
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.800	10.800 (1.220)	146	2741571	100.000	103.87	80.00- 120.00	100.00
10.800	10.800 (1.220)	148	1751398			33.86- 93.86	63.88
10.800	10.800 (1.220)	111	1007540			6.71- 66.71	36.75
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.922	10.922 (1.234)	91	3453138	100.000	110.02	80.00- 120.00	100.00
10.922	10.922 (1.234)	126	774197			0.00- 51.95	22.42
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.129	11.129 (1.257)	146	2603147	100.000	103.01	80.00- 120.00	100.00
11.129	11.129 (1.257)	148	1650566			33.90- 93.90	63.41

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.129	11.129 (1.257)	111	1011526			8.86- 68.86	38.86
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.533	12.533 (1.416)	180	2361191	100.000	107.57	80.00- 120.00	100.00
12.533	12.533 (1.416)	182	2264550			65.21- 125.21	95.91
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.619	12.619 (1.426)	225	1968211	100.000	104.43	80.00- 120.00	100.00
12.619	12.619 (1.426)	223	1227265			33.22- 93.22	62.35

QC Flag Legend

H - Operator selected an alternate compound hit.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092123.d
Lab Smp Id: ICAL Level #7
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msd17.i/21sep15a.b/175q0921a.m
Misc Info: 100ppbv(200ppbv)

Calibration Date: 21-SEP-2015
Calibration Time: 22:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	116527	69916	163138	122053	4.74
123 1,4-Difluorobenze	475185	285111	665259	478988	0.80
163 Chlorobenzene-d5	418099	250859	585339	439963	5.23

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.85	-0.16

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/21sep15a.b/17092123.d

Date : 21-SEP-2015 23:31

Client ID:

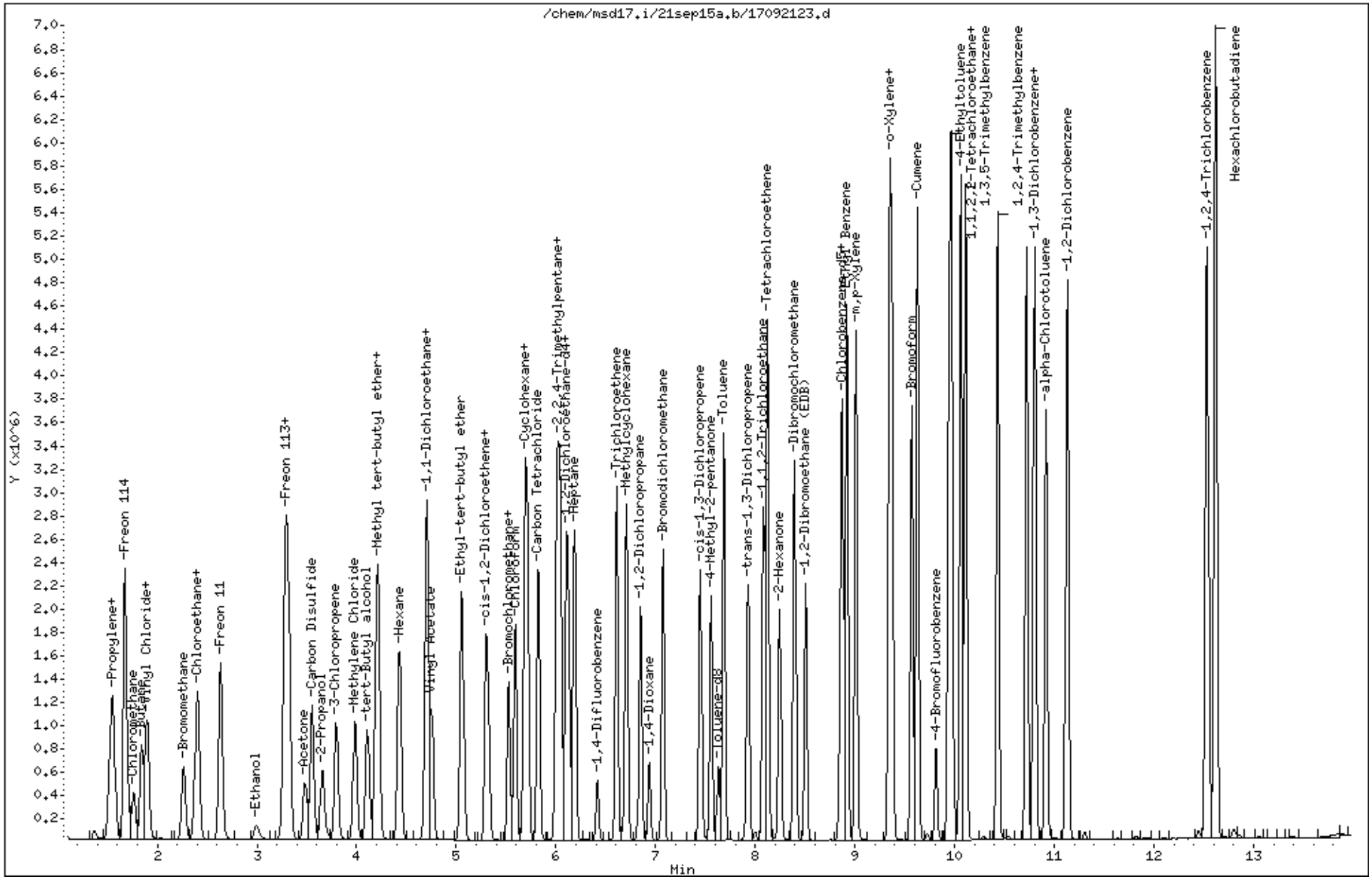
Sample Info: 100ml 2737-240

Column phase: RTX-624

Instrument: msd17.i

Operator: gh

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092418.d
Lab Smp Id: ICAL Level 8
Inj Date : 24-SEP-2015 17:21
Operator : cb Inst ID: msd17.i
Smp Info : 200ml 2736-262
Misc Info : 20ppbv(20ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921c.m
Meth Date : 25-Sep-2015 15:58 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 17:21 Cal File: 17092418.d
Als bottle: 7 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Naphcrv.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.528	5.528 (1.000)	130	100324	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	79433			46.54- 106.54	79.18
5.528	5.528 (1.000)	49	116214			83.83- 143.83	115.84
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.409	6.409 (1.000)	114	417065	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	63217			0.00- 44.86	15.16
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	381749	25.0000		80.00- 120.00	100.00
8.866	8.866 (1.000)	82	197856			23.93- 83.93	51.83
228 Naphthalene					CAS #: 91-20-3		
12.820	12.820 (1.446)	128	287419	20.0000	15.204	0.00- 30.00	100.00(H)
12.820	12.820 (1.446)	127	38961			0.00- 30.00	13.56

QC Flag Legend

H - Operator selected an alternate compound hit.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092418.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921c.m
Misc Info: 20ppbv(20ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 08:49
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	102227	61336	143118	100324	-1.86
123 1,4-Difluorobenze	417792	250675	584909	417065	-0.17
163 Chlorobenzene-d5	379305	227583	531027	381749	0.64

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.41	-0.11
163 Chlorobenzene-d5	8.86	8.53	9.19	8.87	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092418.d

Date : 24-SEP-2015 17:21

Client ID:

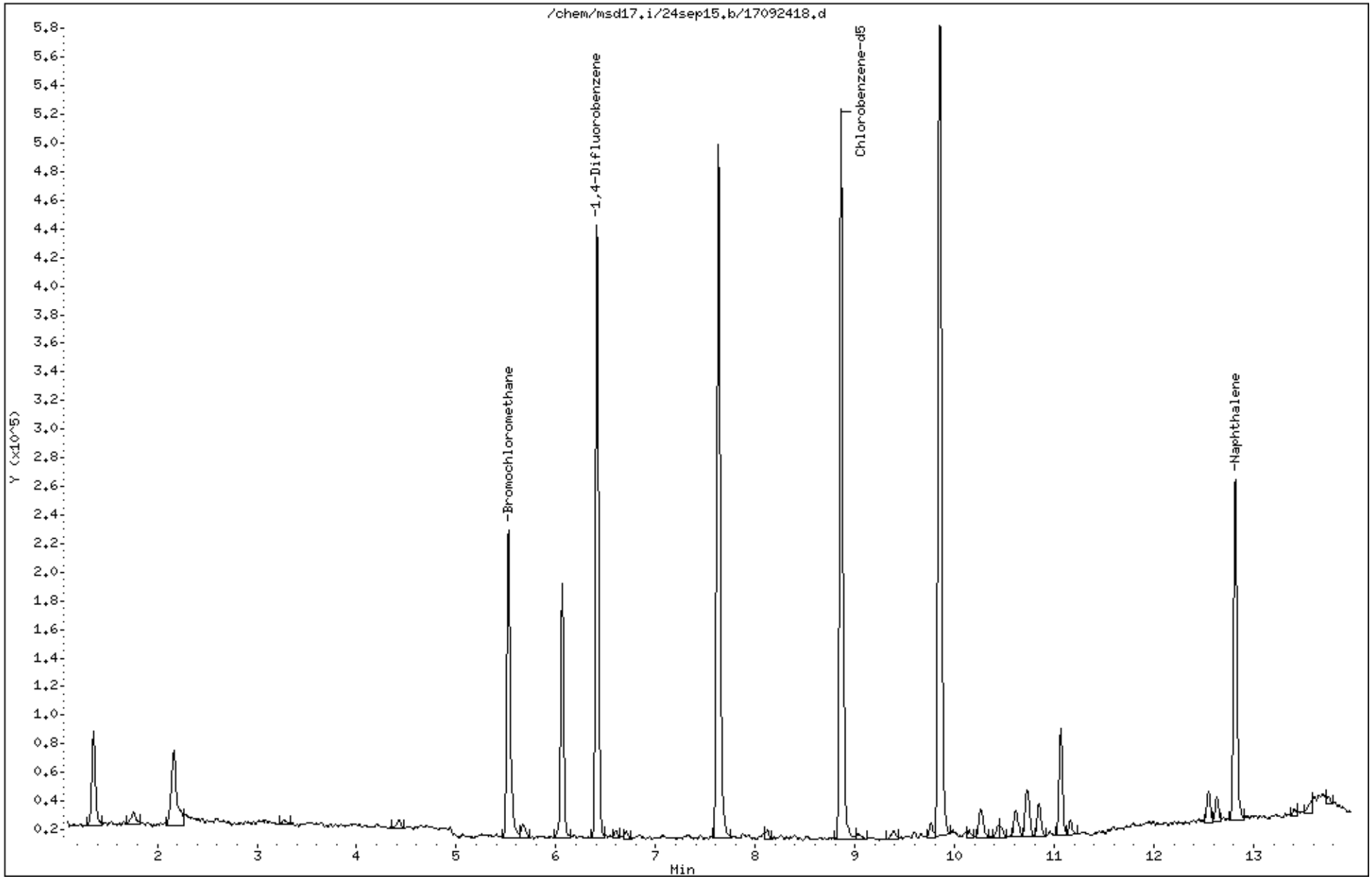
Instrument: msd17.i

Sample Info: 200ml 2736-262

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092413.d
Lab Smp Id: ICAL Level 8
Inj Date : 24-SEP-2015 14:13
Operator : cb Inst ID: msd17.i
Smp Info : 200ml 2736-197
Misc Info : 200ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921b.m
Meth Date : 25-Sep-2015 15:30 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 14:13 Cal File: 17092413.d
Als bottle: 2 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT1.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.528	5.528 (1.000)	130	107785	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	81652			46.54- 106.54	75.75
5.528	5.528 (1.000)	49	115151			83.83- 143.83	106.83
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.409	6.409 (1.000)	114	441324	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	66005			0.00- 44.86	14.96
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.866	8.866 (1.000)	117	398249	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	208986			23.93- 83.93	52.48
6 Freon 143a						CAS #: 420-46-2	
1.431	1.431 (0.259)	65	159242	200.000	99.319	0.00- 0.00	100.00
1.431	1.431 (0.259)	69	485664			0.00- 0.00	304.98
1.431	1.431 (0.259)	64	43334			0.00- 0.00	27.21

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
7 Freon 134a					CAS #: 811-97-2		
1.481	1.481 (0.268)	83	764866	200.000	146.25	0.00- 0.00	100.00
1.481	1.481 (0.268)	69	770710			0.00- 0.00	100.76
1.481	1.481 (0.268)	63	89252			0.00- 0.00	11.67
10 1,1-Difluoroethane					CAS #: 75-37-6		
1.531	1.531 (0.277)	65	376499	200.000	133.51	0.00- 0.00	100.00
1.581	1.581 (0.286)	51	1948966			0.00- 0.00	517.66
1.538	1.538 (0.278)	47	164459			0.00- 0.00	43.68
13 Chlorodifluoromethane					CAS #: 75-45-6		
1.588	1.588 (0.287)	67	210698	200.000	144.63	0.00- 0.00	100.00
1.581	1.581 (0.286)	51	1948966			0.00- 0.00	925.00
1.588	1.588 (0.287)	85	24172			0.00- 0.00	11.47
16 Freon 142b					CAS #: 75-68-3		
1.710	1.710 (0.309)	65	2577332	200.000	190.63	0.00- 0.00	100.00
1.710	1.710 (0.309)	45	588683			0.00- 0.00	22.84
37 Dichlorofluoromethane					CAS #: 75-43-4		
2.634	2.634 (0.476)	67	3004761	200.000	188.82	0.00- 0.00	100.00
2.634	2.634 (0.476)	69	971917			0.00- 0.00	32.35
2.799	2.799 (0.506)	35	326			0.00- 0.00	0.01
48 Freon 123					CAS #: 306-83-2		
3.214	3.214 (0.581)	83	3368716	200.000	193.92	0.00- 0.00	100.00
3.214	3.214 (0.581)	133	618889			0.00- 0.00	18.37
3.214	3.214 (0.581)	85	2296776			0.00- 0.00	68.18
59 Cyclopentene					CAS #: 142-29-0		
3.794	3.794 (0.686)	67	1949383	200.000	179.52	0.00- 0.00	100.00
3.794	3.794 (0.686)	68	759984			0.00- 0.00	38.99
3.787	3.787 (0.685)	53	358601			0.00- 0.00	18.40
84 1-Propanol					CAS #: 71-23-8		
4.847	4.847 (0.877)	42	199409	200.000	141.44	0.00- 0.00	100.00
4.855	4.855 (0.878)	59	283369			0.00- 0.00	142.10
4.847	4.847 (0.877)	41	137868			0.00- 0.00	69.14
90 2,2-Dichloropropane					CAS #: 594-20-7		
5.248	5.248 (0.949)	77	2084492	200.000	183.66	0.00- 0.00	100.00
5.248	5.248 (0.949)	79	664749			0.00- 0.00	31.89
5.248	5.248 (0.949)	97	438318			0.00- 0.00	21.03
107 1,1-Dichloropropene					CAS #: 563-58-6		
5.857	5.857 (0.914)	110	581514	200.000	187.77	0.00- 0.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
107 1,1-Dichloropropene (continued)							
5.850	5.850 (0.913)	75	1592077			0.00- 0.00	273.78
115 Isobutanol					CAS #: 78-83-1		
6.008	6.008 (1.087)	39	301303	200.000		0.00- 0.00	100.00(a)
6.008	6.008 (1.087)	41	781295			0.00- 0.00	259.31
6.008	6.008 (1.087)	43	1049960			0.00- 0.00	348.47
124 n-Butanol					CAS #: 71-36-3		
6.581	6.581 (1.027)	56	1747567	200.000	189.91	0.00- 0.00	100.00
6.581	6.581 (1.027)	41	1115339			0.00- 0.00	63.82
6.581	6.581 (1.027)	43	885988			0.00- 0.00	50.70
157 1,3-Dichloropropane					CAS #: 142-28-9		
8.228	8.228 (1.284)	76	2416816	200.000	189.20	0.00- 0.00	100.00
8.228	8.228 (1.284)	41	1246030			0.00- 0.00	51.56
8.228	8.228 (1.284)	78	777774			0.00- 0.00	32.18
159 Butyl Acetate					CAS #: 123-86-4		
8.307	8.307 (1.296)	56	544773	200.000	177.38	0.00- 0.00	100.00
8.307	8.307 (1.296)	73	259011			0.00- 0.00	47.54
8.300	8.300 (1.295)	43	1224585			0.00- 0.00	224.79
168 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.952	8.952 (1.010)	131	2272944	200.000	193.84	0.00- 0.00	100.00
8.952	8.952 (1.010)	117	1606061			0.00- 0.00	70.66
8.952	8.952 (1.010)	95	844759			0.00- 0.00	37.17
176 Cyclohexanone					CAS #: 108-94-1		
9.833	9.833 (1.109)	55	1792105	200.000	185.36	0.00- 0.00	100.00
9.833	9.833 (1.109)	98	905814			0.00- 0.00	50.54
9.833	9.833 (1.109)	42	1162387			0.00- 0.00	64.86
180 Bromobenzene					CAS #: 108-86-1		
9.983	9.983 (1.126)	156	2711297	200.000	193.91	0.00- 0.00	100.00
9.983	9.983 (1.126)	158	2662996			0.00- 0.00	98.22
9.983	9.983 (1.126)	77	4058136			0.00- 0.00	149.68
185 1,2,3-Trichloropropane					CAS #: 96-18-4		
10.033	10.033 (1.132)	110	1275540	200.000	196.38	0.00- 0.00	100.00
10.033	10.033 (1.132)	75	3348239			0.00- 0.00	262.50
10.033	10.033 (1.132)	61	822759			0.00- 0.00	64.50
189 2-Chlorotoluene					CAS #: 95-49-8		
10.127	10.127 (1.142)	126	2078348	200.000	198.80	0.00- 0.00	100.00
10.127	10.127 (1.142)	91	5786339			0.00- 0.00	278.41

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
189 2-Chlorotoluene (continued)							
10.127	10.127 (1.142)	65	498800			0.00- 0.00	24.00
191 4-Chlorotoluene					CAS #: 106-43-4		
10.220	10.220 (1.153)	126	2201445	200.000	203.81	0.00- 0.00	100.00(A)
10.220	10.220 (1.153)	91	6152731			0.00- 0.00	279.49
10.220	10.220 (1.153)	63	750203			0.00- 0.00	34.08
195 tert-Butylbenzene					CAS #: 98-06-6		
10.427	10.427 (1.176)	119	6482264	200.000	203.21	0.00- 0.00	100.00(A)
10.427	10.427 (1.176)	134	1607850			0.00- 0.00	24.80
10.427	10.427 (1.176)	91	4221534			0.00- 0.00	65.12
197 Pentachloroethane					CAS #: 76-01-7		
10.499	10.499 (1.184)	167	2362753	200.000	239.29	0.00- 0.00	100.00(A)
10.499	10.499 (1.184)	117	2305960			0.00- 0.00	97.60
10.499	10.499 (1.184)	169	1123963			0.00- 0.00	47.57
203 sec-Butylbenzene					CAS #: 135-98-8		
10.614	10.614 (1.197)	134	1981269	200.000	200.16	0.00- 0.00	100.00(A)
10.614	10.614 (1.197)	105	9822352			0.00- 0.00	495.76
10.614	10.614 (1.197)	91	1479616			0.00- 0.00	74.68
207 p-Cymene					CAS #: 99-87-6		
10.721	10.721 (1.209)	119	8402740	200.000	201.26	0.00- 0.00	100.00(A)
10.728	10.728 (1.210)	134	2217864			0.00- 0.00	26.39
10.721	10.721 (1.209)	91	1850159			0.00- 0.00	22.02
210 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
10.850	10.850 (1.224)	120	3334487	200.000	204.53	0.00- 0.00	100.00(A)
10.850	10.850 (1.224)	105	7758143			0.00- 0.00	232.66
10.850	10.850 (1.224)	77	913044			0.00- 0.00	27.38
213 Butylbenzene					CAS #: 104-51-8		
11.079	11.079 (1.250)	134	1994850	200.000	187.29	0.00- 0.00	100.00(H)
11.079	11.079 (1.250)	91	7485442			0.00- 0.00	375.24
11.079	11.079 (1.250)	92	3913082			0.00- 0.00	196.16
221 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.867	11.867 (1.339)	157	3206165	200.000	199.55	0.00- 0.00	100.00
11.867	11.867 (1.339)	75	2554979			0.00- 0.00	79.69
11.867	11.867 (1.339)	155	2479666			0.00- 0.00	77.34

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
    exceeded maximum amount.
H - Operator selected an alternate compound hit.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092413.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921b.m
Misc Info: 200ppbv(200ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 08:49
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	102227	61336	143118	107785	5.44
123 1,4-Difluorobenze	417792	250675	584909	441324	5.63
163 Chlorobenzene-d5	379305	227583	531027	398249	4.99

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.41	-0.11
163 Chlorobenzene-d5	8.86	8.53	9.19	8.87	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092413.d

Date : 24-SEP-2015 14:13

Client ID:

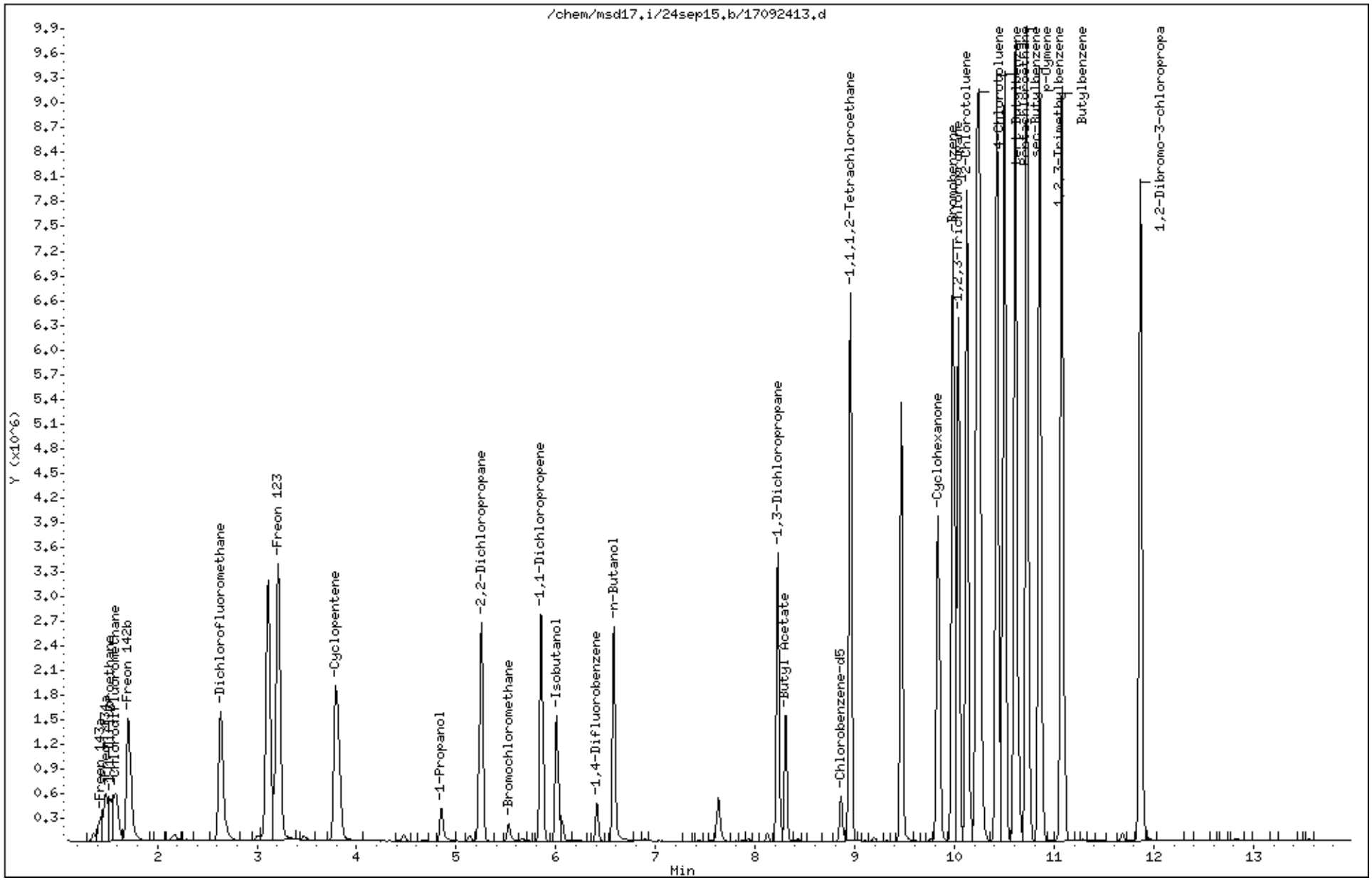
Sample Info: 200ml 2736-197

Column phase: RTX-624

Instrument: msd17.i

Operator: cb

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092410.d
Lab Smp Id: ICAL Level 8
Inj Date : 24-SEP-2015 12:46
Operator : cb Inst ID: msd17.i
Smp Info : 200ml 2736-222
Misc Info : 200ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921b.m
Meth Date : 25-Sep-2015 15:50 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 14:13 Cal File: 17092413.d
Als bottle: 2 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Combo.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.535	5.535 (1.000)	130	107867	25.0000		80.00- 120.00	100.00
5.535	5.535 (1.000)	128	82587			46.54- 106.54	76.56
5.528	5.528 (1.000)	49	119271			83.83- 143.83	110.57
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.416	6.416 (1.000)	114	435671	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	69127			0.00- 44.86	15.87
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.859	8.859 (1.000)	117	372569	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	196327			23.93- 83.93	52.70
32 Vinyl Bromide						CAS #: 593-60-2	
2.591	2.591 (0.468)	106	1387426	200.000	202.86	0.00- 0.00	100.00(A)
2.591	2.591 (0.468)	108	1316254			0.00- 0.00	94.87

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
94 Ethyl Acetate					CAS #: 141-78-6		
5.342	5.342 (0.965)	70	193486	200.000	199.80	0.00- 0.00	100.00
5.342	5.342 (0.965)	61	258987			0.00- 0.00	133.85
5.342	5.342 (0.965)	45	236278			0.00- 0.00	122.12
63 Acetonitrile					CAS #: 75-05-8		
3.902	3.902 (0.705)	40	745828	200.000	206.30	0.00- 0.00	100.00(A)
3.909	3.909 (0.706)	41	1873068			0.00- 0.00	251.14
3.909	3.909 (0.706)	38	218874			0.00- 0.00	29.35
64 Cyclopentane					CAS #: 287-92-3		
3.916	3.916 (0.708)	70	875512	200.000	214.20	0.00- 0.00	100.00(A)
3.916	3.916 (0.708)	55	1041504			0.00- 0.00	118.96
74 Acrylonitrile					CAS #: 107-13-1		
4.332	4.332 (0.783)	52	929032	200.000	195.66	0.00- 0.00	100.00
4.339	4.339 (0.784)	53	1220691			0.00- 0.00	131.39
134 Methyl Methacrylate					CAS #: 80-62-6		
6.903	6.903 (0.779)	41	1796671	200.000	209.12	0.00- 0.00	100.00(A)
6.903	6.903 (0.779)	69	1675169			0.00- 0.00	93.24
6.903	6.903 (0.779)	100	616131			0.00- 0.00	34.29
137 Dibromomethane					CAS #: 74-95-3		
6.960	6.960 (0.786)	174	2086535	200.000	223.36	0.00- 0.00	100.00(A)
6.960	6.960 (0.786)	93	1953155			0.00- 0.00	93.61
6.960	6.960 (0.786)	95	1632265			0.00- 0.00	78.23
173 2-Heptanone					CAS #: 110-43-0		
6.187	6.187 (1.118)	58	52769	200.000	175.86	0.00- 0.00	100.00
6.187	6.187 (1.118)	43	2038582			0.00- 0.00	3863.22
34 Pentane					CAS #: 109-66-0		
2.706	2.706 (0.489)	43	2323300	200.000	216.50	0.00- 0.00	100.00(A)
2.706	2.706 (0.489)	57	391198			0.00- 0.00	16.84
2.706	2.706 (0.489)	72	289864			0.00- 0.00	12.48
148 Octane					CAS #: 111-65-9		
7.677	7.677 (1.196)	57	1250300	200.000	205.34	0.00- 0.00	100.00(A)
7.677	7.677 (1.196)	85	1589789			0.00- 0.00	127.15
7.677	7.677 (1.196)	43	2754740			0.00- 0.00	220.33
170 Nonane					CAS #: 111-84-2		
8.945	8.945 (1.010)	43	2810735	200.000	212.79	0.00- 0.00	100.00(A)
8.945	8.945 (1.010)	57	2735030			0.00- 0.00	97.31
8.945	8.945 (1.010)	85	1243878			0.00- 0.00	44.25

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
187 Decane					CAS #: 124-18-5		
10.055	10.055 (1.135)	57	3775202	200.000	222.70	0.00- 0.00	100.00(A)
10.055	10.055 (1.135)	71	1686790			0.00- 0.00	44.68
10.055	10.055 (1.135)	142	222921			0.00- 0.00	5.90
215 Undecane					CAS #: 1120-21-4		
11.051	11.051 (1.247)	57	4481289	200.000	236.73	0.00- 0.00	100.00(A)
11.051	11.051 (1.247)	43	3557503			0.00- 0.00	79.39
225 Dodecane					CAS #: 112-40-3		
11.975	11.975 (1.352)	57	4442895	200.000	265.31	0.00- 0.00	100.00(AH)
11.975	11.975 (1.352)	43	3341933			0.00- 0.00	75.22

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
H - Operator selected an alternate compound hit.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092410.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921b.m
Misc Info: 200ppbv(200ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 08:49
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	102227	61336	143118	107867	5.52
123 1,4-Difluorobenze	417792	250675	584909	435671	4.28
163 Chlorobenzene-d5	379305	227583	531027	372569	-1.78

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.54	0.13
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092410.d

Date : 24-SEP-2015 12:46

Client ID:

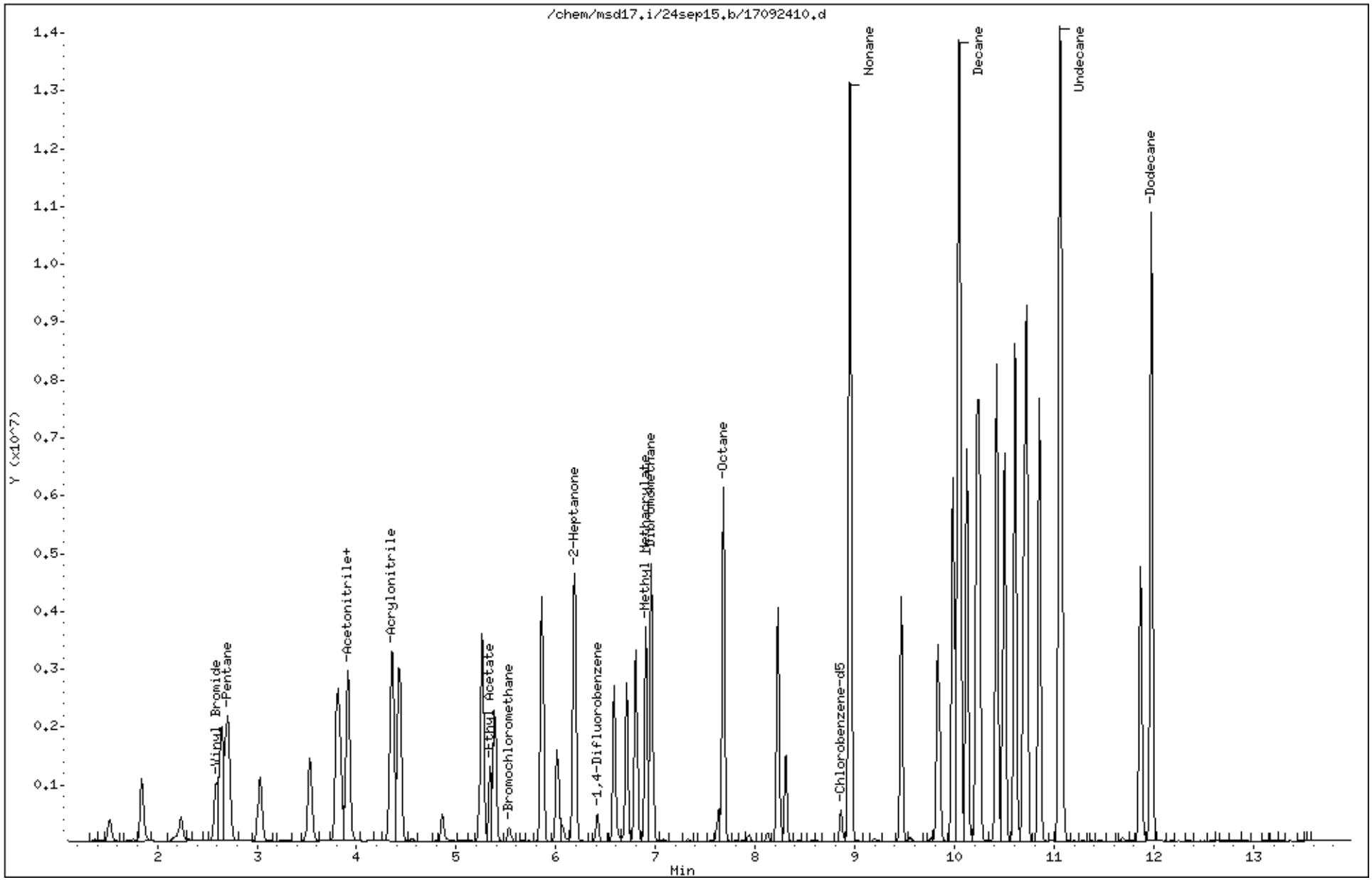
Sample Info: 200ml 2736-222

Column phase: RTX-624

Instrument: msd17.i

Operator: cb

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092407.d
Lab Smp Id: ICAL Level 8
Inj Date : 24-SEP-2015 11:27
Operator : cb Inst ID: msd17.i
Smp Info : 200ml 2736-107
Misc Info : 200ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921b.m
Meth Date : 25-Sep-2015 15:28 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 11:27 Cal File: 17092407.d
Als bottle: 2 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 123TCB.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.535	5.535 (1.000)	130	100902	25.0000		80.00- 120.00	100.00
5.535	5.535 (1.000)	128	76523			46.54- 106.54	75.84
5.528	5.528 (1.000)	49	115100			83.83- 143.83	114.07
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.416	6.416 (1.000)	114	413016	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	63081			0.00- 44.86	15.27
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	361587	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	193689			23.93- 83.93	53.57
229 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
13.135	13.135 (1.482)	180	2455297	200.000	204.76	0.00- 0.00	100.00(A)
13.135	13.135 (1.482)	182	2334519			0.00- 0.00	95.08
13.135	13.135 (1.482)	145	743207			0.00- 0.00	30.27

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092407.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921b.m
Misc Info: 200ppbv(200ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 08:49
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	102227	61336	143118	100902	-1.30
123 1,4-Difluorobenze	417792	250675	584909	413016	-1.14
163 Chlorobenzene-d5	379305	227583	531027	361587	-4.67

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.13
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.87	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092407.d

Date : 24-SEP-2015 11:27

Client ID:

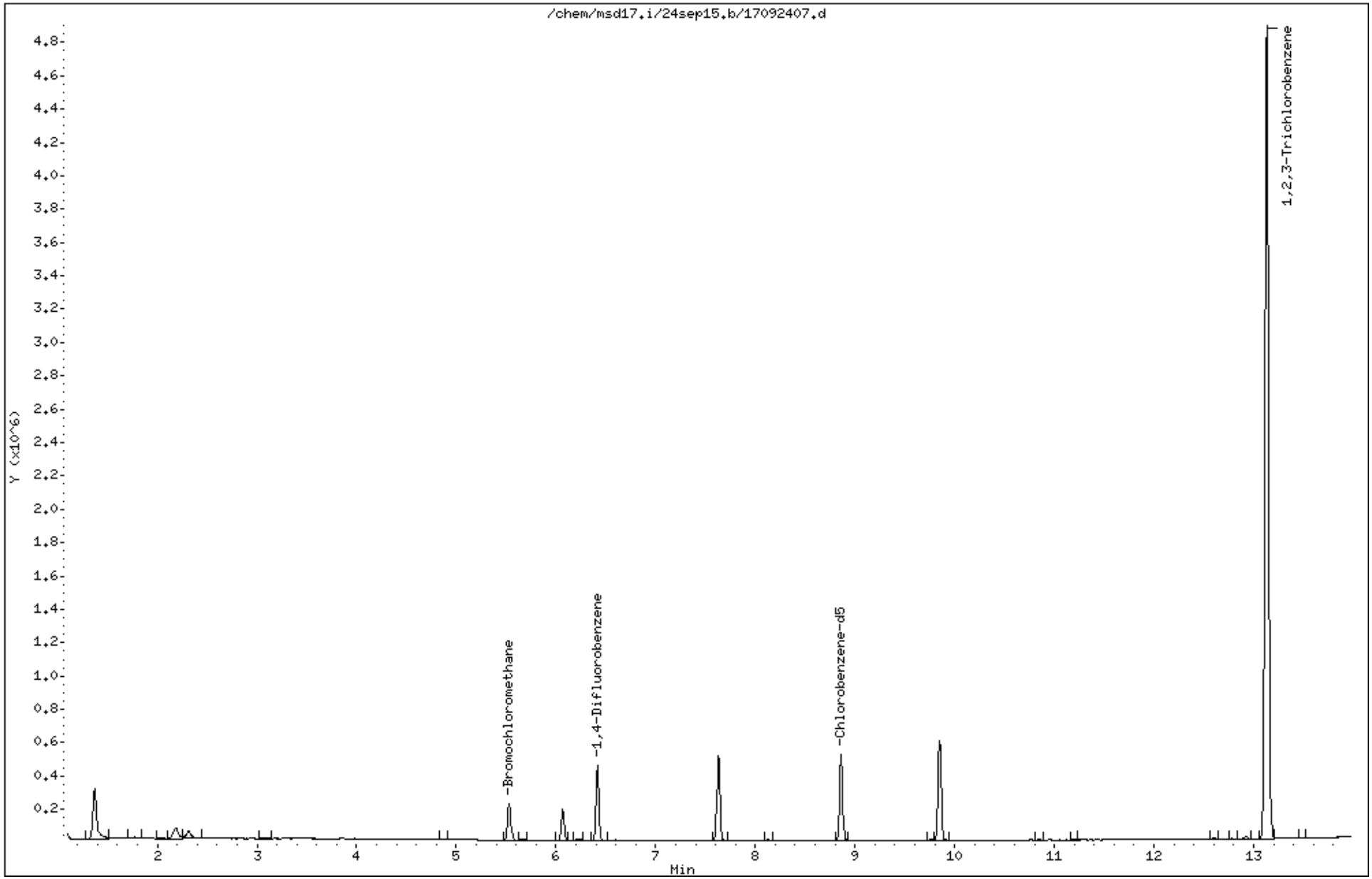
Instrument: msd17.i

Sample Info: 200ml 2736-107

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/21sep15a.b/17092124.d
Lab Smp Id: ICAL Level #8
Inj Date : 21-SEP-2015 23:54
Operator : gh Inst ID: msd17.i
Smp Info : 200ml 2737-240
Misc Info : 200ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/21sep15a.b/175q0921a.m
Meth Date : 25-Sep-2015 15:15 cbond Quant Type: ISTD
Cal Date : 21-SEP-2015 23:54 Cal File: 17092124.d
Als bottle: 2 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12noNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.535	5.535 (1.000)	130	121699	25.0000		80.00- 120.00	100.00
5.535	5.535 (1.000)	128	93172			46.54- 106.54	76.56
5.535	5.535 (1.000)	49	133941			83.83- 143.83	110.06
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.416	6.416 (1.000)	114	487106	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	75921			0.00- 44.86	15.59
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.866	8.866 (1.000)	117	444142	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	235752			23.93- 83.93	53.08
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.065	6.065 (1.096)	65	166634	25.0000	25.410	80.00- 120.00	100.00
6.065	6.065 (1.096)	67	104768			25.51- 85.51	62.87

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.189)	98	513120	25.0000	25.549	80.00- 120.00	100.00
7.627	7.627 (1.189)	70	52981			0.00- 40.39	10.33
7.627	7.627 (1.189)	100	328525			33.97- 93.97	64.02
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.854	9.854 (1.111)	174	298289	25.0000	26.304	80.00- 120.00	100.00
9.847	9.847 (1.111)	95	327997			79.64- 139.64	109.96
9.854	9.854 (1.111)	176	285051			65.80- 125.80	95.56
9 Propylene					CAS #: 115-07-1		
1.524	1.524 (0.275)	41	919247	200.000	190.38	80.00- 120.00	100.00
1.524	1.524 (0.275)	42	600903			37.10- 97.10	65.37
1.524	1.524 (0.275)	39	679121			44.98- 104.98	73.88
11 Freon 12					CAS #: 75-71-8		
1.560	1.560 (0.282)	85	3801856	200.000	194.10	80.00- 120.00	100.00
1.560	1.560 (0.282)	87	1225063			2.33- 62.33	32.22
15 Freon 114					CAS #: 76-14-2		
1.689	1.689 (0.305)	135	2796542	200.000	196.69	80.00- 120.00	100.00
1.689	1.689 (0.305)	137	888072			2.02- 62.02	31.76
17 Chloromethane					CAS #: 74-87-3		
1.775	1.775 (0.321)	50	1193466	200.000	174.13	80.00- 120.00	100.00
1.775	1.775 (0.321)	52	378165			2.35- 62.35	31.69
23 Butane					CAS #: 106-97-8		
1.853	1.853 (0.335)	58	276345	200.000	183.84	80.00- 120.00	100.00
1.853	1.853 (0.335)	43	1846421			657.81- 717.81	668.16
25 Vinyl Chloride					CAS #: 75-01-4		
1.882	1.882 (0.340)	62	1436206	200.000	185.40	80.00- 120.00	100.00
1.882	1.882 (0.340)	64	465429			2.69- 62.69	32.41
26 1,3-Butadiene					CAS #: 106-99-0		
1.911	1.911 (0.345)	54	1017321	200.000	189.28	80.00- 120.00	100.00
1.911	1.911 (0.345)	39	1042975			63.95- 123.95	102.52
29 Bromomethane					CAS #: 74-83-9		
2.269	2.269 (0.410)	94	1357382	200.000	197.83	80.00- 120.00	100.00
2.269	2.269 (0.410)	96	1276332			63.69- 123.69	94.03
30 Chloroethane					CAS #: 75-00-3		
2.383	2.383 (0.431)	64	747974	200.000	190.47	80.00- 120.00	100.00
2.383	2.383 (0.431)	66	240753			1.86- 61.86	32.19

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.383	2.383 (0.431)	49	186549			0.00- 55.51	24.94
31 Isopentane					CAS #: 78-78-4		
2.405	2.405 (0.434)	43	1469976	200.000	192.98	80.00- 120.00	100.00
2.405	2.405 (0.434)	57	1102324			44.35- 104.35	74.99
35 Freon 11					CAS #: 75-69-4		
2.641	2.641 (0.477)	101	3900789	200.000	193.40	80.00- 120.00	100.00
2.641	2.641 (0.477)	103	2521698			35.20- 95.20	64.65
42 Ethanol					CAS #: 64-17-5		
2.992	2.992 (0.541)	45	499571	200.000	184.99	80.00- 120.00	100.00
2.992	2.992 (0.541)	43	104753			0.00- 50.36	20.97
2.992	2.992 (0.541)	46	194077			10.31- 70.31	38.85
49 Freon 113					CAS #: 76-13-1		
3.293	3.293 (0.595)	151	2789089	200.000	194.08	80.00- 120.00	100.00
3.293	3.293 (0.595)	153	1781608			33.72- 93.72	63.88
3.286	3.286 (0.594)	101	3491488			95.23- 155.23	125.18
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.322	3.322 (0.600)	98	1015918	200.000	191.76	80.00- 120.00	100.00
3.322	3.322 (0.600)	96	1602566			130.14- 190.14	157.75
3.322	3.322 (0.600)	61	2514045			218.16- 278.16	247.47
52 Acetone					CAS #: 67-64-1		
3.494	3.494 (0.631)	58	661622	200.000	180.76	80.00- 120.00	100.00
3.494	3.494 (0.631)	43	1995677			266.49- 326.49	301.63
56 Carbon Disulfide					CAS #: 75-15-0		
3.558	3.558 (0.643)	76	4636560	200.000	189.52	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.666	3.666 (0.662)	45	2256892	200.000	198.77	80.00- 120.00	100.00
3.666	3.666 (0.662)	43	446451			0.00- 50.02	19.78
3.666	3.666 (0.662)	59	97659			0.00- 34.32	4.33
58 3-Chloropropene					CAS #: 107-05-1		
3.802	3.802 (0.687)	76	744123	200.000	188.66	80.00- 120.00	100.00
3.802	3.802 (0.687)	41	1649150			185.01- 245.01	221.62
66 Methylene Chloride					CAS #: 75-09-2		
3.988	3.988 (0.720)	49	1617941	200.000	188.58	80.00- 120.00	100.00
3.988	3.988 (0.720)	84	1421255			59.02- 119.02	87.84
3.988	3.988 (0.720)	51	506097			1.78- 61.78	31.28

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.110	4.110 (0.742)	59	3018938	200.000	211.74	80.00- 120.00	100.00(A)
4.110	4.110 (0.742)	41	584898			0.00- 50.26	19.37
4.110	4.110 (0.742)	57	309369			0.00- 40.80	10.25
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.196	4.196 (0.758)	73	4418871	200.000	198.84	80.00- 120.00	100.00
4.196	4.196 (0.758)	57	945450			0.00- 51.46	21.40
4.196	4.196 (0.758)	41	837701			0.00- 49.34	18.96
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.224	4.224 (0.763)	98	1058660	200.000	200.56	80.00- 120.00	100.00(A)
4.224	4.224 (0.763)	61	2276670			184.16- 244.16	215.05
4.224	4.224 (0.763)	96	1658932			127.84- 187.84	156.70
78 Hexane					CAS #: 110-54-3		
4.432	4.432 (0.801)	57	2268518	200.000	188.96	80.00- 120.00	100.00
4.432	4.432 (0.801)	43	1316623			27.64- 87.64	58.04
4.432	4.432 (0.801)	86	393553			0.00- 46.92	17.35
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.719	4.719 (0.852)	63	2838939	200.000	198.80	80.00- 120.00	100.00
4.719	4.719 (0.852)	65	901304			2.04- 62.04	31.75
83 Isopropyl ether					CAS #: 108-20-3		
4.704	4.704 (0.850)	45	4524658	200.000	194.84	80.00- 120.00	100.00
4.704	4.704 (0.850)	87	1398336			1.31- 61.31	30.90
4.704	4.704 (0.850)	59	562487			0.00- 42.69	12.43
86 Vinyl Acetate					CAS #: 108-05-4		
4.754	4.754 (0.859)	86	445907	200.000	204.64	80.00- 120.00	100.00(A)
4.754	4.754 (0.859)	43	4045286			891.41- 951.41	907.20
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.055	5.055 (0.913)	59	4793032	200.000	197.76	80.00- 120.00	100.00
5.055	5.055 (0.913)	87	2062824			13.52- 73.52	43.04
5.055	5.055 (0.913)	41	798988			0.00- 47.26	16.67
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.299	5.299 (0.957)	98	1121948	200.000	197.10	80.00- 120.00	100.00
5.299	5.299 (0.957)	96	1742141			124.38- 184.38	155.28
5.299	5.299 (0.957)	61	2120567			162.07- 222.07	189.01
92 2-Butanone					CAS #: 78-93-3		
5.327	5.327 (0.962)	72	799882	200.000	198.75	80.00- 120.00	100.00
5.327	5.327 (0.962)	43	2687475			306.33- 366.33	335.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.327	5.327 (0.962)	57	234709			0.00- 59.26	29.34
99 Tetrahydrofuran					CAS #: 109-99-9		
5.528	5.528 (0.999)	42	1473255	200.000	187.92	80.00- 120.00	100.00
5.528	5.528 (0.999)	71	698851			17.72- 77.72	47.44
5.528	5.528 (0.999)	72	745780			20.99- 80.99	50.62
100 Chloroform					CAS #: 67-66-3		
5.592	5.592 (1.010)	83	3372353	200.000	192.68	80.00- 120.00	100.00
5.592	5.592 (1.010)	85	2179816			34.67- 94.67	64.64
102 Cyclohexane					CAS #: 110-82-7		
5.693	5.693 (1.028)	84	2160628	200.000	198.80	80.00- 120.00	100.00
5.693	5.693 (1.028)	56	2293456			77.09- 137.09	106.15
5.693	5.693 (1.028)	41	1168089			25.87- 85.87	54.06
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.714	5.714 (1.032)	97	3376305	200.000	194.59	80.00- 120.00	100.00
5.714	5.714 (1.032)	99	2156443			34.33- 94.33	63.87
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.829	5.829 (1.053)	119	3438653	200.000	198.35	80.00- 120.00	100.00
5.829	5.829 (1.053)	117	3564489			74.90- 134.90	103.66
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.087)	57	7241328	200.000	197.28	80.00- 120.00	100.00
6.015	6.015 (1.087)	56	2259908			1.80- 61.80	31.21
6.015	6.015 (1.087)	41	1810558			0.00- 55.83	25.00
116 Benzene					CAS #: 71-43-2		
6.044	6.044 (0.942)	78	4871098	200.000	197.40	80.00- 120.00	100.00
6.044	6.044 (0.942)	77	1166986			0.00- 54.08	23.96
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.108	6.108 (1.104)	87	1143040	200.000	196.52	80.00- 120.00	100.00
6.108	6.108 (1.104)	73	4820495			376.57- 436.57	421.73
6.108	6.108 (1.104)	55	1080606			64.52- 124.52	94.54
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.137	6.137 (0.956)	62	2134366	200.000	198.01	80.00- 120.00	100.00
6.137	6.137 (0.956)	64	688293			2.16- 62.16	32.25
121 Heptane					CAS #: 142-82-5		
6.187	6.187 (0.964)	71	1719167	200.000	201.29	80.00- 120.00	100.00(A)
6.187	6.187 (0.964)	43	2382778			110.94- 170.94	138.60

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.187	6.187 (0.964)	57	1428309			53.72- 113.72	83.08
125 Trichloroethene					CAS #: 79-01-6		
6.610	6.610 (1.030)	95	2294567	200.000	197.08	80.00- 120.00	100.00
6.610	6.610 (1.030)	130	2388980			74.97- 134.97	104.11
6.610	6.610 (1.030)	97	1477318			35.33- 95.33	64.38
127 Methylcyclohexane					CAS #: 108-87-2		
6.710	6.710 (1.212)	83	2992232	200.000	199.50	80.00- 120.00	100.00
6.710	6.710 (1.212)	98	1393566			16.41- 76.41	46.57
6.703	6.703 (1.211)	55	2102488			40.41- 100.41	70.26
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.846	6.846 (1.067)	63	1749546	200.000	198.06	80.00- 120.00	100.00
6.846	6.846 (1.067)	62	1200531			38.78- 98.78	68.62
6.846	6.846 (1.067)	41	876135			20.16- 80.16	50.08
136 1,4-Dioxane					CAS #: 123-91-1		
6.939	6.939 (1.081)	88	1144157	200.000	214.06	80.00- 120.00	100.00(A)
6.939	6.939 (1.081)	58	691171			31.02- 91.02	60.41
6.939	6.939 (1.081)	57	234103			0.00- 51.33	20.46
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.103)	83	3659892	200.000	200.26	80.00- 120.00	100.00(A)
7.075	7.075 (1.103)	85	2336634			34.16- 94.16	63.84
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.448	7.448 (1.161)	75	3104064	200.000	202.20	80.00- 120.00	100.00(A)
7.448	7.448 (1.161)	77	990130			1.57- 61.57	31.90
7.448	7.448 (1.161)	39	1379421			13.98- 73.98	44.44
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.555	7.555 (1.178)	58	1307043	200.000	219.94	80.00- 120.00	100.00(A)
7.555	7.555 (1.178)	43	3096880			205.93- 265.93	236.94
7.555	7.555 (1.178)	85	635240			18.04- 78.04	48.60
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.198)	91	6246781	200.000	201.88	80.00- 120.00	100.00(A)
7.684	7.684 (1.198)	92	3495854			27.24- 87.24	55.96
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.928	7.928 (0.894)	75	2774669	200.000	201.13	80.00- 120.00	100.00(A)
7.928	7.928 (0.894)	77	878648			1.57- 61.57	31.67
7.928	7.928 (0.894)	39	1183190			13.98- 73.98	42.64

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.085	8.085 (0.912)	97	2135621	200.000	196.22	80.00- 120.00	100.00
8.085	8.085 (0.912)	99	1327583			31.05- 91.05	62.16
8.085	8.085 (0.912)	83	1853629			58.29- 118.29	86.80
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.916)	166	3096940	200.000	193.88	80.00- 120.00	100.00
8.121	8.121 (0.916)	129	2244785			42.46- 102.46	72.48
8.121	8.121 (0.916)	131	2163160			40.24- 100.24	69.85
158 2-Hexanone					CAS #: 591-78-6		
8.243	8.243 (0.930)	58	1732046	200.000	225.52	80.00- 120.00	100.00(A)
8.243	8.243 (0.930)	43	2939319			205.93- 265.93	169.70
8.250	8.250 (0.931)	100	398342			11.40- 71.40	23.00
160 Dibromochloromethane					CAS #: 124-48-1		
8.400	8.400 (0.947)	129	4081064	200.000	200.86	80.00- 120.00	100.00(A)
8.400	8.400 (0.947)	127	3148151			47.28- 107.28	77.14
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.515	8.515 (0.960)	107	3445850	200.000	200.26	80.00- 120.00	100.00(A)
8.515	8.515 (0.960)	109	3261024			66.45- 126.45	94.64
165 Chlorobenzene					CAS #: 108-90-7		
8.887	8.887 (1.002)	112	5020685	200.000	201.54	80.00- 120.00	100.00(A)
8.887	8.887 (1.002)	114	1570152			2.06- 62.06	31.27
8.887	8.887 (1.002)	77	2799430			26.47- 86.47	55.76
167 Ethyl Benzene					CAS #: 100-41-4		
8.930	8.930 (1.007)	106	2565661	200.000	211.46	80.00- 120.00	100.00(A)
8.930	8.930 (1.007)	91	8194277			289.94- 349.94	319.38
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	3188268	200.000	211.65	80.00- 120.00	100.00(A)
9.031	9.031 (1.019)	91	6399188			167.83- 227.83	200.71
171 o-Xylene					CAS #: 95-47-6		
9.375	9.375 (1.057)	106	2996604	200.000	214.40	80.00- 120.00	100.00(A)
9.375	9.375 (1.057)	91	6395218			181.11- 241.11	213.42
172 Styrene					CAS #: 100-42-5		
9.396	9.396 (1.060)	104	5292094	200.000	221.98	80.00- 120.00	100.00(A)
9.389	9.389 (1.059)	78	2495349			17.79- 77.79	47.15
174 Bromoform					CAS #: 75-25-2		
9.597	9.597 (1.082)	173	4381082	200.000	213.55	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.597	9.597 (1.082)	171	2247891			21.45- 81.45	51.31
175 Cumene					CAS #: 98-82-8		
9.661	9.661 (1.090)	105	9602335	200.000	215.07	80.00- 120.00	100.00(A)
9.661	9.661 (1.090)	120	2576450			0.00- 57.47	26.83
9.661	9.661 (1.090)	51	802677			0.00- 38.62	8.36
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.976	9.976 (1.125)	83	4717714	200.000	200.79	80.00- 120.00	100.00(A)
9.976	9.976 (1.125)	85	3053342			34.77- 94.77	64.72
182 Propylbenzene					CAS #: 103-65-1		
10.005	10.005 (1.128)	91	11543105	200.000	215.35	80.00- 120.00	100.00(A)
10.005	10.005 (1.128)	120	2701293			0.00- 53.65	23.40
10.005	10.005 (1.128)	105	407575			0.00- 33.57	3.53
188 4-Ethyltoluene					CAS #: 622-96-8		
10.098	10.098 (1.139)	120	3058850	200.000	215.48	80.00- 120.00	100.00(A)
10.098	10.098 (1.139)	105	10072533			292.89- 352.89	329.29
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.148	10.148 (1.145)	120	4087074	200.000	219.14	80.00- 120.00	100.00(A)
10.148	10.148 (1.145)	105	8385865			175.25- 235.25	205.18
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.478	10.478 (1.182)	120	3716082	200.000	221.95	80.00- 120.00	100.00(A)
10.478	10.478 (1.182)	105	8052152			183.76- 243.76	216.68
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.771	10.771 (1.215)	146	5722594	200.000	212.48	80.00- 120.00	100.00(A)
10.771	10.771 (1.215)	148	3648557			33.69- 93.69	63.76
10.771	10.771 (1.215)	111	2156016			8.12- 68.12	37.68
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.850	10.850 (1.224)	146	5791312	200.000	217.34	80.00- 120.00	100.00(A)
10.850	10.850 (1.224)	148	3698268			33.86- 93.86	63.86
10.850	10.850 (1.224)	111	2091460			6.71- 66.71	36.11
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.965	10.965 (1.237)	91	7519155	200.000	237.32	80.00- 120.00	100.00(A)
10.972	10.972 (1.238)	126	1643895			0.00- 51.95	21.86
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.180	11.180 (1.261)	146	5530413	200.000	216.79	80.00- 120.00	100.00(A)
11.180	11.180 (1.261)	148	3510806			33.90- 93.90	63.48

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.180	11.180 (1.261)	111	2145563			8.86- 68.86	38.80
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.605	12.605 (1.422)	180	5083373	200.000	229.42	80.00- 120.00	100.00(A)
12.605	12.605 (1.422)	182	4862927			65.21- 125.21	95.66
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.691	12.691 (1.431)	225	4274617	200.000	224.67	80.00- 120.00	100.00(A)
12.691	12.691 (1.431)	223	2665072			33.22- 93.22	62.35

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092124.d
Lab Smp Id: ICAL Level #8
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msd17.i/21sep15a.b/175q0921a.m
Misc Info: 200ppbv(200ppbv)

Calibration Date: 21-SEP-2015
Calibration Time: 22:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	116527	69916	163138	121699	4.44
123 1,4-Difluorobenze	475185	285111	665259	487106	2.51
163 Chlorobenzene-d5	418099	250859	585339	444142	6.23

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.54	0.13
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/21sep15a.b/17092124.d

Date : 21-SEP-2015 23:54

Client ID:

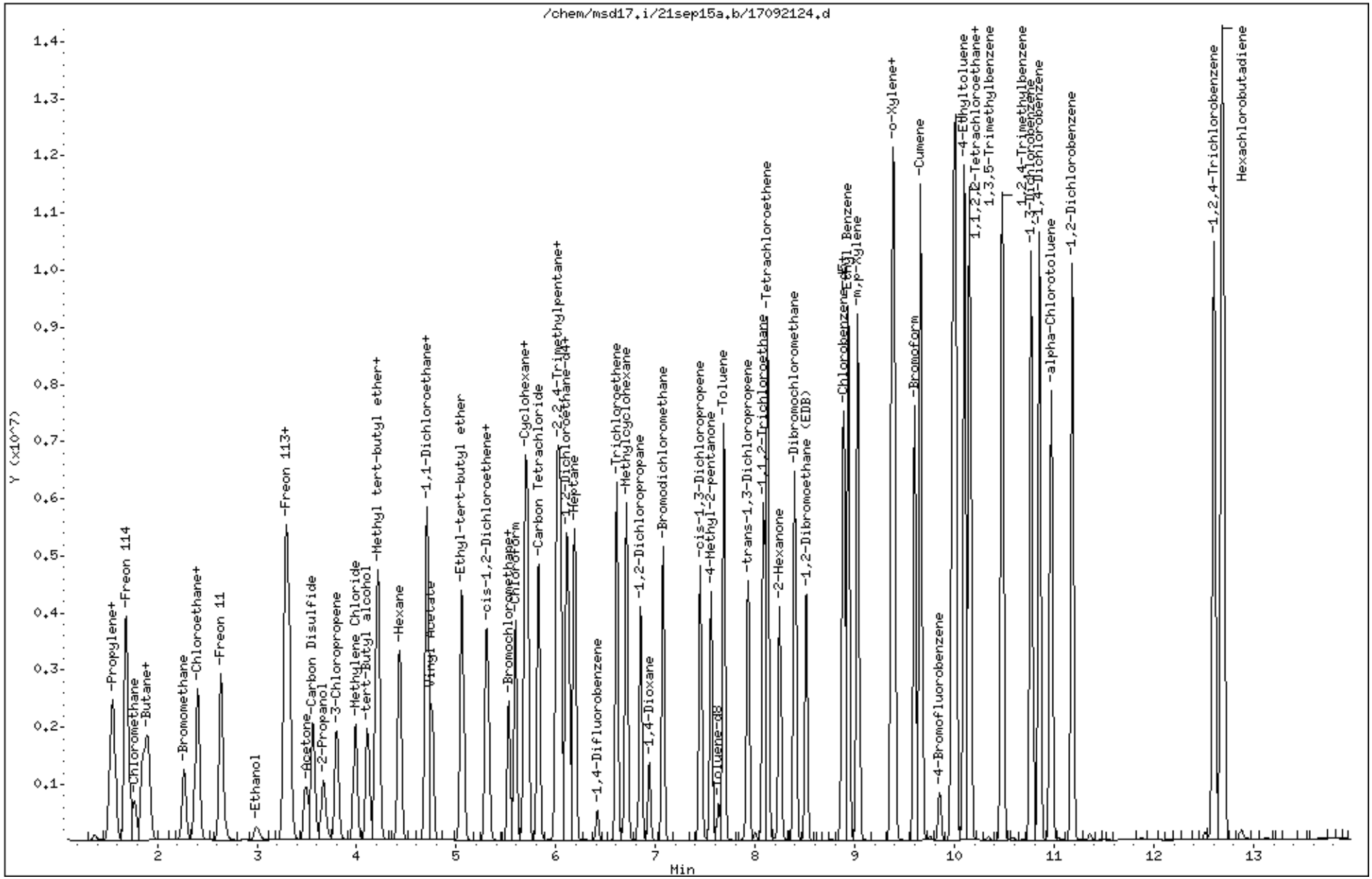
Sample Info: 200ml 2737-240

Column phase: RTX-624

Instrument: msd17.i

Operator: gh

Column diameter: 0.25



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Client Sample ID: CCV

Lab ID#: 1509511-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100202**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/2/15 09:19 AM**	

Compound	%Recovery
Vinyl Chloride	103
1,1-Dichloroethene	100
Methylene Chloride	109
trans-1,2-Dichloroethene	109
cis-1,2-Dichloroethene	104
Chloroform	104
Benzene	105
1,2-Dichloroethane	104
Trichloroethene	105
Toluene	104
1,1,2-Trichloroethane	101
Tetrachloroethene	93
Ethyl Benzene	104
m,p-Xylene	106
o-Xylene	105
1,2,4-Trimethylbenzene	101

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	108	70-130
4-Bromofluorobenzene	93	70-130

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd17.i Injection Date: 02-OCT-2015 09:19
Lab File ID: 17100202.d Init. Cal. Date(s): 21-SEP-2015 24-SEP-2015
Analysis Type: AIR Init. Cal. Times: 20:32 17:21
Lab Sample ID: CCV Quant Type: ISTD
Method: /var/chem/msd17.i/02oct15.b/175q0921c.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 117 1,2-Dichloroethane-d4	1.34713	1.45076	0.010	-7.69249	30.00000	Averaged
$ 146 Toluene-d8	1.03075	1.08125	0.010	-4.89937	30.00000	Averaged
$ 177 4-Bromofluorobenzene	0.63831	0.59553	0.010	6.70144	30.00000	Averaged
9 Propylene	0.99192	1.02997	0.010	-3.83661	40.00000	Averaged
11 Freon 12	4.02374	4.31068	0.010	-7.13101	30.00000	Averaged
15 Freon 114	2.92071	3.04832	0.010	-4.36946	30.00000	Averaged
17 Chloromethane	1.40795	1.49325	0.010	-6.05824	30.00000	Averaged
23 Butane	0.30879	0.29951	0.010	3.00356	40.00000	Averaged
25 Vinyl Chloride	1.59130	1.64581	0.010	-3.42545	30.00000	Averaged
26 1,3-Butadiene	1.10408	1.12758	0.010	-2.12841	30.00000	Averaged
29 Bromomethane	1.40948	1.56674	0.010	-11.15743	30.00000	Averaged
30 Chloroethane	0.80668	0.87376	0.010	-8.31491	30.00000	Averaged
31 Isopentane	1.56476	1.57099	0.010	-0.39800	40.00000	Averaged
35 Freon 11	4.14328	4.34450	0.010	-4.85651	30.00000	Averaged
42 Ethanol	0.55476	0.52119	0.010	6.05108	30.00000	Averaged
49 Freon 113	2.95204	2.97319	0.010	-0.71639	30.00000	Averaged
50 1,1-Dichloroethene	1.08829	1.08316	0.010	0.47193	30.00000	Averaged
52 Acetone	0.75188	0.72605	0.010	3.43477	30.00000	Averaged
56 Carbon Disulfide	5.02571	5.25020	0.010	-4.46667	30.00000	Averaged
57 2-Propanol	2.33241	2.31721	0.010	0.65184	30.00000	Averaged
58 3-Chloropropene	0.81025	0.84453	0.010	-4.23088	30.00000	Averaged
66 Methylene Chloride	1.76244	1.91614	0.010	-8.72040	30.00000	Averaged
71 tert-Butyl alcohol	2.92896	2.94651	0.010	-0.59909	40.00000	Averaged
72 Methyl tert-butyl ether	4.56525	4.58411	0.010	-0.41321	30.00000	Averaged
73 trans-1,2-Dichloroethene	1.08433	1.17972	0.010	-8.79733	30.00000	Averaged
78 Hexane	2.46620	2.48461	0.010	-0.74666	30.00000	Averaged
82 1,1-Dichloroethane	2.93354	3.19975	0.010	-9.07492	30.00000	Averaged
83 Isopropyl ether	4.77043	4.78571	0.010	-0.32020	40.00000	Averaged
86 Vinyl Acetate	0.44761	0.44769	0.010	-0.01802	30.00000	Averaged
88 Ethyl-tert-butyl ether	4.97869	4.94661	0.010	0.64437	40.00000	Averaged
91 cis-1,2-Dichloroethene	1.16936	1.21712	0.010	-4.08433	30.00000	Averaged
92 2-Butanone	0.82674	0.88702	0.010	-7.29102	30.00000	Averaged
99 Tetrahydrofuran	1.61049	1.52544	0.010	5.28096	30.00000	Averaged
100 Chloroform	3.59543	3.74758	0.010	-4.23161	30.00000	Averaged
102 Cyclohexane	2.23265	2.31499	0.010	-3.68795	30.00000	Averaged
103 1,1,1-Trichloroethane	3.56425	3.67372	0.010	-3.07128	30.00000	Averaged

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd17.i Injection Date: 02-OCT-2015 09:19
Lab File ID: 17100202.d Init. Cal. Date(s): 21-SEP-2015 24-SEP-2015
Analysis Type: AIR Init. Cal. Times: 20:32 17:21
Lab Sample ID: CCV Quant Type: ISTD
Method: /var/chem/msd17.i/02oct15.b/175q0921c.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
106 Carbon Tetrachloride	3.56123	3.75241	0.010	-5.36830	30.00000	Averaged
113 2,2,4-Trimethylpentane	7.54048	7.89666	0.010	-4.72360	30.00000	Averaged
116 Benzene	1.26645	1.32630	0.010	-4.72613	30.00000	Averaged
119 tert-Amyl methyl ether	1.19486	1.20000	0.010	-0.42998	40.00000	Averaged
120 1,2-Dichloroethane	0.55322	0.57848	0.010	-4.56549	30.00000	Averaged
121 Heptane	0.43834	0.47309	0.010	-7.92958	30.00000	Averaged
125 Trichloroethene	0.59756	0.62635	0.010	-4.81771	30.00000	Averaged
127 Methylcyclohexane	3.08103	3.21969	0.010	-4.50045	30.00000	Averaged
132 1,2-Dichloropropane	0.45337	0.48446	0.010	-6.85925	30.00000	Averaged
136 1,4-Dioxane	0.27432	0.28610	0.010	-4.29510	30.00000	Averaged
138 Bromodichloromethane	0.93797	0.97269	0.010	-3.70139	30.00000	Averaged
144 cis-1,3-Dichloropropene	0.78791	0.80182	0.010	-1.76662	30.00000	Averaged
145 4-Methyl-2-pentanone	0.30499	0.33456	0.010	-9.69358	30.00000	Averaged
147 Toluene	1.58812	1.64499	0.010	-3.58073	30.00000	Averaged
150 trans-1,3-Dichloropropene	0.77652	0.77715	0.010	-0.08148	30.00000	Averaged
155 1,1,2-Trichloroethane	0.61261	0.62086	0.010	-1.34693	30.00000	Averaged
156 Tetrachloroethene	0.89911	0.83962	0.010	6.61608	30.00000	Averaged
158 2-Hexanone	0.43232	0.46828	0.010	-8.31857	30.00000	Averaged
160 Dibromochloromethane	1.14369	1.13253	0.010	0.97544	30.00000	Averaged
161 1,2-Dibromoethane (EDB)	0.96853	0.99485	0.010	-2.71735	30.00000	Averaged
165 Chlorobenzene	1.40226	1.40377	0.010	-0.10754	30.00000	Averaged
167 Ethyl Benzene	0.68294	0.70766	0.010	-3.61831	30.00000	Averaged
169 m,p-Xylene	0.84792	0.90291	0.010	-6.48469	30.00000	Averaged
171 o-Xylene	0.78674	0.82872	0.010	-5.33659	30.00000	Averaged
172 Styrene	1.34196	1.47357	0.010	-9.80710	30.00000	Averaged
174 Bromoform	1.15479	1.13023	0.010	2.12742	30.00000	Averaged
175 Cumene	2.51316	2.64563	0.010	-5.27135	30.00000	Averaged
181 1,1,2,2-Tetrachloroethane	1.32250	1.33397	0.010	-0.86687	30.00000	Averaged
182 Propylbenzene	3.01709	3.18743	0.010	-5.64568	30.00000	Averaged
188 4-Ethyltoluene	0.79902	0.79862	0.010	0.05042	30.00000	Averaged
190 1,3,5-Trimethylbenzene	1.04980	1.18280	0.010	-12.66918	30.00000	Averaged
196 1,2,4-Trimethylbenzene	0.94244	0.95009	0.010	-0.81212	30.00000	Averaged
208 1,3-Dichlorobenzene	1.51596	1.55848	0.010	-2.80424	30.00000	Averaged
209 1,4-Dichlorobenzene	1.49984	1.56846	0.010	-4.57510	30.00000	Averaged
212 alpha-Chlorotoluene	1.78345	1.78165	0.010	0.10108	30.00000	Averaged

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd17.i Injection Date: 02-OCT-2015 09:19
Lab File ID: 17100202.d Init. Cal. Date(s): 21-SEP-2015 24-SEP-2015
Analysis Type: AIR Init. Cal. Times: 20:32 17:21
Lab Sample ID: CCV Quant Type: ISTD
Method: /var/chem/msd17.i/02oct15.b/175q0921c.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
214 1,2-Dichlorobenzene	1.43593	1.47753	0.010	-2.89671	30.00000	Averaged
226 1,2,4-Trichlorobenzene	1.24723	1.05521	0.010	15.39507	30.00000	Averaged
227 Hexachlorobutadiene	1.07095	0.97415	0.010	9.03829	30.00000	Averaged

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/02oct15.b/17100202.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 02-OCT-2015 09:19
Operator : cb Inst ID: msd17.i
Smp Info : 100ml #2736-240A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /var/chem/msd17.i/02oct15.b/175q0921c.m
Meth Date : 02-Oct-2015 11:57 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 16:22 Cal File: 17092416.d
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12noNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.521	5.521 (1.000)	130	74352	25.0000		80.00- 120.00	100.00
5.521	5.521 (1.000)	128	60536			46.54- 106.54	81.42
5.521	5.521 (1.000)	49	91284			83.83- 143.83	122.77
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.409	6.409 (1.000)	114	308060	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	46013			0.00- 44.86	14.94
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.859	8.859 (1.000)	117	281339	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	147356			23.93- 83.93	52.38
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.058	6.058 (1.097)	65	107867	25.0000	26.923	80.00- 120.00	100.00
6.058	6.058 (1.097)	67	62883			25.51- 85.51	58.30

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.190)	98	333091	25.0000	26.225	80.00- 120.00	100.00
7.627	7.627 (1.190)	70	34500			0.00- 40.39	10.36
7.627	7.627 (1.190)	100	213652			33.97- 93.97	64.14
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.847	9.847 (1.112)	174	167546	25.0000	23.325	80.00- 120.00	100.00
9.847	9.847 (1.112)	95	194642			79.64- 139.64	116.17
9.847	9.847 (1.112)	176	162100			65.80- 125.80	96.75
9 Propylene					CAS #: 115-07-1		
1.510	1.510 (0.273)	41	153161	50.0000	51.918	80.00- 120.00	100.00
1.510	1.510 (0.273)	42	100962			37.10- 97.10	65.92
1.510	1.510 (0.273)	39	114054			44.98- 104.98	74.47
11 Freon 12					CAS #: 75-71-8		
1.545	1.545 (0.280)	85	641015	50.0000	53.566	80.00- 120.00	100.00
1.545	1.545 (0.280)	87	207151			2.33- 62.33	32.32
15 Freon 114					CAS #: 76-14-2		
1.667	1.667 (0.302)	135	453298	50.0000	52.185	80.00- 120.00	100.00
1.667	1.667 (0.302)	137	140690			2.02- 62.02	31.04
17 Chloromethane					CAS #: 74-87-3		
1.753	1.753 (0.318)	50	222052	50.0000	53.029	80.00- 120.00	100.00
1.753	1.753 (0.318)	52	70372			2.35- 62.35	31.69
23 Butane					CAS #: 106-97-8		
1.825	1.825 (0.331)	58	44539	50.0000	48.498	80.00- 120.00	100.00
1.825	1.825 (0.331)	43	303581			657.81- 717.81	681.61
25 Vinyl Chloride					CAS #: 75-01-4		
1.861	1.861 (0.337)	62	244739	50.0000	51.713	80.00- 120.00	100.00
1.861	1.861 (0.337)	64	76699			2.69- 62.69	31.34
26 1,3-Butadiene					CAS #: 106-99-0		
1.889	1.889 (0.342)	54	167676	50.0000	51.064	80.00- 120.00	100.00
1.889	1.889 (0.342)	39	157157			63.95- 123.95	93.73
29 Bromomethane					CAS #: 74-83-9		
2.247	2.247 (0.407)	94	232981	50.0000	55.579	80.00- 120.00	100.00
2.247	2.247 (0.407)	96	214700			63.69- 123.69	92.15
30 Chloroethane					CAS #: 75-00-3		
2.362	2.362 (0.428)	64	129931	50.0000	54.157	80.00- 120.00	100.00
2.362	2.362 (0.428)	66	40702			1.86- 61.86	31.33

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.369	2.369 (0.429)	49	33869			0.00- 55.51	26.07
31 Isopentane					CAS #: 78-78-4		
2.383	2.383 (0.432)	43	233612	50.0000	50.199	80.00- 120.00	100.00
2.383	2.383 (0.432)	57	177910			44.35- 104.35	76.16
35 Freon 11					CAS #: 75-69-4		
2.620	2.620 (0.475)	101	646044	50.0000	52.428	80.00- 120.00	100.00
2.620	2.620 (0.475)	103	419056			35.20- 95.20	64.86
42 Ethanol					CAS #: 64-17-5		
2.971	2.971 (0.538)	45	77503	50.0000	46.974	80.00- 120.00	100.00
2.978	2.978 (0.539)	43	16155			0.00- 50.36	20.84
2.971	2.971 (0.538)	46	30645			10.31- 70.31	39.54
49 Freon 113					CAS #: 76-13-1		
3.265	3.265 (0.591)	151	442125	50.0000	50.358	80.00- 120.00	100.00
3.265	3.265 (0.591)	153	286136			33.72- 93.72	64.72
3.265	3.265 (0.591)	101	583181			95.23- 155.23	131.90
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.300	3.300 (0.598)	98	161070	50.0000	49.764	80.00- 120.00	100.00
3.300	3.300 (0.598)	96	254815			130.14- 190.14	158.20
3.300	3.300 (0.598)	61	408147			218.16- 278.16	253.40
52 Acetone					CAS #: 67-64-1		
3.465	3.465 (0.628)	58	107967	50.0000	48.283	80.00- 120.00	100.00
3.458	3.458 (0.626)	43	325236			266.49- 326.49	301.24
56 Carbon Disulfide					CAS #: 75-15-0		
3.530	3.530 (0.639)	76	780725	50.0000	52.233	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.637	3.637 (0.659)	45	344578	50.0000	49.674	80.00- 120.00	100.00
3.637	3.637 (0.659)	43	81079			0.00- 50.02	23.53
3.637	3.637 (0.659)	59	15387			0.00- 34.32	4.47
58 3-Chloropropene					CAS #: 107-05-1		
3.780	3.780 (0.685)	76	125585	50.0000	52.115	80.00- 120.00	100.00
3.780	3.780 (0.685)	41	263848			185.01- 245.01	210.10
66 Methylene Chloride					CAS #: 75-09-2		
3.967	3.967 (0.718)	49	284937	50.0000	54.360	80.00- 120.00	100.00
3.967	3.967 (0.718)	84	246378			59.02- 119.02	86.47
3.967	3.967 (0.718)	51	87358			1.78- 61.78	30.66

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.095	4.095 (0.742)	59	438158	50.0000	50.300	80.00- 120.00	100.00
4.095	4.095 (0.742)	41	100009			0.00- 50.26	22.82
4.095	4.095 (0.742)	57	48250			0.00- 40.80	11.01
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.181	4.181 (0.757)	73	681676	50.0000	50.207	80.00- 120.00	100.00
4.181	4.181 (0.757)	57	151158			0.00- 51.46	22.17
4.181	4.181 (0.757)	41	137303			0.00- 49.34	20.14
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.203	4.203 (0.761)	98	175429	50.0000	54.399	80.00- 120.00	100.00
4.203	4.203 (0.761)	61	371756			184.16- 244.16	211.91
4.203	4.203 (0.761)	96	271337			127.84- 187.84	154.67
78 Hexane					CAS #: 110-54-3		
4.418	4.418 (0.800)	57	369472	50.0000	50.373	80.00- 120.00	100.00
4.418	4.418 (0.800)	43	214774			27.64- 87.64	58.13
4.418	4.418 (0.800)	86	62847			0.00- 46.92	17.01
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.704	4.704 (0.852)	63	475816	50.0000	54.537	80.00- 120.00	100.00
4.704	4.704 (0.852)	65	152607			2.04- 62.04	32.07
83 Isopropyl ether					CAS #: 108-20-3		
4.690	4.690 (0.849)	45	711654	50.0000	50.160	80.00- 120.00	100.00
4.690	4.690 (0.849)	87	217996			1.31- 61.31	30.63
4.690	4.690 (0.849)	59	92964			0.00- 42.69	13.06
86 Vinyl Acetate					CAS #: 108-05-4		
4.747	4.747 (0.860)	86	66573	50.0000	50.009	80.00- 120.00	100.00
4.747	4.747 (0.860)	43	610008			891.41- 951.41	916.30
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.048	5.048 (0.914)	59	735581	50.0000	49.678	80.00- 120.00	100.00
5.048	5.048 (0.914)	87	316908			13.52- 73.52	43.08
5.048	5.048 (0.914)	41	139164			0.00- 47.26	18.92
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.285	5.285 (0.957)	98	180990	50.0000	52.042	80.00- 120.00	100.00
5.285	5.285 (0.957)	96	283279			124.38- 184.38	156.52
5.285	5.285 (0.957)	61	344110			162.07- 222.07	190.13
92 2-Butanone					CAS #: 78-93-3		
5.320	5.320 (0.964)	72	131903	50.0000	53.646	80.00- 120.00	100.00
5.320	5.320 (0.964)	43	439065			306.33- 366.33	332.87

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.313	5.313 (0.962)	57	38362			0.00- 59.26	29.08
99 Tetrahydrofuran					CAS #: 109-99-9		
5.521	5.521 (1.000)	42	226839	50.0000	47.360	80.00- 120.00	100.00
5.521	5.521 (1.000)	71	108343			17.72- 77.72	47.76
5.521	5.521 (1.000)	72	123282			20.99- 80.99	54.35
100 Chloroform					CAS #: 67-66-3		
5.585	5.585 (1.012)	83	557280	50.0000	52.116	80.00- 120.00	100.00
5.585	5.585 (1.012)	85	365706			34.67- 94.67	65.62
102 Cyclohexane					CAS #: 110-82-7		
5.686	5.686 (1.030)	84	344248	50.0000	51.844	80.00- 120.00	100.00
5.678	5.678 (1.029)	56	361522			77.09- 137.09	105.02
5.678	5.678 (1.029)	41	192372			25.87- 85.87	55.88
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.707	5.707 (1.034)	97	546297	50.0000	51.536	80.00- 120.00	100.00
5.707	5.707 (1.034)	99	352238			34.33- 94.33	64.48
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.815	5.815 (1.053)	119	557998	50.0000	52.684	80.00- 120.00	100.00
5.815	5.815 (1.053)	117	576742			74.90- 134.90	103.36
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.008	6.008 (1.088)	57	1174265	50.0000	52.362	80.00- 120.00	100.00
6.008	6.008 (1.088)	56	381487			1.80- 61.80	32.49
6.008	6.008 (1.088)	41	303697			0.00- 55.83	25.86
116 Benzene					CAS #: 71-43-2		
6.037	6.037 (0.942)	78	817161	50.0000	52.363	80.00- 120.00	100.00
6.037	6.037 (0.942)	77	196356			0.00- 54.08	24.03
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.101	6.101 (1.105)	87	178445	50.0000	50.215	80.00- 120.00	100.00
6.101	6.101 (1.105)	73	753305			376.57- 436.57	422.15
6.101	6.101 (1.105)	55	194216			64.52- 124.52	108.84
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.130	6.130 (0.956)	62	356414	50.0000	52.283	80.00- 120.00	100.00
6.130	6.130 (0.956)	64	115397			2.16- 62.16	32.38
121 Heptane					CAS #: 142-82-5		
6.180	6.180 (0.964)	71	291483	50.0000	53.965	80.00- 120.00	100.00
6.180	6.180 (0.964)	43	393021			110.94- 170.94	134.83

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.180	6.180 (0.964)	57	246476			53.72- 113.72	84.56
125 Trichloroethene					CAS #: 79-01-6		
6.603	6.603 (1.030)	95	385908	50.0000	52.409	80.00- 120.00	100.00
6.603	6.603 (1.030)	130	394970			74.97- 134.97	102.35
6.603	6.603 (1.030)	97	249737			35.33- 95.33	64.71
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.214)	83	478781	50.0000	52.250	80.00- 120.00	100.00
6.703	6.703 (1.214)	98	215196			16.41- 76.41	44.95
6.703	6.703 (1.214)	55	340944			40.41- 100.41	71.21
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.846	6.846 (1.068)	63	298488	50.0000	53.430	80.00- 120.00	100.00
6.846	6.846 (1.068)	62	204590			38.78- 98.78	68.54
6.839	6.839 (1.067)	41	145029			20.16- 80.16	48.59
136 1,4-Dioxane					CAS #: 123-91-1		
6.932	6.932 (1.082)	88	176273	50.0000	52.148	80.00- 120.00	100.00
6.932	6.932 (1.082)	58	107829			31.02- 91.02	61.17
6.932	6.932 (1.082)	57	37572			0.00- 51.33	21.31
138 Bromodichloromethane					CAS #: 75-27-4		
7.068	7.068 (1.103)	83	599294	50.0000	51.851	80.00- 120.00	100.00
7.068	7.068 (1.103)	85	390966			34.16- 94.16	65.24
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.448	7.448 (1.162)	75	494020	50.0000	50.883	80.00- 120.00	100.00
7.448	7.448 (1.162)	77	156332			1.57- 61.57	31.64
7.448	7.448 (1.162)	39	214199			13.98- 73.98	43.36
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.555	7.555 (1.179)	58	206128	50.0000	54.847	80.00- 120.00	100.00
7.555	7.555 (1.179)	43	492762			205.93- 265.93	239.06
7.555	7.555 (1.179)	85	94876			18.04- 78.04	46.03
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.199)	91	1013509	50.0000	51.790	80.00- 120.00	100.00
7.684	7.684 (1.199)	92	563211			27.24- 87.24	55.57
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.928	7.928 (0.895)	75	437286	50.0000	50.041	80.00- 120.00	100.00
7.928	7.928 (0.895)	77	140172			1.57- 61.57	32.05
7.928	7.928 (0.895)	39	182435			13.98- 73.98	41.72

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.078	8.078 (0.912)	97	349347	50.0000	50.673	80.00- 120.00	100.00
8.078	8.078 (0.912)	99	217521			31.05- 91.05	62.27
8.078	8.078 (0.912)	83	315080			58.29- 118.29	90.19
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.917)	166	472437	50.0000	46.692	80.00- 120.00	100.00
8.121	8.121 (0.917)	129	356404			42.46- 102.46	75.44
8.121	8.121 (0.917)	131	336738			40.24- 100.24	71.28
158 2-Hexanone					CAS #: 591-78-6		
8.243	8.243 (0.930)	58	263490	50.0000	54.159	80.00- 120.00	100.00
8.243	8.243 (0.930)	43	455911			205.93- 265.93	173.03
8.243	8.243 (0.930)	100	59020			11.40- 71.40	22.40
160 Dibromochloromethane					CAS #: 124-48-1		
8.393	8.393 (0.947)	129	637250	50.0000	49.512	80.00- 120.00	100.00
8.393	8.393 (0.947)	127	486970			47.28- 107.28	76.42
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.508	8.508 (0.960)	107	559779	50.0000	51.359	80.00- 120.00	100.00
8.508	8.508 (0.960)	109	522991			66.45- 126.45	93.43
165 Chlorobenzene					CAS #: 108-90-7		
8.888	8.888 (1.003)	112	789871	50.0000	50.054	80.00- 120.00	100.00
8.888	8.888 (1.003)	114	255121			2.06- 62.06	32.30
8.888	8.888 (1.003)	77	455629			26.47- 86.47	57.68
167 Ethyl Benzene					CAS #: 100-41-4		
8.931	8.931 (1.008)	106	398182	50.0000	51.809	80.00- 120.00	100.00
8.931	8.931 (1.008)	91	1269305			289.94- 349.94	318.78
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	508047	50.0000	53.242	80.00- 120.00	100.00
9.031	9.031 (1.019)	91	1026735			167.83- 227.83	202.09
171 o-Xylene					CAS #: 95-47-6		
9.375	9.375 (1.058)	106	466303	50.0000	52.668	80.00- 120.00	100.00
9.375	9.375 (1.058)	91	991855			181.11- 241.11	212.71
172 Styrene					CAS #: 100-42-5		
9.396	9.396 (1.061)	104	829147	50.0000	54.904	80.00- 120.00	100.00
9.389	9.389 (1.060)	78	397274			17.79- 77.79	47.91
174 Bromoform					CAS #: 75-25-2		
9.597	9.597 (1.083)	173	635954	50.0000	48.936	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.597	9.597 (1.083)	171	328218			21.45- 81.45	51.61
175 Cumene					CAS #: 98-82-8		
9.661	9.661 (1.091)	105	1488640	50.0000	52.636	80.00- 120.00	100.00
9.661	9.661 (1.091)	120	395876			0.00- 57.47	26.59
9.661	9.661 (1.091)	51	135051			0.00- 38.62	9.07
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.976	9.976 (1.126)	83	750595	50.0000	50.433	80.00- 120.00	100.00
9.976	9.976 (1.126)	85	486636			34.77- 94.77	64.83
182 Propylbenzene					CAS #: 103-65-1		
10.005	10.005 (1.129)	91	1793495	50.0000	52.823	80.00- 120.00	100.00
10.005	10.005 (1.129)	120	401171			0.00- 53.65	22.37
10.005	10.005 (1.129)	105	63442			0.00- 33.57	3.54
188 4-Ethyltoluene					CAS #: 622-96-8		
10.098	10.098 (1.140)	120	449365	50.0000	49.975	80.00- 120.00	100.00
10.098	10.098 (1.140)	105	1453638			292.89- 352.89	323.49
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.155	10.155 (1.146)	120	665535	50.0000	56.334	80.00- 120.00	100.00
10.148	10.148 (1.146)	105	1401797			175.25- 235.25	210.63
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.478	10.478 (1.183)	120	534597	50.0000	50.406	80.00- 120.00	100.00
10.478	10.478 (1.183)	105	1159745			183.76- 243.76	216.94
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.771	10.771 (1.216)	146	876920	50.0000	51.402	80.00- 120.00	100.00
10.771	10.771 (1.216)	148	559247			33.69- 93.69	63.77
10.771	10.771 (1.216)	111	348769			8.12- 68.12	39.77
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.850	10.850 (1.225)	146	882539	50.0000	52.288	80.00- 120.00	100.00
10.850	10.850 (1.225)	148	563988			33.86- 93.86	63.91
10.850	10.850 (1.225)	111	335428			6.71- 66.71	38.01
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.965	10.965 (1.238)	91	1002493	50.0000	49.949	80.00- 120.00	100.00
10.965	10.965 (1.238)	126	214801			0.00- 51.95	21.43
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.180	11.180 (1.262)	146	831373	50.0000	51.448	80.00- 120.00	100.00
11.180	11.180 (1.262)	148	527350			33.90- 93.90	63.43

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.180	11.180 (1.262)	111	335274			8.86- 68.86	40.33
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.605	12.605 (1.423)	180	593746	50.0000	42.302	80.00- 120.00	100.00
12.605	12.605 (1.423)	182	557196			65.21- 125.21	93.84
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.684	12.684 (1.432)	225	548135	50.0000	45.481	80.00- 120.00	100.00
12.684	12.684 (1.432)	223	346461			33.22- 93.22	63.21

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17100202.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /var/chem/msd17.i/02oct15.b/175q0921c.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 02-OCT-2015
Calibration Time: 10:52
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	79176	47506	110846	74352	-6.09
123 1,4-Difluorobenze	301775	181065	422485	308060	2.08
163 Chlorobenzene-d5	275055	165033	385077	281339	2.28

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.52	0.00
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.86	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/02oct15.b/17100202.d

Date : 02-OCT-2015 09:19

Client ID: CCV

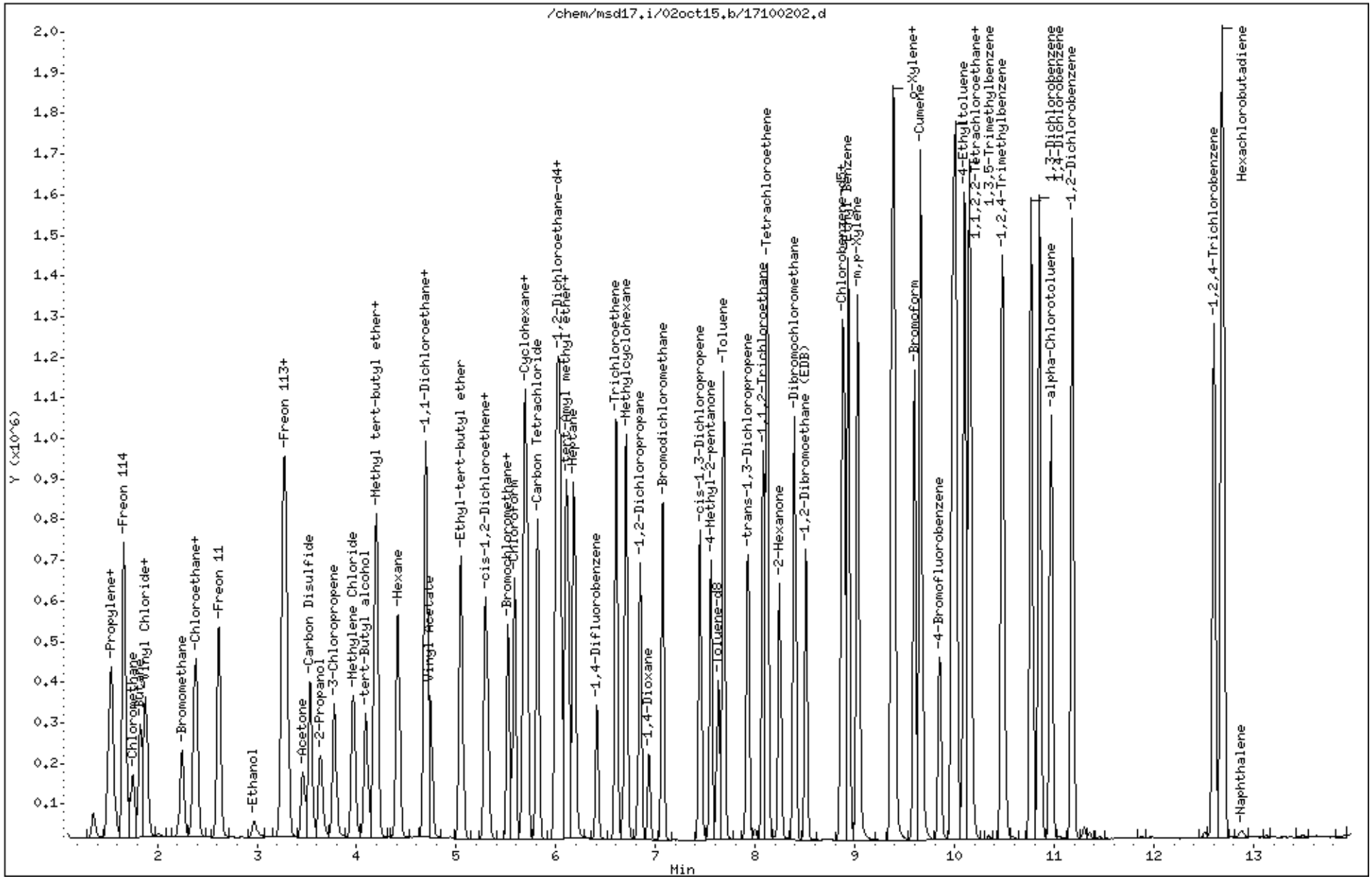
Sample Info: 100ml #2736-240A

Column phase: RTX-624

Instrument: msd17.i

Operator: cb

Column diameter: 0.25



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Client Sample ID: LCS

Lab ID#: 1509511-10A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100203**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/2/15 09:54 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	111	70-130
1,1-Dichloroethene	102	70-130
Methylene Chloride	110	70-130
trans-1,2-Dichloroethene	95	70-130
cis-1,2-Dichloroethene	117	70-130
Chloroform	105	70-130
Benzene	107	70-130
1,2-Dichloroethane	104	70-130
Trichloroethene	102	70-130
Toluene	108	70-130
1,1,2-Trichloroethane	108	70-130
Tetrachloroethene	102	70-130
Ethyl Benzene	115	70-130
m,p-Xylene	116	70-130
o-Xylene	118	70-130
1,2,4-Trimethylbenzene	115	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	103	70-130
1,2-Dichloroethane-d4	103	70-130
4-Bromofluorobenzene	96	70-130

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 02oct15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCS Client Smp ID: LCS
Level: LOW Operator: cb
Data Type: MS DATA SampleType: LCS
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: AT12.sub
Method File: /var/chem/msd17.i/02oct15.b/175q0921c.m
Misc Info: 50ppbv (200ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9 Propylene	50.000	52.238	104.48	70-130
11 Freon 12	50.000	56.685	113.37	70-130
15 Freon 114	50.000	56.322	112.64	70-130
17 Chloromethane	50.000	54.928	109.86	70-130
23 Butane	50.000	50.831	101.66	70-130
25 Vinyl Chloride	50.000	55.454	110.91	70-130
26 1,3-Butadiene	50.000	52.194	104.39	70-130
29 Bromomethane	50.000	58.178	116.36	70-130
30 Chloroethane	50.000	56.666	113.33	70-130
31 Isopentane	50.000	54.521	109.04	70-130
35 Freon 11	50.000	55.960	111.92	70-130
42 Ethanol	50.000	56.373	112.75	70-130
49 Freon 113	50.000	51.423	102.85	70-130
50 1,1-Dichloroethene	50.000	50.840	101.68	70-130
52 Acetone	50.000	51.789	103.58	70-130
56 Carbon Disulfide	50.000	47.701	95.40	70-130
57 2-Propanol	50.000	57.063	114.13	70-130
58 3-Chloropropene	50.000	48.372	96.74	70-130
66 Methylene Chloride	50.000	54.932	109.86	70-130
72 Methyl tert-butyl	50.000	49.946	99.89	70-130
73 trans-1,2-Dichloro	50.000	47.670	95.34	70-130
78 Hexane	50.000	52.072	104.14	70-130
82 1,1-Dichloroethane	50.000	55.218	110.44	70-130
86 Vinyl Acetate	50.000	52.480	104.96	70-130
91 cis-1,2-Dichloroet	50.000	58.392	116.78	70-130
92 2-Butanone	50.000	53.609	107.22	70-130
99 Tetrahydrofuran	50.000	49.020	98.04	70-130
100 Chloroform	50.000	52.708	105.42	70-130
103 1,1,1-Trichloroeth	50.000	52.054	104.11	70-130
106 Carbon Tetrachlori	50.000	53.437	106.87	70-130
102 Cyclohexane	50.000	52.498	105.00	70-130
113 2,2,4-Trimethylpen	50.000	55.923	111.85	70-130
116 Benzene	50.000	53.475	106.95	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	50.000	52.065	104.13	70-130
121 Heptane	50.000	53.755	107.51	70-130
125 Trichloroethene	50.000	50.814	101.63	70-130
127 Methylcyclohexane	50.000	53.264	106.53	70-130
132 1,2-Dichloropropan	50.000	55.046	110.09	70-130
136 1,4-Dioxane	50.000	56.480	112.96	70-130
138 Bromodichlorometha	50.000	54.348	108.70	70-130
144 cis-1,3-Dichloropr	50.000	48.229	96.46	70-130
145 4-Methyl-2-pentano	50.000	60.059	120.12	70-130
147 Toluene	50.000	54.134	108.27	70-130
150 trans-1,3-Dichloro	50.000	53.901	107.80	70-130
155 1,1,2-Trichloroeth	50.000	53.829	107.66	70-130
156 Tetrachloroethene	50.000	51.174	102.35	70-130
158 2-Hexanone	50.000	68.247	136.49*	70-130
160 Dibromochlorometha	50.000	53.485	106.97	70-130
161 1,2-Dibromoethane	50.000	54.740	109.48	70-130
165 Chlorobenzene	50.000	54.308	108.62	70-130
167 Ethyl Benzene	50.000	57.622	115.24	70-130
169 m,p-Xylene	50.000	57.808	115.62	70-130
171 o-Xylene	50.000	59.097	118.19	70-130
172 Styrene	50.000	60.657	121.31	70-130
174 Bromoform	50.000	53.979	107.96	70-130
175 Cumene	50.000	57.445	114.89	70-130
181 1,1,2,2-Tetrachlor	50.000	59.394	118.79	70-130
182 Propylbenzene	50.000	59.688	119.38	70-130
188 4-Ethyltoluene	50.000	54.365	108.73	70-130
190 1,3,5-Trimethylben	50.000	63.696	127.39	70-130
196 1,2,4-Trimethylben	50.000	57.610	115.22	70-130
208 1,3-Dichlorobenzen	50.000	56.856	113.71	70-130
209 1,4-Dichlorobenzen	50.000	58.107	116.21	70-130
212 alpha-Chlorotoluen	50.000	64.734	129.47	70-130
214 1,2-Dichlorobenzen	50.000	56.618	113.24	70-130
226 1,2,4-Trichloroben	50.000	52.610	105.22	70-130
227 Hexachlorobutadien	50.000	52.056	104.11	70-130
228 Naphthalene	5.000	6.222	124.43	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.864	103.46	70-130
$ 146 Toluene-d8	25.000	25.707	102.83	70-130
$ 177 4-Bromofluorobenze	25.000	24.131	96.53	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/02oct15.b/17100203.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 02-OCT-2015 09:54
Operator : cb Inst ID: msd17.i
Smp Info : 50ml #2736-265
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /var/chem/msd17.i/02oct15.b/175q0921c.m
Meth Date : 02-Oct-2015 10:33 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 16:22 Cal File: 17092416.d
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.521	5.521 (1.000)	130	75549	25.0000		80.00- 120.00	100.00
5.521	5.521 (1.000)	128	58577			46.54- 106.54	77.54
5.521	5.521 (1.000)	49	90187			83.83- 143.83	119.38
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.409	6.409 (1.000)	114	314903	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	48798			0.00- 44.86	15.50
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.844	8.859 (1.000)	117	278470	25.0000		80.00- 120.00	100.00
8.844	8.859 (1.000)	82	151497			23.93- 83.93	54.40
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.058	6.058 (1.097)	65	105292	25.8640	25.864	80.00- 120.00	100.00
6.058	6.058 (1.097)	67	60158			25.51- 85.51	57.13

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.190)	98	333768	25.7071	25.707	80.00- 120.00	100.00
7.627	7.627 (1.190)	70	34683			0.00- 40.39	10.39
7.627	7.627 (1.190)	100	213103			33.97- 93.97	63.85
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.811	9.847 (1.109)	174	171573	24.1313	24.131	80.00- 120.00	100.00
9.811	9.847 (1.109)	95	193403			79.64- 139.64	112.72
9.811	9.847 (1.109)	176	162977			65.80- 125.80	94.99
9 Propylene					CAS #: 115-07-1		
1.509	1.510 (0.273)	41	156585	52.2380	52.238	80.00- 120.00	100.00
1.502	1.510 (0.272)	42	105288			37.10- 97.10	67.24
1.509	1.510 (0.273)	39	117650			44.98- 104.98	75.13
11 Freon 12					CAS #: 75-71-8		
1.538	1.545 (0.279)	85	689264	56.6848	56.685	80.00- 120.00	100.00
1.538	1.545 (0.279)	87	224469			2.33- 62.33	32.57
15 Freon 114					CAS #: 76-14-2		
1.660	1.667 (0.301)	135	497108	56.3215	56.322	80.00- 120.00	100.00
1.660	1.667 (0.301)	137	157571			2.02- 62.02	31.70
17 Chloromethane					CAS #: 74-87-3		
1.746	1.753 (0.316)	50	233705	54.9277	54.928	80.00- 120.00	100.00
1.746	1.753 (0.316)	52	75348			2.35- 62.35	32.24
23 Butane					CAS #: 106-97-8		
1.825	1.825 (0.330)	58	47433	50.8311	50.831	80.00- 120.00	100.00
1.825	1.825 (0.330)	43	328206			657.81- 717.81	691.94
25 Vinyl Chloride					CAS #: 75-01-4		
1.860	1.861 (0.337)	62	266673	55.4546	55.454	80.00- 120.00	100.00
1.860	1.861 (0.337)	64	86080			2.69- 62.69	32.28
26 1,3-Butadiene					CAS #: 106-99-0		
1.889	1.889 (0.342)	54	174144	52.1937	52.194	80.00- 120.00	100.00
1.889	1.889 (0.342)	39	166457			63.95- 123.95	95.59
29 Bromomethane					CAS #: 74-83-9		
2.247	2.247 (0.407)	94	247805	58.1784	58.178	80.00- 120.00	100.00
2.247	2.247 (0.407)	96	238177			63.69- 123.69	96.11
30 Chloroethane					CAS #: 75-00-3		
2.362	2.362 (0.428)	64	138137	56.6656	56.666	80.00- 120.00	100.00
2.362	2.362 (0.428)	66	43830			1.86- 61.86	31.73

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.362	2.369 (0.428)	49	37242			0.00- 55.51	26.96
31 Isopentane					CAS #: 78-78-4		
2.383	2.383 (0.432)	43	257810	54.5210	54.521	80.00- 120.00	100.00
2.383	2.383 (0.432)	57	185793			44.35- 104.35	72.07
35 Freon 11					CAS #: 75-69-4		
2.613	2.620 (0.473)	101	700661	55.9597	55.960	80.00- 120.00	100.00
2.613	2.620 (0.473)	103	446615			35.20- 95.20	63.74
42 Ethanol					CAS #: 64-17-5		
2.971	2.971 (0.538)	45	94507	56.3730	56.373	80.00- 120.00	100.00
2.971	2.978 (0.538)	43	22087			0.00- 50.36	23.37
2.971	2.971 (0.538)	46	35352			10.31- 70.31	37.41
49 Freon 113					CAS #: 76-13-1		
3.264	3.265 (0.591)	151	458739	51.4227	51.423	80.00- 120.00	100.00
3.264	3.265 (0.591)	153	290157			33.72- 93.72	63.25
3.264	3.265 (0.591)	101	593609			95.23- 155.23	129.40
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.300	3.300 (0.598)	98	167203	50.8404	50.840	80.00- 120.00	100.00
3.300	3.300 (0.598)	96	268809			130.14- 190.14	160.77
3.293	3.300 (0.596)	61	425212			218.16- 278.16	254.31
52 Acetone					CAS #: 67-64-1		
3.458	3.465 (0.626)	58	117672	51.7889	51.789	80.00- 120.00	100.00
3.458	3.458 (0.626)	43	350099			266.49- 326.49	297.52
56 Carbon Disulfide					CAS #: 75-15-0		
3.529	3.530 (0.639)	76	724458	47.7009	47.701	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.637	3.637 (0.659)	45	402205	57.0629	57.063	80.00- 120.00	100.00
3.637	3.637 (0.659)	43	95222			0.00- 50.02	23.67
3.630	3.637 (0.657)	59	18018			0.00- 34.32	4.48
58 3-Chloropropene					CAS #: 107-05-1		
3.780	3.780 (0.685)	76	118441	48.3721	48.372	80.00- 120.00	100.00
3.780	3.780 (0.685)	41	267235			185.01- 245.01	225.63
66 Methylene Chloride					CAS #: 75-09-2		
3.966	3.967 (0.718)	49	292571	54.9323	54.932	80.00- 120.00	100.00
3.966	3.967 (0.718)	84	253476			59.02- 119.02	86.64
3.966	3.967 (0.718)	51	92365			1.78- 61.78	31.57

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.181	4.181 (0.757)	73	689059	49.9463	49.946	80.00- 120.00	100.00
4.181	4.181 (0.757)	57	150296			0.00- 51.46	21.81
4.181	4.181 (0.757)	41	145160			0.00- 49.34	21.07
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.203	4.203 (0.761)	98	156206	47.6704	47.670	80.00- 120.00	100.00
4.203	4.203 (0.761)	61	334983			184.16- 244.16	214.45
4.203	4.203 (0.761)	96	244198			127.84- 187.84	156.33
78 Hexane					CAS #: 110-54-3		
4.418	4.418 (0.800)	57	388079	52.0719	52.072	80.00- 120.00	100.00
4.418	4.418 (0.800)	43	224724			27.64- 87.64	57.91
4.418	4.418 (0.800)	86	66420			0.00- 46.92	17.12
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.704	4.704 (0.852)	63	489509	55.2180	55.218	80.00- 120.00	100.00
4.704	4.704 (0.852)	65	156568			2.04- 62.04	31.98
86 Vinyl Acetate					CAS #: 108-05-4		
4.747	4.747 (0.860)	86	70987	52.4799	52.480	80.00- 120.00	100.00
4.747	4.747 (0.860)	43	617686			891.41- 951.41	870.14
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.292	5.285 (0.958)	98	206341	58.3916	58.392	80.00- 120.00	100.00
5.284	5.285 (0.957)	96	314036			124.38- 184.38	152.19
5.284	5.285 (0.957)	61	392010			162.07- 222.07	189.98
92 2-Butanone					CAS #: 78-93-3		
5.320	5.320 (0.964)	72	133935	53.6089	53.609	80.00- 120.00	100.00
5.313	5.320 (0.962)	43	450138			306.33- 366.33	336.09
5.313	5.313 (0.962)	57	40384			0.00- 59.26	30.15
99 Tetrahydrofuran					CAS #: 109-99-9		
5.521	5.521 (1.000)	42	238575	49.0206	49.020	80.00- 120.00	100.00
5.521	5.521 (1.000)	71	115830			17.72- 77.72	48.55
5.521	5.521 (1.000)	72	123690			20.99- 80.99	51.85
100 Chloroform					CAS #: 67-66-3		
5.585	5.585 (1.012)	83	572691	52.7085	52.708	80.00- 120.00	100.00
5.585	5.585 (1.012)	85	373739			34.67- 94.67	65.26
102 Cyclohexane					CAS #: 110-82-7		
5.686	5.686 (1.030)	84	354201	52.4977	52.498	80.00- 120.00	100.00
5.678	5.678 (1.029)	56	380793			77.09- 137.09	107.51
5.678	5.678 (1.029)	41	196865			25.87- 85.87	55.58

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.707	5.707 (1.034)	97	560673	52.0538	52.054	80.00- 120.00	100.00
5.700	5.707 (1.032)	99	365682			34.33- 94.33	65.22
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.814	5.815 (1.053)	119	575086	53.4372	53.437	80.00- 120.00	100.00
5.814	5.815 (1.053)	117	593412			74.90- 134.90	103.19
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.008	6.008 (1.088)	57	1274310	55.9226	55.923	80.00- 120.00	100.00
6.008	6.008 (1.088)	56	416784			1.80- 61.80	32.71
6.008	6.008 (1.088)	41	330401			0.00- 55.83	25.93
116 Benzene					CAS #: 71-43-2		
6.037	6.037 (0.942)	78	853050	53.4750	53.475	80.00- 120.00	100.00
6.037	6.037 (0.942)	77	208681			0.00- 54.08	24.46
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.130	6.130 (0.956)	62	362812	52.0648	52.065	80.00- 120.00	100.00
6.130	6.130 (0.956)	64	117044			2.16- 62.16	32.26
121 Heptane					CAS #: 142-82-5		
6.180	6.180 (0.964)	71	296798	53.7547	53.755	80.00- 120.00	100.00
6.180	6.180 (0.964)	43	411480			110.94- 170.94	138.64
6.180	6.180 (0.964)	57	253305			53.72- 113.72	85.35
125 Trichloroethene					CAS #: 79-01-6		
6.602	6.603 (1.030)	95	382478	50.8143	50.814	80.00- 120.00	100.00
6.602	6.603 (1.030)	130	390913			74.97- 134.97	102.21
6.602	6.603 (1.030)	97	248225			35.33- 95.33	64.90
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.214)	83	495931	53.2643	53.264	80.00- 120.00	100.00
6.703	6.703 (1.214)	98	230177			16.41- 76.41	46.41
6.703	6.703 (1.214)	55	355205			40.41- 100.41	71.62
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.846	6.846 (1.068)	63	314347	55.0457	55.046	80.00- 120.00	100.00
6.846	6.846 (1.068)	62	213675			38.78- 98.78	67.97
6.839	6.839 (1.067)	41	156035			20.16- 80.16	49.64
136 1,4-Dioxane					CAS #: 123-91-1		
6.932	6.932 (1.082)	88	195158	56.4798	56.480	80.00- 120.00	100.00
6.932	6.932 (1.082)	58	127580			31.02- 91.02	65.37
6.932	6.932 (1.082)	57	41686			0.00- 51.33	21.36

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
138 Bromodichloromethane					CAS #: 75-27-4		
7.068	7.068 (1.103)	83	642111	54.3480	54.348	80.00- 120.00	100.00
7.068	7.068 (1.103)	85	417004			34.16- 94.16	64.94
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.448	7.448 (1.162)	75	478648	48.2287	48.229	80.00- 120.00	100.00
7.448	7.448 (1.162)	77	154413			1.57- 61.57	32.26
7.448	7.448 (1.162)	39	213449			13.98- 73.98	44.59
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.555	7.555 (1.179)	58	230731	60.0591	60.059	80.00- 120.00	100.00
7.555	7.555 (1.179)	43	559118			205.93- 265.93	242.32
7.555	7.555 (1.179)	85	111902			18.04- 78.04	48.50
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.199)	91	1082907	54.1341	54.134	80.00- 120.00	100.00
7.684	7.684 (1.199)	92	607737			27.24- 87.24	56.12
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.928	7.928 (0.896)	75	466215	53.9009	53.901	80.00- 120.00	100.00
7.928	7.928 (0.896)	77	149021			1.57- 61.57	31.96
7.928	7.928 (0.896)	39	196732			13.98- 73.98	42.20
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.078	8.078 (0.913)	97	367315	53.8287	53.829	80.00- 120.00	100.00
8.078	8.078 (0.913)	99	230063			31.05- 91.05	62.63
8.078	8.078 (0.913)	83	330827			58.29- 118.29	90.07
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.918)	166	512502	51.1735	51.174	80.00- 120.00	100.00
8.121	8.121 (0.918)	129	376671			42.46- 102.46	73.50
8.121	8.121 (0.918)	131	362777			40.24- 100.24	70.79
158 2-Hexanone					CAS #: 591-78-6		
8.243	8.243 (0.932)	58	328642	68.2470	68.247	80.00- 120.00	100.00(R)
8.243	8.243 (0.932)	43	555563			205.93- 265.93	169.05
8.243	8.243 (0.932)	100	73117			11.40- 71.40	22.25
160 Dibromochloromethane					CAS #: 124-48-1		
8.386	8.393 (0.948)	129	681366	53.4854	53.485	80.00- 120.00	100.00
8.386	8.393 (0.948)	127	530071			47.28- 107.28	77.80
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.501	8.508 (0.961)	107	590552	54.7403	54.740	80.00- 120.00	100.00
8.501	8.508 (0.961)	109	556311			66.45- 126.45	94.20

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
165 Chlorobenzene					CAS #: 108-90-7		
8.866	8.888 (1.002)	112	848268	54.3082	54.308	80.00- 120.00	100.00
8.866	8.888 (1.002)	114	266307			2.06- 62.06	31.39
8.866	8.888 (1.002)	77	485610			26.47- 86.47	57.25
167 Ethyl Benzene					CAS #: 100-41-4		
8.916	8.931 (1.008)	106	438343	57.6223	57.622	80.00- 120.00	100.00
8.916	8.931 (1.008)	91	1389617			289.94- 349.94	317.02
169 m,p-Xylene					CAS #: 108-38-3		
9.009	9.031 (1.019)	106	545990	57.8082	57.808	80.00- 120.00	100.00
9.009	9.031 (1.019)	91	1095510			167.83- 227.83	200.65
171 o-Xylene					CAS #: 95-47-6		
9.346	9.375 (1.057)	106	517886	59.0972	59.097	80.00- 120.00	100.00
9.346	9.375 (1.057)	91	1089495			181.11- 241.11	210.37
172 Styrene					CAS #: 100-42-5		
9.367	9.396 (1.059)	104	906695	60.6571	60.657	80.00- 120.00	100.00
9.360	9.389 (1.058)	78	429885			17.79- 77.79	47.41
174 Bromoform					CAS #: 75-25-2		
9.568	9.597 (1.082)	173	694330	53.9787	53.979	80.00- 120.00	100.00
9.568	9.597 (1.082)	171	360629			21.45- 81.45	51.94
175 Cumene					CAS #: 98-82-8		
9.625	9.661 (1.088)	105	1608085	57.4448	57.445	80.00- 120.00	100.00
9.625	9.661 (1.088)	120	427403			0.00- 57.47	26.58
9.625	9.661 (1.088)	51	141653			0.00- 38.62	8.81
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.940	9.976 (1.124)	83	874940	59.3940	59.394	80.00- 120.00	100.00
9.940	9.976 (1.124)	85	567221			34.77- 94.77	64.83
182 Propylbenzene					CAS #: 103-65-1		
9.969	10.005 (1.127)	91	2005931	59.6883	59.688	80.00- 120.00	100.00
9.969	10.005 (1.127)	120	457708			0.00- 53.65	22.82
9.969	10.005 (1.127)	105	69271			0.00- 33.57	3.45
188 4-Ethyltoluene					CAS #: 622-96-8		
10.062	10.098 (1.138)	120	483854	54.3648	54.365	80.00- 120.00	100.00(H)
10.062	10.098 (1.138)	105	1564470			292.89- 352.89	323.34
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.112	10.155 (1.143)	120	744823	63.6955	63.696	80.00- 120.00	100.00
10.112	10.148 (1.143)	105	1602552			175.25- 235.25	215.16

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.435	10.478 (1.180)	120	604765	57.6095	57.610	80.00- 120.00	100.00
10.435	10.478 (1.180)	105	1309992			183.76- 243.76	216.61
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.721	10.771 (1.212)	146	960073	56.8561	56.856	80.00- 120.00	100.00(H)
10.721	10.771 (1.212)	148	615882			33.69- 93.69	64.15
10.721	10.771 (1.212)	111	377408			8.12- 68.12	39.31
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.800	10.850 (1.221)	146	970756	58.1067	58.107	80.00- 120.00	100.00
10.800	10.850 (1.221)	148	621818			33.86- 93.86	64.06
10.800	10.850 (1.221)	111	367493			6.71- 66.71	37.86
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.915	10.965 (1.234)	91	1285976	64.7342	64.734	80.00- 120.00	100.00
10.915	10.965 (1.234)	126	279775			0.00- 51.95	21.76
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.129	11.180 (1.258)	146	905575	56.6176	56.618	80.00- 120.00	100.00
11.129	11.180 (1.258)	148	584824			33.90- 93.90	64.58
11.129	11.180 (1.258)	111	362429			8.86- 68.86	40.02
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.533	12.605 (1.417)	180	730889	52.6100	52.610	80.00- 120.00	100.00
12.533	12.605 (1.417)	182	688529			65.21- 125.21	94.20
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.619	12.684 (1.427)	225	620979	52.0558	52.056	80.00- 120.00	100.00
12.619	12.684 (1.427)	223	390459			33.22- 93.22	62.88
228 Naphthalene					CAS #: 91-20-3		
12.806	12.877 (1.448)	128	82556	6.22160	6.222	0.00- 30.00	100.00
12.798	12.877 (1.447)	127	11066			0.00- 30.00	13.40

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
H - Operator selected an alternate compound hit.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17100203.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /var/chem/msd17.i/02oct15.b/175q0921c.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 02-OCT-2015
Calibration Time: 09:19
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	74352	44611	104093	75549	1.61
123 1,4-Difluorobenze	308060	184836	431284	314903	2.22
163 Chlorobenzene-d5	281339	168803	393875	278470	-1.02

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.52	0.00
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.84	-0.16

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/02oct15.b/17100203.d

Date : 02-OCT-2015 09:54

Client ID: LCS

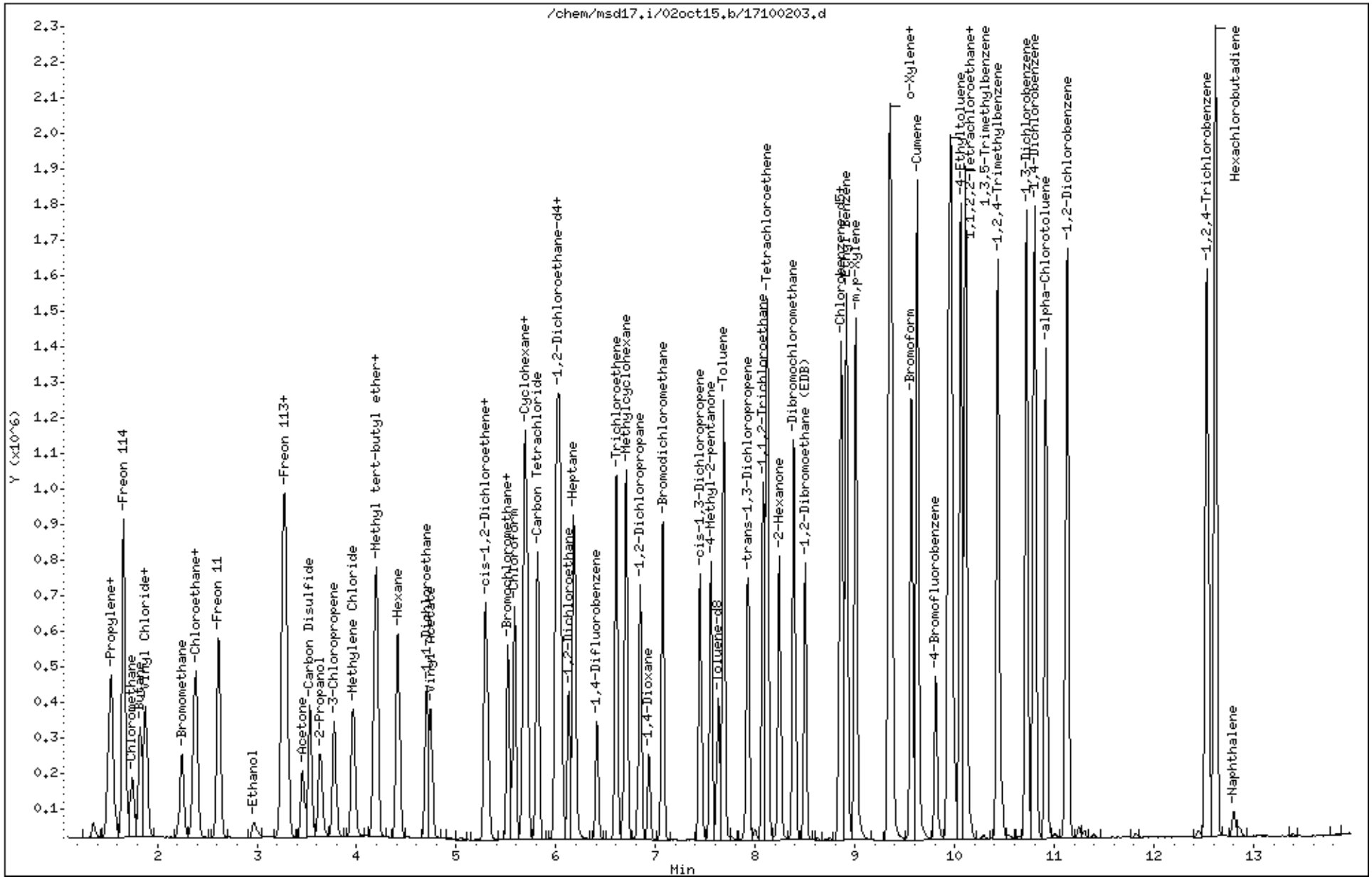
Sample Info: 50ml #2736-265

Column phase: RTX-624

Instrument: msd17.i

Operator: cb

Column diameter: 0.25



eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1509511-10AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17100204**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/2/15 10:16 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	102	70-130
1,1-Dichloroethene	96	70-130
Methylene Chloride	101	70-130
trans-1,2-Dichloroethene	88	70-130
cis-1,2-Dichloroethene	110	70-130
Chloroform	99	70-130
Benzene	106	70-130
1,2-Dichloroethane	104	70-130
Trichloroethene	100	70-130
Toluene	106	70-130
1,1,2-Trichloroethane	104	70-130
Tetrachloroethene	98	70-130
Ethyl Benzene	108	70-130
m,p-Xylene	112	70-130
o-Xylene	115	70-130
1,2,4-Trimethylbenzene	113	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	104	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	96	70-130

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 02oct15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCSD Client Smp ID: LCSD
Level: LOW Operator: cb
Data Type: MS DATA SampleType: LCSD
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: AT12.sub
Method File: /var/chem/msd17.i/02oct15.b/175q0921c.m
Misc Info: 50ppbv (200ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9 Propylene	50.000	48.854	97.71	70-130
11 Freon 12	50.000	51.949	103.90	70-130
15 Freon 114	50.000	53.046	106.09	70-130
17 Chloromethane	50.000	49.025	98.05	70-130
23 Butane	50.000	48.568	97.14	70-130
25 Vinyl Chloride	50.000	51.008	102.02	70-130
26 1,3-Butadiene	50.000	48.458	96.92	70-130
29 Bromomethane	50.000	54.226	108.45	70-130
30 Chloroethane	50.000	52.484	104.97	70-130
31 Isopentane	50.000	48.571	97.14	70-130
35 Freon 11	50.000	51.629	103.26	70-130
42 Ethanol	50.000	51.738	103.48	70-130
49 Freon 113	50.000	47.796	95.59	70-130
50 1,1-Dichloroethene	50.000	48.085	96.17	70-130
52 Acetone	50.000	46.598	93.20	70-130
56 Carbon Disulfide	50.000	43.682	87.36	70-130
57 2-Propanol	50.000	53.553	107.11	70-130
58 3-Chloropropene	50.000	44.612	89.22	70-130
66 Methylene Chloride	50.000	50.621	101.24	70-130
72 Methyl tert-butyl	50.000	46.342	92.68	70-130
73 trans-1,2-Dichloro	50.000	44.005	88.01	70-130
78 Hexane	50.000	48.427	96.85	70-130
82 1,1-Dichloroethane	50.000	50.370	100.74	70-130
86 Vinyl Acetate	50.000	51.218	102.44	70-130
91 cis-1,2-Dichloroet	50.000	54.969	109.94	70-130
92 2-Butanone	50.000	50.732	101.46	70-130
99 Tetrahydrofuran	50.000	46.193	92.39	70-130
100 Chloroform	50.000	49.409	98.82	70-130
103 1,1,1-Trichloroeth	50.000	49.374	98.75	70-130
106 Carbon Tetrachlori	50.000	49.937	99.87	70-130
102 Cyclohexane	50.000	49.079	98.16	70-130
113 2,2,4-Trimethylpen	50.000	51.250	102.50	70-130
116 Benzene	50.000	53.125	106.25	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	50.000	51.776	103.55	70-130
121 Heptane	50.000	54.026	108.05	70-130
125 Trichloroethene	50.000	50.266	100.53	70-130
127 Methylcyclohexane	50.000	50.335	100.67	70-130
132 1,2-Dichloropropan	50.000	54.969	109.94	70-130
136 1,4-Dioxane	50.000	56.509	113.02	70-130
138 Bromodichlorometha	50.000	54.726	109.45	70-130
144 cis-1,3-Dichloropr	50.000	48.905	97.81	70-130
145 4-Methyl-2-pentano	50.000	61.693	123.39	70-130
147 Toluene	50.000	53.226	106.45	70-130
150 trans-1,3-Dichloro	50.000	52.127	104.25	70-130
155 1,1,2-Trichloroeth	50.000	52.267	104.53	70-130
156 Tetrachloroethene	50.000	48.965	97.93	70-130
158 2-Hexanone	50.000	64.644	129.29	70-130
160 Dibromochlorometha	50.000	50.783	101.57	70-130
161 1,2-Dibromoethane	50.000	52.857	105.71	70-130
165 Chlorobenzene	50.000	52.587	105.17	70-130
167 Ethyl Benzene	50.000	54.007	108.01	70-130
169 m,p-Xylene	50.000	55.825	111.65	70-130
171 o-Xylene	50.000	57.479	114.96	70-130
172 Styrene	50.000	58.365	116.73	70-130
174 Bromoform	50.000	52.219	104.44	70-130
175 Cumene	50.000	55.850	111.70	70-130
181 1,1,2,2-Tetrachlor	50.000	57.018	114.04	70-130
182 Propylbenzene	50.000	57.468	114.94	70-130
188 4-Ethyltoluene	50.000	54.856	109.71	70-130
190 1,3,5-Trimethylben	50.000	60.203	120.41	70-130
196 1,2,4-Trimethylben	50.000	56.484	112.97	70-130
208 1,3-Dichlorobenzen	50.000	55.395	110.79	70-130
209 1,4-Dichlorobenzen	50.000	56.393	112.79	70-130
212 alpha-Chlorotoluen	50.000	62.669	125.34	70-130
214 1,2-Dichlorobenzen	50.000	55.852	111.70	70-130
226 1,2,4-Trichloroben	50.000	54.804	109.61	70-130
227 Hexachlorobutadien	50.000	53.291	106.58	70-130
228 Naphthalene	5.000	7.064	141.28*	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.152	100.61	70-130
$ 146 Toluene-d8	25.000	25.962	103.85	70-130
$ 177 4-Bromofluorobenze	25.000	24.063	96.25	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/02oct15.b/17100204.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 02-OCT-2015 10:16
Operator : cb Inst ID: msd17.i
Smp Info : 50ml #2736-265
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /var/chem/msd17.i/02oct15.b/175q0921c.m
Meth Date : 02-Oct-2015 10:33 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 16:22 Cal File: 17092416.d
Als bottle: 14 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.521	5.521 (1.000)	130	81514	25.0000		80.00- 120.00	100.00
5.521	5.521 (1.000)	128	63416			46.54- 106.54	77.80
5.521	5.521 (1.000)	49	92681			83.83- 143.83	113.70
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.409	6.409 (1.000)	114	315626	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	49125			0.00- 44.86	15.56
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.859	8.859 (1.000)	117	287147	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	154052			23.93- 83.93	53.65
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.058	6.058 (1.097)	65	110479	25.1523	25.152	80.00- 120.00	100.00
6.058	6.058 (1.097)	67	59574			25.51- 85.51	53.92

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.190)	98	337849	25.9618	25.962	80.00- 120.00	100.00
7.627	7.627 (1.190)	70	35245			0.00- 40.39	10.43
7.627	7.627 (1.190)	100	214943			33.97- 93.97	63.62
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.847	9.847 (1.112)	174	176421	24.0634	24.063	80.00- 120.00	100.00
9.847	9.847 (1.112)	95	198050			79.64- 139.64	112.26
9.847	9.847 (1.112)	176	171284			65.80- 125.80	97.09
9 Propylene					CAS #: 115-07-1		
1.509	1.510 (0.273)	41	158003	48.8538	48.854	80.00- 120.00	100.00
1.509	1.510 (0.273)	42	105786			37.10- 97.10	66.95
1.509	1.510 (0.273)	39	118344			44.98- 104.98	74.90
11 Freon 12					CAS #: 75-71-8		
1.538	1.545 (0.279)	85	681550	51.9488	51.949	80.00- 120.00	100.00
1.538	1.545 (0.279)	87	222202			2.33- 62.33	32.60
15 Freon 114					CAS #: 76-14-2		
1.660	1.667 (0.301)	135	505167	53.0463	53.046	80.00- 120.00	100.00
1.660	1.667 (0.301)	137	160735			2.02- 62.02	31.82
17 Chloromethane					CAS #: 74-87-3		
1.746	1.753 (0.316)	50	225058	49.0247	49.025	80.00- 120.00	100.00
1.746	1.753 (0.316)	52	79823			2.35- 62.35	35.47
23 Butane					CAS #: 106-97-8		
1.825	1.825 (0.330)	58	48899	48.5675	48.568	80.00- 120.00	100.00
1.825	1.825 (0.330)	43	330704			657.81- 717.81	676.30
25 Vinyl Chloride					CAS #: 75-01-4		
1.860	1.861 (0.337)	62	264655	51.0076	51.008	80.00- 120.00	100.00
1.860	1.861 (0.337)	64	85758			2.69- 62.69	32.40
26 1,3-Butadiene					CAS #: 106-99-0		
1.889	1.889 (0.342)	54	174445	48.4579	48.458	80.00- 120.00	100.00
1.889	1.889 (0.342)	39	165606			63.95- 123.95	94.93
29 Bromomethane					CAS #: 74-83-9		
2.247	2.247 (0.407)	94	249208	54.2264	54.226	80.00- 120.00	100.00
2.247	2.247 (0.407)	96	232842			63.69- 123.69	93.43
30 Chloroethane					CAS #: 75-00-3		
2.362	2.362 (0.428)	64	138045	52.4840	52.484	80.00- 120.00	100.00
2.362	2.362 (0.428)	66	44675			1.86- 61.86	32.36

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.362	2.369 (0.428)	49	35374			0.00- 55.51	25.62
31 Isopentane					CAS #: 78-78-4		
2.383	2.383 (0.432)	43	247810	48.5712	48.571	80.00- 120.00	100.00
2.383	2.383 (0.432)	57	186043			44.35- 104.35	75.07
35 Freon 11					CAS #: 75-69-4		
2.612	2.620 (0.473)	101	697472	51.6286	51.629	80.00- 120.00	100.00
2.620	2.620 (0.475)	103	447327			35.20- 95.20	64.14
42 Ethanol					CAS #: 64-17-5		
2.971	2.971 (0.538)	45	93586	51.7386	51.738	80.00- 120.00	100.00
2.978	2.978 (0.539)	43	19866			0.00- 50.36	21.23
2.971	2.971 (0.538)	46	34337			10.31- 70.31	36.69
49 Freon 113					CAS #: 76-13-1		
3.264	3.265 (0.591)	151	460047	47.7956	47.796	80.00- 120.00	100.00
3.264	3.265 (0.591)	153	295525			33.72- 93.72	64.24
3.264	3.265 (0.591)	101	592944			95.23- 155.23	128.89
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.300	3.300 (0.598)	98	170628	48.0852	48.085	80.00- 120.00	100.00
3.300	3.300 (0.598)	96	265238			130.14- 190.14	155.45
3.293	3.300 (0.596)	61	421999			218.16- 278.16	247.32
52 Acetone					CAS #: 67-64-1		
3.458	3.465 (0.626)	58	114238	46.5984	46.598	80.00- 120.00	100.00
3.458	3.458 (0.626)	43	353053			266.49- 326.49	309.05
56 Carbon Disulfide					CAS #: 75-15-0		
3.529	3.530 (0.639)	76	715799	43.6819	43.682	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.637	3.637 (0.659)	45	407269	53.5530	53.553	80.00- 120.00	100.00
3.637	3.637 (0.659)	43	92035			0.00- 50.02	22.60
3.637	3.637 (0.659)	59	19314			0.00- 34.32	4.74
58 3-Chloropropene					CAS #: 107-05-1		
3.780	3.780 (0.685)	76	117859	44.6120	44.612	80.00- 120.00	100.00
3.773	3.780 (0.683)	41	264590			185.01- 245.01	224.50
66 Methylene Chloride					CAS #: 75-09-2		
3.966	3.967 (0.718)	49	290899	50.6215	50.621	80.00- 120.00	100.00
3.966	3.967 (0.718)	84	249866			59.02- 119.02	85.89
3.966	3.967 (0.718)	51	92318			1.78- 61.78	31.74

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.181	4.181 (0.757)	73	689818	46.3423	46.342	80.00- 120.00	100.00
4.181	4.181 (0.757)	57	157135			0.00- 51.46	22.78
4.181	4.181 (0.757)	41	145335			0.00- 49.34	21.07
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.210	4.203 (0.763)	98	155581	44.0052	44.005	80.00- 120.00	100.00
4.203	4.203 (0.761)	61	332603			184.16- 244.16	213.78
4.203	4.203 (0.761)	96	247619			127.84- 187.84	159.16
78 Hexane					CAS #: 110-54-3		
4.418	4.418 (0.800)	57	389414	48.4274	48.427	80.00- 120.00	100.00
4.410	4.418 (0.799)	43	223842			27.64- 87.64	57.48
4.418	4.418 (0.800)	86	65308			0.00- 46.92	16.77
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.704	4.704 (0.852)	63	481785	50.3697	50.370	80.00- 120.00	100.00
4.704	4.704 (0.852)	65	157484			2.04- 62.04	32.69
86 Vinyl Acetate					CAS #: 108-05-4		
4.747	4.747 (0.860)	86	74751	51.2186	51.218	80.00- 120.00	100.00
4.747	4.747 (0.860)	43	618768			891.41- 951.41	827.77
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.291	5.285 (0.958)	98	209583	54.9689	54.969	80.00- 120.00	100.00
5.284	5.285 (0.957)	96	319417			124.38- 184.38	152.41
5.284	5.285 (0.957)	61	390709			162.07- 222.07	186.42
92 2-Butanone					CAS #: 78-93-3		
5.320	5.320 (0.964)	72	136755	50.7320	50.732	80.00- 120.00	100.00
5.320	5.320 (0.964)	43	459556			306.33- 366.33	336.04
5.320	5.313 (0.964)	57	39835			0.00- 59.26	29.13
99 Tetrahydrofuran					CAS #: 109-99-9		
5.521	5.521 (1.000)	42	242564	46.1930	46.193	80.00- 120.00	100.00
5.521	5.521 (1.000)	71	114799			17.72- 77.72	47.33
5.521	5.521 (1.000)	72	126087			20.99- 80.99	51.98
100 Chloroform					CAS #: 67-66-3		
5.585	5.585 (1.012)	83	579227	49.4089	49.409	80.00- 120.00	100.00
5.585	5.585 (1.012)	85	372985			34.67- 94.67	64.39
102 Cyclohexane					CAS #: 110-82-7		
5.685	5.686 (1.030)	84	357278	49.0788	49.079	80.00- 120.00	100.00
5.678	5.678 (1.029)	56	382673			77.09- 137.09	107.11
5.678	5.678 (1.029)	41	199036			25.87- 85.87	55.71

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.700	5.707 (1.032)	97	573796	49.3738	49.374	80.00- 120.00	100.00
5.700	5.707 (1.032)	99	366737			34.33- 94.33	63.91
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.822	5.815 (1.054)	119	579848	49.9369	49.937	80.00- 120.00	100.00
5.814	5.815 (1.053)	117	603747			74.90- 134.90	104.12
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.008	6.008 (1.088)	57	1260045	51.2501	51.250	80.00- 120.00	100.00
6.008	6.008 (1.088)	56	416951			1.80- 61.80	33.09
6.008	6.008 (1.088)	41	329463			0.00- 55.83	26.15
116 Benzene					CAS #: 71-43-2		
6.036	6.037 (0.942)	78	849416	53.1252	53.125	80.00- 120.00	100.00
6.036	6.037 (0.942)	77	208207			0.00- 54.08	24.51
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.130	6.130 (0.956)	62	361625	51.7755	51.776	80.00- 120.00	100.00
6.130	6.130 (0.956)	64	119580			2.16- 62.16	33.07
121 Heptane					CAS #: 142-82-5		
6.180	6.180 (0.964)	71	298982	54.0263	54.026	80.00- 120.00	100.00
6.180	6.180 (0.964)	43	411485			110.94- 170.94	137.63
6.180	6.180 (0.964)	57	257063			53.72- 113.72	85.98
125 Trichloroethene					CAS #: 79-01-6		
6.602	6.603 (1.030)	95	379220	50.2660	50.266	80.00- 120.00	100.00
6.602	6.603 (1.030)	130	387873			74.97- 134.97	102.28
6.602	6.603 (1.030)	97	245533			35.33- 95.33	64.75
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.214)	83	505661	50.3351	50.335	80.00- 120.00	100.00
6.703	6.703 (1.214)	98	233350			16.41- 76.41	46.15
6.703	6.703 (1.214)	55	365105			40.41- 100.41	72.20
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.846	6.846 (1.068)	63	314628	54.9687	54.969	80.00- 120.00	100.00
6.846	6.846 (1.068)	62	215658			38.78- 98.78	68.54
6.846	6.839 (1.068)	41	154916			20.16- 80.16	49.24
136 1,4-Dioxane					CAS #: 123-91-1		
6.932	6.932 (1.082)	88	195707	56.5089	56.509	80.00- 120.00	100.00
6.932	6.932 (1.082)	58	122475			31.02- 91.02	62.58
6.932	6.932 (1.082)	57	41650			0.00- 51.33	21.28

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
138 Bromodichloromethane					CAS #: 75-27-4		
7.068	7.068 (1.103)	83	648058	54.7257	54.726	80.00- 120.00	100.00
7.068	7.068 (1.103)	85	413897			34.16- 94.16	63.87
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.448	7.448 (1.162)	75	486474	48.9050	48.905	80.00- 120.00	100.00
7.448	7.448 (1.162)	77	152793			1.57- 61.57	31.41
7.448	7.448 (1.162)	39	211931			13.98- 73.98	43.56
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.555	7.555 (1.179)	58	237554	61.6935	61.693	80.00- 120.00	100.00
7.555	7.555 (1.179)	43	559713			205.93- 265.93	235.62
7.555	7.555 (1.179)	85	109877			18.04- 78.04	46.25
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.199)	91	1067189	53.2262	53.226	80.00- 120.00	100.00
7.684	7.684 (1.199)	92	601965			27.24- 87.24	56.41
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.927	7.928 (0.895)	75	464922	52.1271	52.127	80.00- 120.00	100.00
7.927	7.928 (0.895)	77	145648			1.57- 61.57	31.33
7.927	7.928 (0.895)	39	197694			13.98- 73.98	42.52
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.078	8.078 (0.912)	97	367774	52.2673	52.267	80.00- 120.00	100.00
8.078	8.078 (0.912)	99	223073			31.05- 91.05	60.65
8.078	8.078 (0.912)	83	330485			58.29- 118.29	89.86
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.917)	166	505667	48.9653	48.965	80.00- 120.00	100.00
8.121	8.121 (0.917)	129	370061			42.46- 102.46	73.18
8.121	8.121 (0.917)	131	361260			40.24- 100.24	71.44
158 2-Hexanone					CAS #: 591-78-6		
8.243	8.243 (0.930)	58	320992	64.6441	64.644	80.00- 120.00	100.00
8.243	8.243 (0.930)	43	550907			205.93- 265.93	171.63
8.243	8.243 (0.930)	100	70745			11.40- 71.40	22.04
160 Dibromochloromethane					CAS #: 124-48-1		
8.393	8.393 (0.947)	129	667098	50.7830	50.783	80.00- 120.00	100.00
8.393	8.393 (0.947)	127	516244			47.28- 107.28	77.39
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.508	8.508 (0.960)	107	588002	52.8569	52.857	80.00- 120.00	100.00
8.508	8.508 (0.960)	109	547217			66.45- 126.45	93.06

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
165 Chlorobenzene					CAS #: 108-90-7		
8.887	8.888 (1.003)	112	846980	52.5871	52.587	80.00- 120.00	100.00
8.887	8.888 (1.003)	114	268349			2.06- 62.06	31.68
8.887	8.888 (1.003)	77	487030			26.47- 86.47	57.50
167 Ethyl Benzene					CAS #: 100-41-4		
8.930	8.931 (1.008)	106	423644	54.0072	54.007	80.00- 120.00	100.00
8.930	8.931 (1.008)	91	1369996			289.94- 349.94	323.38
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	543690	55.8252	55.825	80.00- 120.00	100.00
9.031	9.031 (1.019)	91	1095507			167.83- 227.83	201.49
171 o-Xylene					CAS #: 95-47-6		
9.374	9.375 (1.058)	106	519398	57.4787	57.479	80.00- 120.00	100.00
9.374	9.375 (1.058)	91	1094379			181.11- 241.11	210.70
172 Styrene					CAS #: 100-42-5		
9.396	9.396 (1.061)	104	899614	58.3648	58.365	80.00- 120.00	100.00
9.389	9.389 (1.060)	78	429975			17.79- 77.79	47.80
174 Bromoform					CAS #: 75-25-2		
9.596	9.597 (1.083)	173	692629	52.2194	52.219	80.00- 120.00	100.00
9.596	9.597 (1.083)	171	352828			21.45- 81.45	50.94
175 Cumene					CAS #: 98-82-8		
9.661	9.661 (1.091)	105	1612162	55.8502	55.850	80.00- 120.00	100.00
9.661	9.661 (1.091)	120	431374			0.00- 57.47	26.76
9.661	9.661 (1.091)	51	141426			0.00- 38.62	8.77
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.976	9.976 (1.126)	83	866105	57.0176	57.018	80.00- 120.00	100.00
9.976	9.976 (1.126)	85	561671			34.77- 94.77	64.85
182 Propylbenzene					CAS #: 103-65-1		
10.005	10.005 (1.129)	91	1991480	57.4676	57.468	80.00- 120.00	100.00
10.005	10.005 (1.129)	120	448739			0.00- 53.65	22.53
10.005	10.005 (1.129)	105	68022			0.00- 33.57	3.42
188 4-Ethyltoluene					CAS #: 622-96-8		
10.098	10.098 (1.140)	120	503442	54.8563	54.856	80.00- 120.00	100.00
10.098	10.098 (1.140)	105	1601250			292.89- 352.89	318.06
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.155	10.155 (1.146)	120	725925	60.2035	60.203	80.00- 120.00	100.00
10.148	10.148 (1.146)	105	1552084			175.25- 235.25	213.81

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.478	10.478 (1.183)	120	611422	56.4837	56.484	80.00- 120.00	100.00
10.478	10.478 (1.183)	105	1336636			183.76- 243.76	218.61
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.771	10.771 (1.216)	146	964556	55.3955	55.395	80.00- 120.00	100.00
10.771	10.771 (1.216)	148	615122			33.69- 93.69	63.77
10.771	10.771 (1.216)	111	379947			8.12- 68.12	39.39
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.850	10.850 (1.225)	146	971485	56.3931	56.393	80.00- 120.00	100.00
10.850	10.850 (1.225)	148	620840			33.86- 93.86	63.91
10.850	10.850 (1.225)	111	366504			6.71- 66.71	37.73
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.965	10.965 (1.238)	91	1283749	62.6694	62.669	80.00- 120.00	100.00
10.965	10.965 (1.238)	126	274483			0.00- 51.95	21.38
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.179	11.180 (1.262)	146	921162	55.8518	55.852	80.00- 120.00	100.00
11.179	11.180 (1.262)	148	590061			33.90- 93.90	64.06
11.179	11.180 (1.262)	111	366584			8.86- 68.86	39.80
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.598	12.605 (1.422)	180	785099	54.8044	54.804	80.00- 120.00	100.00
12.598	12.605 (1.422)	182	749924			65.21- 125.21	95.52
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.684	12.684 (1.432)	225	655526	53.2913	53.291	80.00- 120.00	100.00
12.684	12.684 (1.432)	223	408475			33.22- 93.22	62.31
228 Naphthalene					CAS #: 91-20-3		
12.877	12.877 (1.454)	128	96657	7.06416	7.064	0.00- 30.00	100.00(R)
12.877	12.877 (1.454)	127	12419			0.00- 30.00	12.85

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17100204.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /var/chem/msd17.i/02oct15.b/175q0921c.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 02-OCT-2015
Calibration Time: 09:19
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	74352	44611	104093	81514	9.63
123 1,4-Difluorobenze	308060	184836	431284	315626	2.46
163 Chlorobenzene-d5	281339	168803	393875	287147	2.06

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.52	0.00
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/02oct15.b/17100204.d

Date : 02-OCT-2015 10:16

Client ID: LCSD

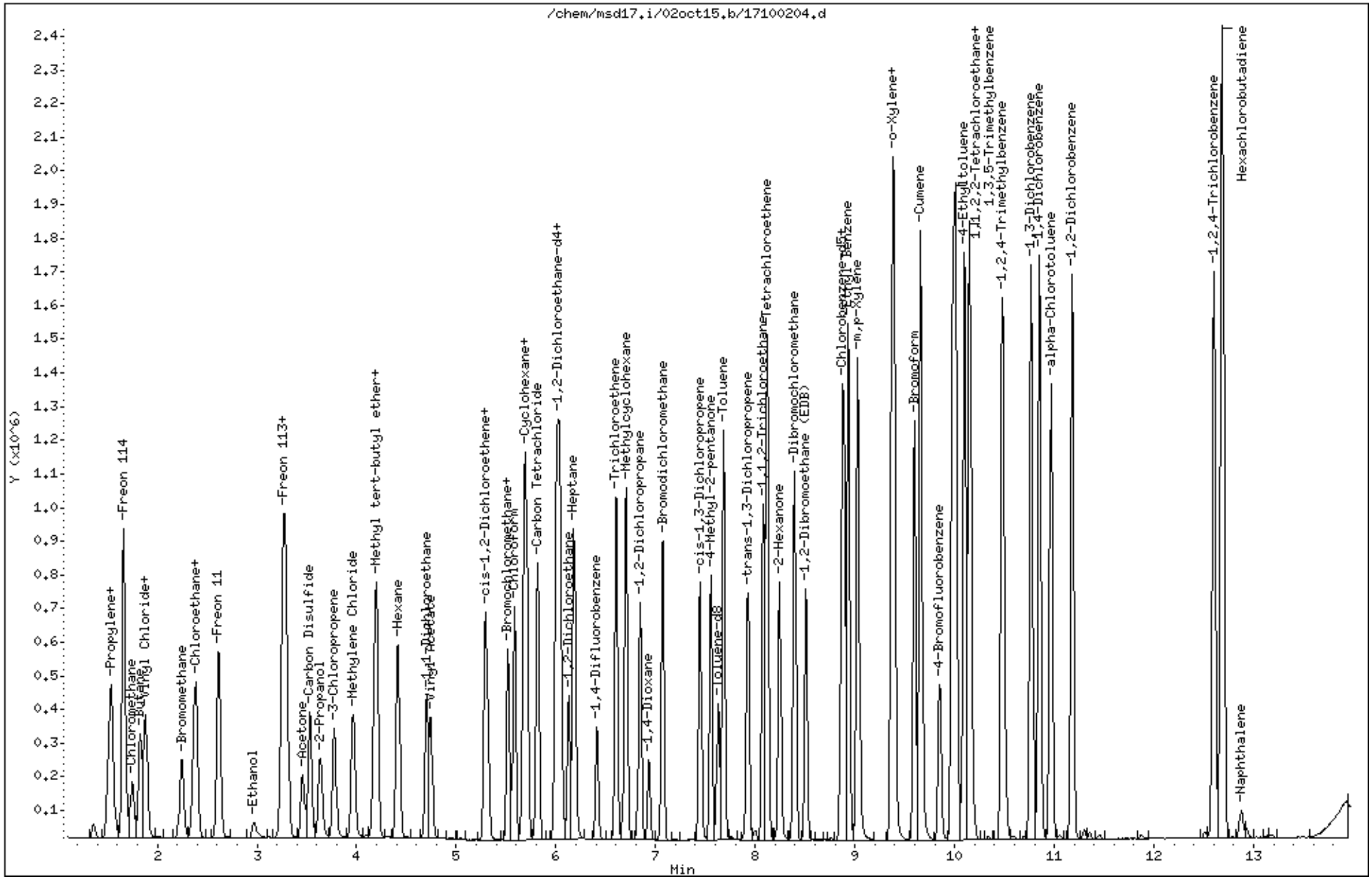
Sample Info: 50ml #2736-265

Column phase: RTX-624

Instrument: msd17.i

Operator: cb

Column diameter: 0.25



MSD17

BFB verification of 176/174 ratio:	(72202/76802) * 100 = 94.01%		
	2736-191	Exp. Date:	11/14/2015
BCM	74,352		
1,4-DFB	308,060		
CB-d5	281,339		

Method TO-15/TO-14			
SOP# 6			
Vacuum:	na		
Please check all standards			
Surrogate#	2736-191	Exp. Date:	11/14/2015
Surrogate#	NA	Exp. Date:	NA

Verified CCV vs ICAL mid-point (-40%): cb

Method: 175Q0921C.m

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	Amount	DF	Verify Load	Loaded By	Date Analyzed	Time Analyzed	Review Init	Comments
√	17100201	BFB Tune Check	2736-191	12	36ng	1.0ml	1.00	cb	cb	10/02/15	0845	cb	
√	17100202	CCV	2737-240A	13	50ppbv(100ppbv)	100ml	1.00	cb	cb	10/02/15	0919	cb	exp. 11/20/15; 0 out.
√	17100203	LCS	2736-265	14	50ppbv(200ppbv)	50ml	1.00	cb	cb	10/02/15	0954	cb	exp 10/30/15 (Naph 9/12/15); 1 out
√	17100204	LCSD	2736-265	14	50ppbv(200ppbv)	50ml	1.00	cb	cb	10/02/15	1016	cb	exp 10/30/15 (Naph 9/12/15); 0 out
√	17100205	CCVsp	2736-262	1	5.0ppbv(20ppbv)	50ml	1.00	cb	cb	10/02/15	1052	cb	exp. 12/22/15. Naph. Only
√	17100206	TPHg Calib	2736-195	6	500ppbv(2500ppbv)	40ml	1.00	cb	cb	10/02/15	1118	cb	exp. 11/7/15
X	17100207	Lab Blank	33555	12	Humid	200ml	1.00	cb	cb	10/02/15	1206	cb	> 1/2 RL
√	17100208	Lab Blank	33555	12	Humid	200ml	1.00	cb	cb	10/02/15	1243	cb	
√	17100209	1509476A-01A	37754	1	5.5 Hg->14.8 psi	200ml	2.46	cb	cb	10/02/15	1326	cb	
√	17100210	1509476A-02A	14525	2	4.9 Hg->15.1 psi	200ml	2.42	cb	cb	10/02/15	1354	cb	
√	17100211	1509476A-03A	34605	3	3.7 Hg->14.9 psi	200ml	2.30	cb	cb	10/02/15	1430	cb	
√	17100212	1509476A-04A	35673	4	5.1 Hg->14.8 psi	200ml	2.42	cb	cb	10/02/15	1453	cb	
√	17100213	1509439-01A	34503	5	0.5 Hg->5 psi	200ml	1.36	cb	cb	10/02/15	1518	gh	
√	17100214	1509439-03A	6L0034	6	0.5 Hg->5 psi	200ml	1.36	gh	cb	10/02/15	1554	gh	
√	17100215	1509439-04A	35265	7	0.5 Hg->5 psi	200ml	1.36	gh	cb	10/02/15	1617	gh	
√	17100216	1509439-04AA	35265	7	0.5 Hg->5 psi	200ml	1.36	gh	cb	10/02/15	1652	gh	
√	17100217	1509439-05A	34329	8	0.0 Hg->5 psi	200ml	1.34	gh	cb	10/02/15	1727	gh	
√	17100218	1509439-06A	12084	9	0.0 Hg->5 psi	200ml	1.34	gh	cb	10/02/15	1750	gh	
√	17100219	1509439-02A	35242	10	0.5 Hg->5 psi	10ml	27.2	gh	cb	10/02/15	1823	gh	dil matrix
√	17100220	System Blank	35555	12	humid	200ml	1.00	gh	gh	10/02/15	1854	gh	
√	17100221	1510015-01A	1L Bag	1	PMG-PREGAC302-093015	150ml	1.33	gh	gh	10/02/15	2145	gh	dil tc
√	17100222	1510015-02A	1L Bag	2	PMG-MIDGAC304-093015	162ml	1.23	gh	gh	10/02/15	2213	gh	loaded 162ml, bag now empty
√	17100223	1509511-01A	31782	3	4.5 Hg->14.5 psi	200ml	2.34	mjs	gh	10/02/15	2245	mjs	
√	17100224	1509511-02A	1L1624	4	5.3 Hg->14.9 psi	200ml	2.44	mjs	gh	10/02/15	2321	mjs	
X	17100225	1509511-03A	34618	5	4.5 Hg->14.7 psi	200ml	2.35	mjs	gh	10/02/15	2344	mjs	did not dup.
√	17100226	1509511-04A	1358	6	4.5 Hg->15.1 psi	200ml	2.38	mjs	gh	10/03/15	0020	mjs	
√	17100227	1509511-05A	1L1901	7	3.9 Hg->15.3 psi	200ml	2.34	mjs	gh	10/03/15	0044	mjs	
X	17100228	1509511-06A	15744	8	3.7 Hg->14.7 psi	100ml	4.56	mjs	gh	10/03/15	0120	mjs	overdilute
√	17100229	1509511-07A	36399	9	4.3 Hg->14.7 psi	200ml	2.33	mjs	gh	10/03/15	0143	mjs	
√	17100230	1509511-06A	15744	8	3.7 Hg->14.7 psi	200ml	2.28	mjs	mjs	10/03/15	0639	mjs	
√	17100231	1509511-03A	34618	5	4.5 Hg->14.7 psi	200ml	2.35	mjs	mjs	10/03/15	0737	mjs	

MB 10/2/15

Eurofins Air Toxics Inc.

Data file : /var/chem/msd17.i/21sep15a.b/17092117.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 21-SEP-2015 19:45
Operator : gh Inst ID: msd17.i
Smp Info : 1.0ml #2736-191; BFB Tune Check
Misc Info : 36ng
Comment :
Method : /var/chem/msd17.i/21sep15a.b/bfb30.m
Meth Date : 21-Sep-2015 20:08 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.847	9.840	0.007	95	133394			100.00- 100.00	100.00
9.847	9.840	0.007	50	22984			8.00- 40.00	17.23
9.847	9.840	0.007	75	65309			30.00- 66.00	48.96
9.847	9.840	0.007	96	8927			5.00- 9.00	6.69
9.847	9.840	0.007	173	1358			0.00- 1.99	1.17
9.847	9.840	0.007	174	116408			50.00- 120.00	87.27
9.847	9.840	0.007	175	8713			4.00- 9.00	7.48
9.847	9.840	0.007	176	111461			93.00- 101.00	95.75
9.847	9.840	0.007	177	7739			5.00- 9.00	6.94

Data File: /var/chem/msd17.i/21sep15a.b/17092117.d

Date : 21-SEP-2015 19:45

Client ID: BFB

Instrument: msd17.i

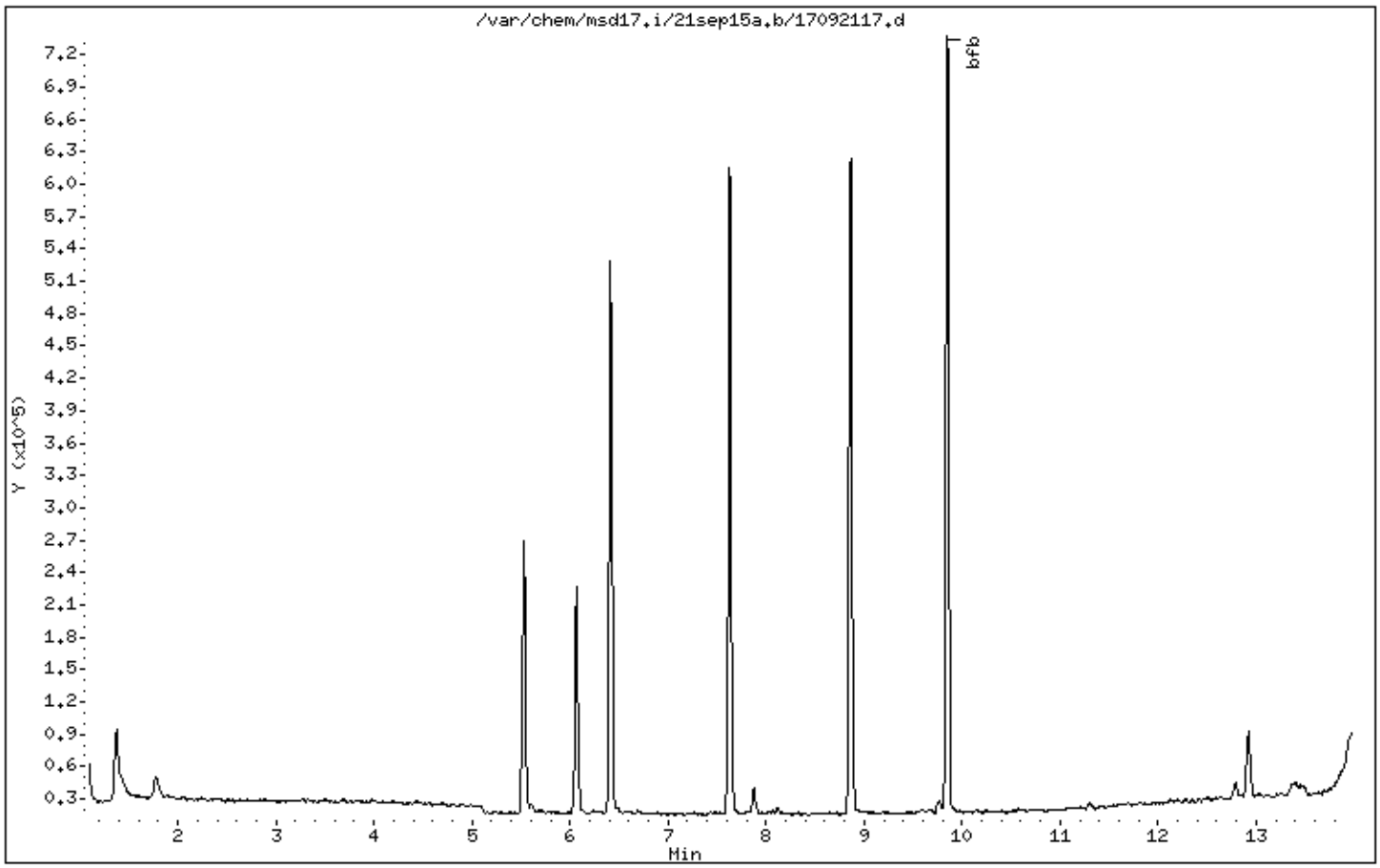
Sample Info: 1.0ml #2736-191; BFB Tune Check

Volume Injected (uL): 1.0

Operator: gh

Column phase:

Column diameter: 2.00



Data File: /var/chem/msd17.i/21sep15a.b/17092117.d

Date : 21-SEP-2015 19:45

Client ID: BFB

Instrument: msd17.i

Sample Info: 1.0ml #2736-191; BFB Tune Check

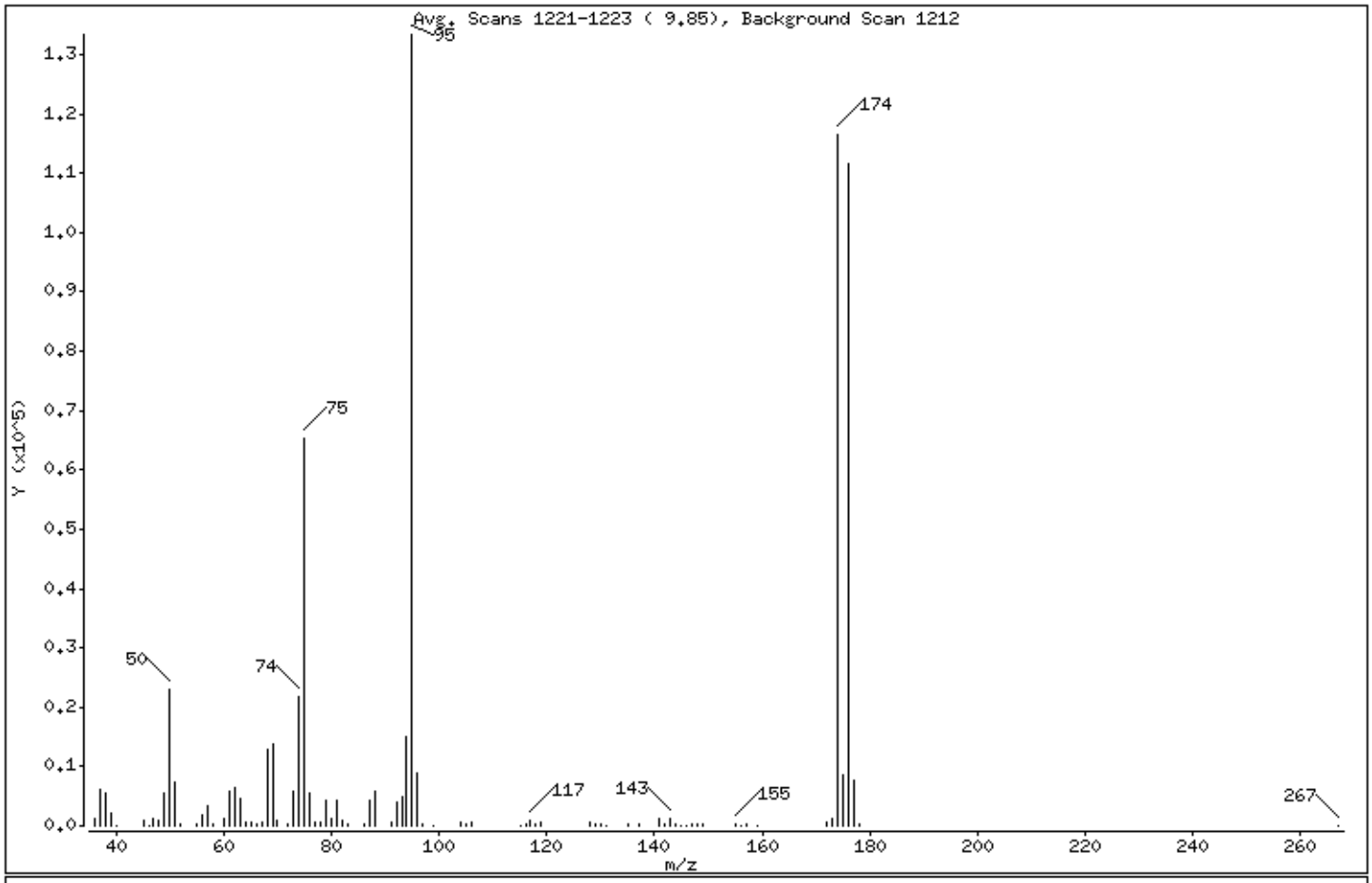
Volume Injected (uL): 1.0

Operator: gh

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	17.23
75	30.00 - 66.00% of mass 95	48.96
96	5.00 - 9.00% of mass 95	6.69
173	Less than 1.99% of mass 174	1.02 (1.17)
174	50.00 - 120.00% of mass 95	87.27
175	4.00 - 9.00% of mass 174	6.53 (7.48)
176	93.00 - 101.00% of mass 174	83.56 (95.75)
177	5.00 - 9.00% of mass 176	5.80 (6.94)

Date : 21-SEP-2015 19:45

Client ID: BFB Instrument: msd17.i

Sample Info: 1.0ml #2736-191; BFB Tune Check

Volume Injected (uL): 1.0 Operator: gh

Column phase: Column diameter: 2.00

Data File: 17092117.d
Spectrum: Avg. Scans 1221-1223 (9.85), Background Scan 1212
Location of Maximum: 95.00
Number of points: 86

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1166	65.00	502	92.00	3901	142.00	184
37.00	6052	66.00	184	93.00	4930	143.00	1288
38.00	5382	67.00	517	94.00	15091	144.00	193
39.00	2013	68.00	12905	95.00	133376	145.00	118
40.00	77	69.00	13645	96.00	8927	146.00	53
45.00	842	70.00	1022	97.00	282	147.00	222
46.00	120	72.00	402	99.00	113	148.00	428
47.00	1147	73.00	5680	104.00	614	149.00	192
48.00	785	74.00	21896	105.00	240	155.00	385
49.00	5384	75.00	65304	106.00	540	156.00	59
50.00	22984	76.00	5657	115.00	55	157.00	225
51.00	7225	77.00	660	116.00	390	159.00	124
52.00	360	78.00	675	117.00	915	172.00	621
55.00	439	79.00	4187	118.00	440	173.00	1358
56.00	1851	80.00	1113	119.00	690	174.00	116408
57.00	3479	81.00	4272	128.00	488	175.00	8713
58.00	220	82.00	925	129.00	175	176.00	111456
60.00	1294	83.00	231	130.00	430	177.00	7739
61.00	5681	86.00	215	131.00	106	178.00	242
62.00	6313	87.00	4320	135.00	336	267.00	60
63.00	4513	88.00	5852	137.00	207		
64.00	550	91.00	480	141.00	1141		

Eurofins Air Toxics Inc.

Data file : /var/chem/msd17.i/24sep15.b/17092401.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 24-SEP-2015 08:06
Operator : cb Inst ID: msd17.i
Smp Info : 1.0ml #2736-191; BFB Tune Check
Misc Info : 36ng
Comment :
Method : /var/chem/msd17.i/24sep15.b/bfb30.m
Meth Date : 24-Sep-2015 08:29 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.847	9.840	0.007	95	109586			100.00- 100.00	100.00
9.847	9.840	0.007	50	19917			8.00- 40.00	18.17
9.847	9.840	0.007	75	52941			30.00- 66.00	48.31
9.847	9.840	0.007	96	7333			5.00- 9.00	6.69
9.847	9.840	0.007	173	1068			0.00- 1.99	1.12
9.847	9.840	0.007	174	95330			50.00- 120.00	86.99
9.847	9.840	0.007	175	7436			4.00- 9.00	7.80
9.847	9.840	0.007	176	90802			93.00- 101.00	95.25
9.847	9.840	0.007	177	6254			5.00- 9.00	6.89

Data File: /var/chem/msd17.i/24sep15.b/17092401.d

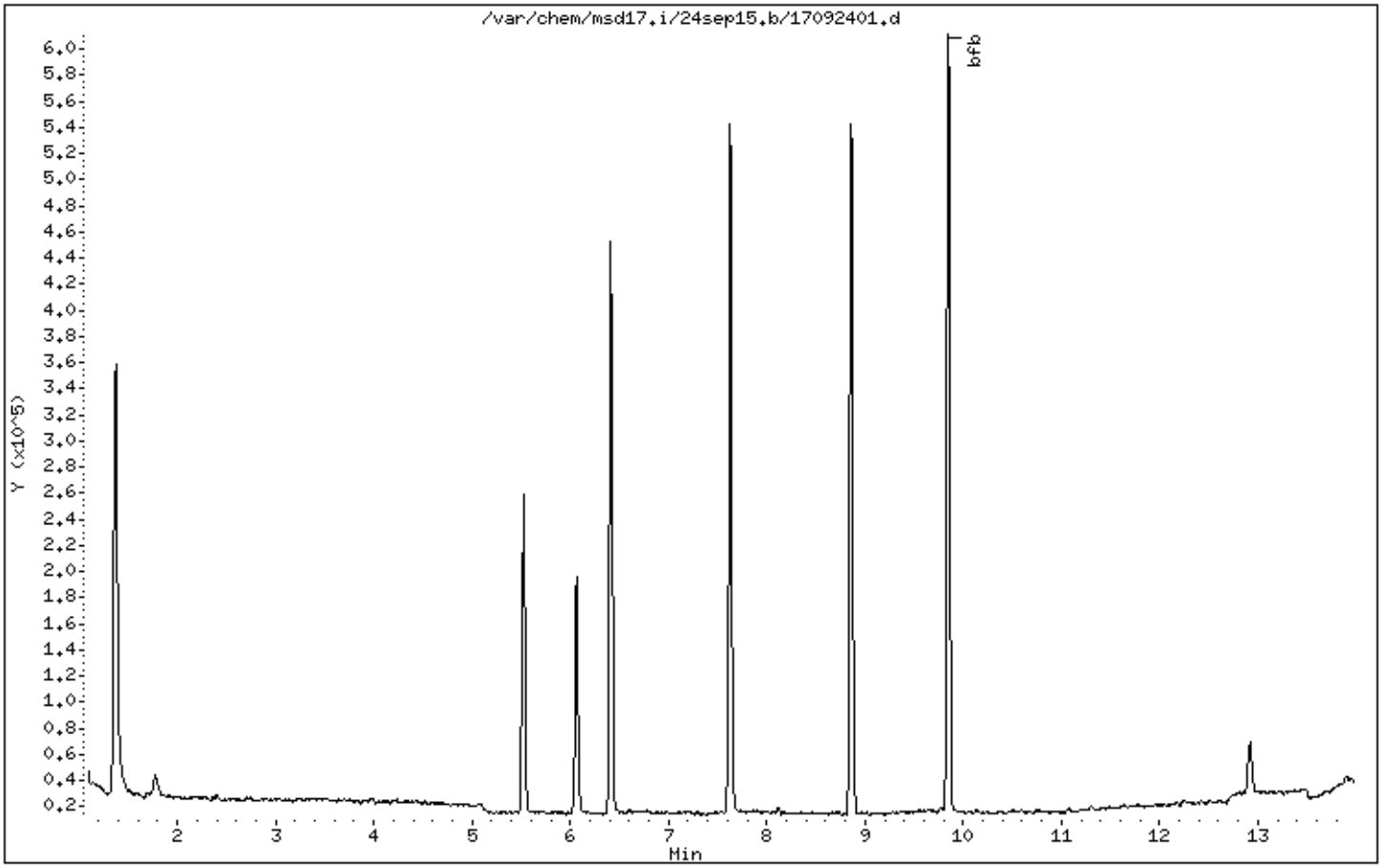
Date : 24-SEP-2015 08:06

Client ID: BFB Instrument: msd17.i

Sample Info: 1.0ml #2736-191; BFB Tune Check

Volume Injected (uL): 1.0 Operator: cb

Column phase: Column diameter: 2.00



Data File: /var/chem/msd17.i/24sep15.b/17092401.d

Date : 24-SEP-2015 08:06

Client ID: BFB

Instrument: msd17.i

Sample Info: 1.0ml #2736-191; BFB Tune Check

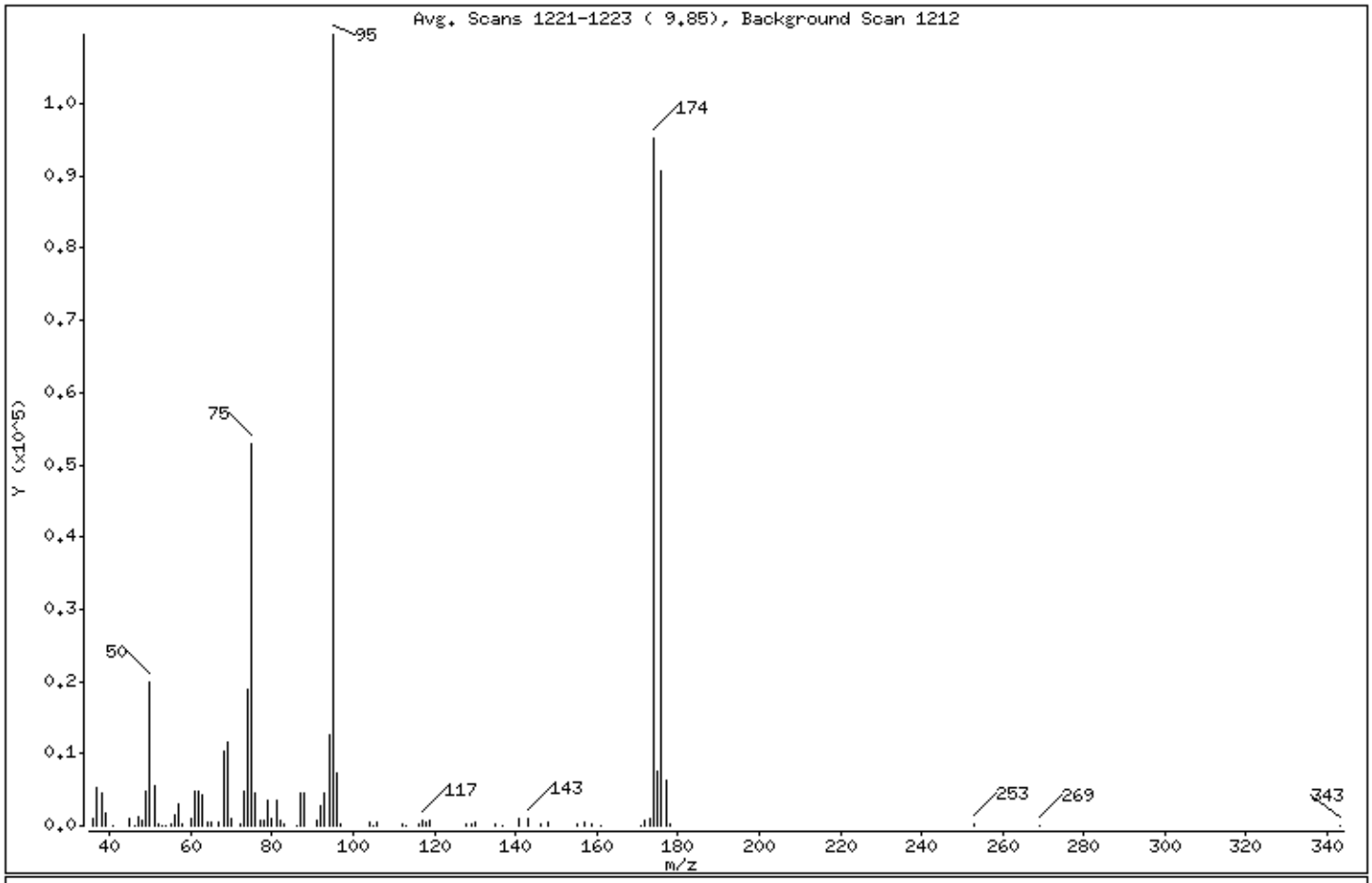
Volume Injected (uL): 1.0

Operator: cb

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	18.17
75	30.00 - 66.00% of mass 95	48.31
96	5.00 - 9.00% of mass 95	6.69
173	Less than 1.99% of mass 174	0.97 (1.12)
174	50.00 - 120.00% of mass 95	86.99
175	4.00 - 9.00% of mass 174	6.79 (7.80)
176	93.00 - 101.00% of mass 174	82.86 (95.25)
177	5.00 - 9.00% of mass 176	5.71 (6.89)

Date : 24-SEP-2015 08:06

Client ID: BFB Instrument: msd17.i

Sample Info: 1.0ml #2736-191; BFB Tune Check

Volume Injected (uL): 1.0 Operator: cb

Column phase: Column diameter: 2.00

Data File: 17092401.d
Spectrum: Avg. Scans 1221-1223 (9.85), Background Scan 1212
Location of Maximum: 95.00
Number of points: 84

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1043	63.00	4291	91.00	641	143.00	1022
37.00	5235	64.00	444	92.00	2886	146.00	207
38.00	4465	65.00	434	93.00	4486	148.00	388
39.00	1650	67.00	390	94.00	12669	155.00	377
41.00	63	68.00	10419	95.00	109584	157.00	388
45.00	1032	69.00	11626	96.00	7333	159.00	134
46.00	58	70.00	951	97.00	217	161.00	124
47.00	1321	72.00	365	104.00	503	171.00	51
48.00	803	73.00	4815	105.00	124	172.00	723
49.00	4716	74.00	18912	106.00	406	173.00	1068
50.00	19912	75.00	52936	112.00	136	174.00	95328
51.00	5661	76.00	4447	113.00	125	175.00	7436
52.00	275	77.00	679	116.00	361	176.00	90800
53.00	63	78.00	652	117.00	765	177.00	6254
54.00	62	79.00	3640	118.00	626	178.00	285
55.00	199	80.00	1096	119.00	633	253.00	164
56.00	1451	81.00	3621	128.00	338	269.00	29
57.00	3014	82.00	785	129.00	163	343.00	84
58.00	214	83.00	129	130.00	482		
60.00	1044	86.00	68	135.00	219		
61.00	4911	87.00	4504	137.00	105		
62.00	4833	88.00	4449	141.00	968		

Eurofins Air Toxics Inc.

Data file : /var/chem/msd17.i/25sep15.b/17092501.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 25-SEP-2015 09:06
Operator : cb Inst ID: msd17.i
Smp Info : 1.0ml #2736-191; BFB Tune Check
Misc Info : 36ng
Comment :
Method : /var/chem/msd17.i/25sep15.b/bfb30.m
Meth Date : 25-Sep-2015 09:29 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.847	9.840	0.007	95	100624			100.00- 100.00	100.00
9.847	9.840	0.007	50	18834			8.00- 40.00	18.72
9.847	9.840	0.007	75	49080			30.00- 66.00	48.78
9.847	9.840	0.007	96	6659			5.00- 9.00	6.62
9.847	9.840	0.007	173	1028			0.00- 1.99	1.18
9.847	9.840	0.007	174	86792			50.00- 120.00	86.25
9.847	9.840	0.007	175	6317			4.00- 9.00	7.28
9.847	9.840	0.007	176	82816			93.00- 101.00	95.42
9.847	9.840	0.007	177	5784			5.00- 9.00	6.98

Data File: /var/chem/msd17.i/25sep15.b/17092501.d

Date : 25-SEP-2015 09:06

Client ID: BFB

Instrument: msd17.i

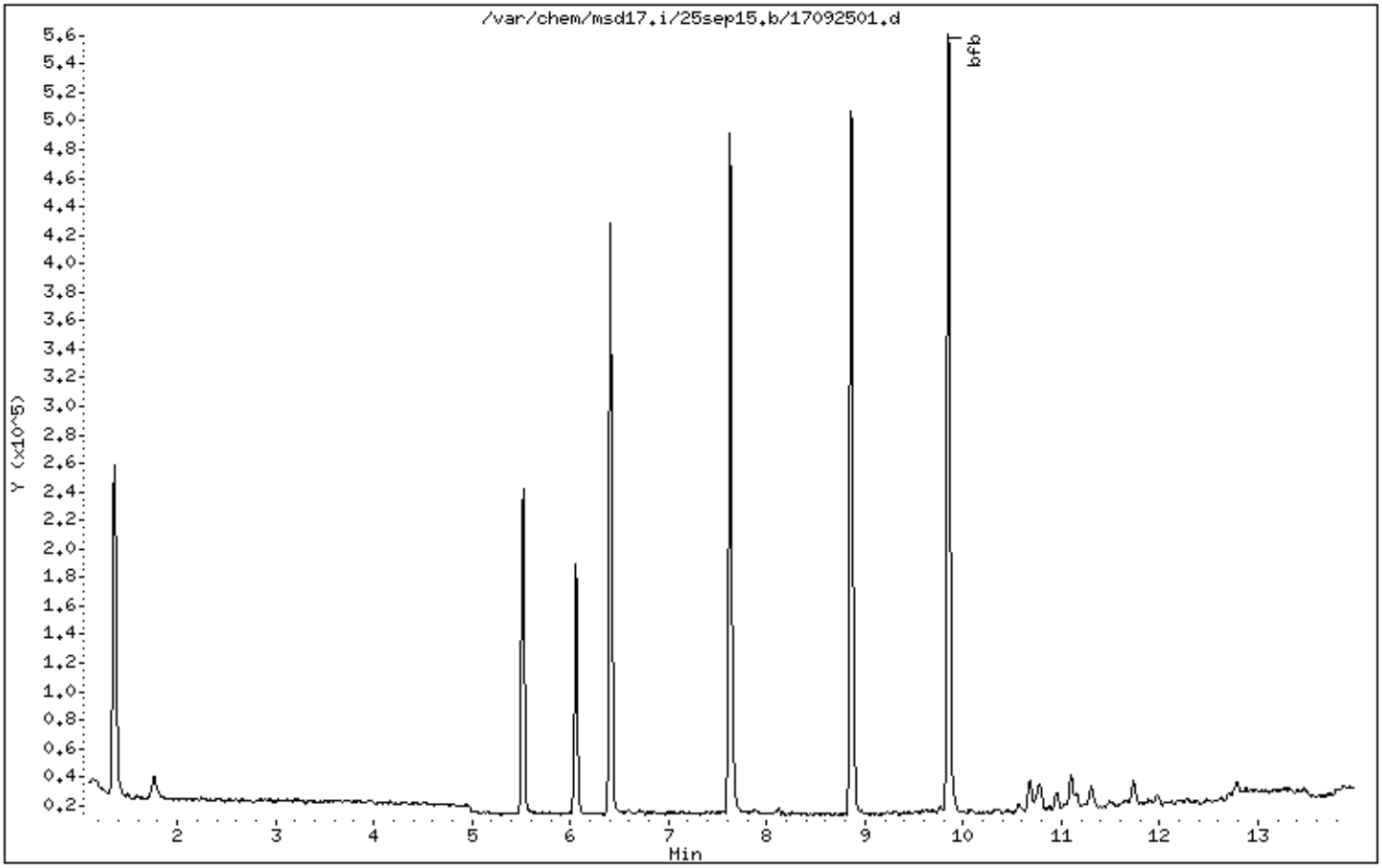
Sample Info: 1.0ml #2736-191; BFB Tune Check

Volume Injected (uL): 1.0

Operator: cb

Column phase:

Column diameter: 2.00



Data File: /var/chem/msd17.i/25sep15.b/17092501.d

Date : 25-SEP-2015 09:06

Client ID: BFB

Instrument: msd17.i

Sample Info: 1.0ml #2736-191; BFB Tune Check

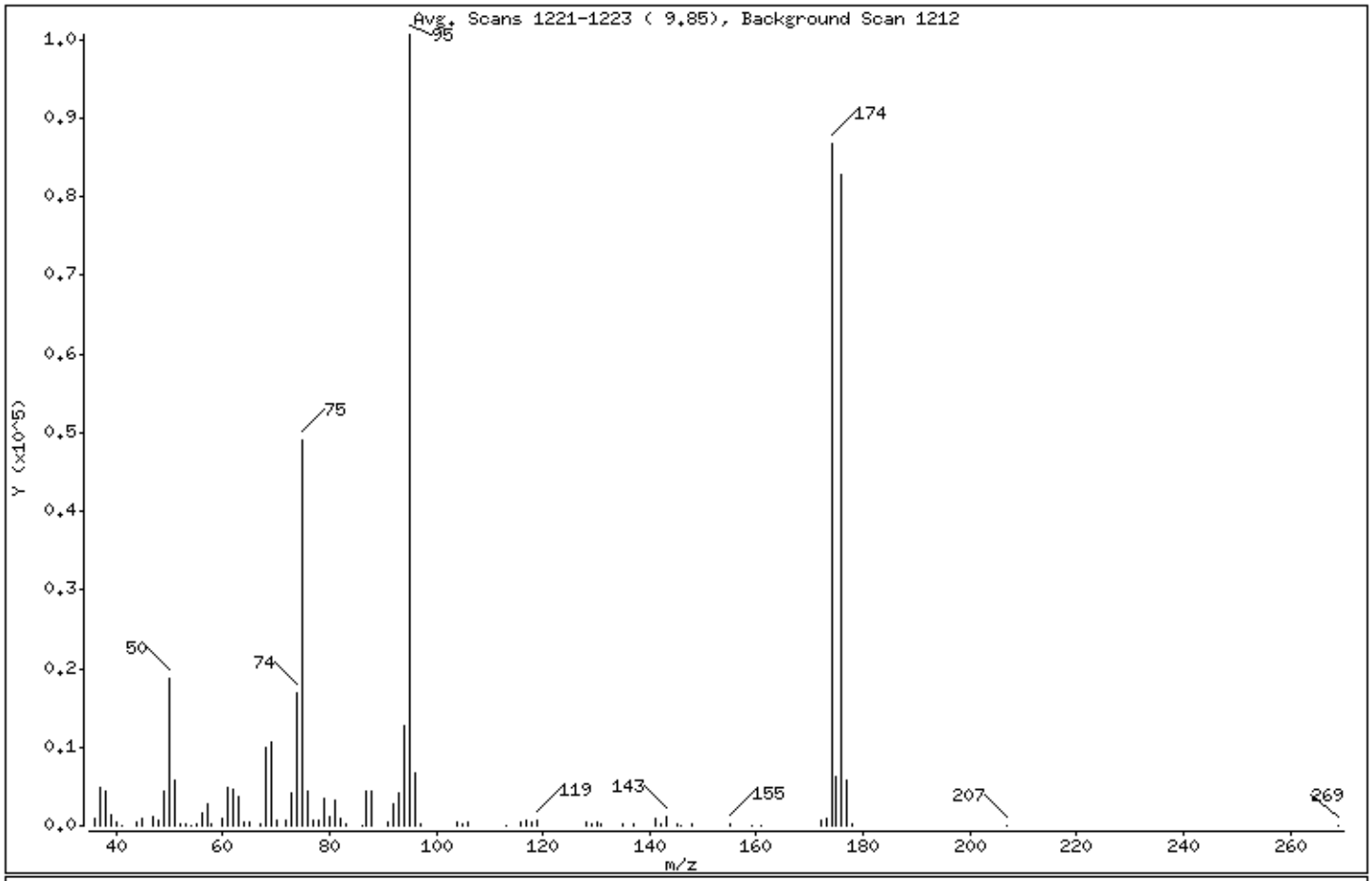
Volume Injected (uL): 1.0

Operator: cb

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	18.72
75	30.00 - 66.00% of mass 95	48.78
96	5.00 - 9.00% of mass 95	6.62
173	Less than 1.99% of mass 174	1.02 (1.18)
174	50.00 - 120.00% of mass 95	86.25
175	4.00 - 9.00% of mass 174	6.28 (7.28)
176	93.00 - 101.00% of mass 174	82.30 (95.42)
177	5.00 - 9.00% of mass 176	5.75 (6.98)

Date : 25-SEP-2015 09:06

Client ID: BFB Instrument: msd17.i

Sample Info: 1.0ml #2736-191; BFB Tune Check

Volume Injected (uL): 1.0 Operator: cb

Column phase: Column diameter: 2.00

Data File: 17092501.d
Spectrum: Avg. Scans 1221-1223 (9.85), Background Scan 1212
Location of Maximum: 95.00
Number of points: 84

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1006	62.00	4713	88.00	4309	141.00	1025
37.00	4776	63.00	3607	91.00	390	142.00	141
38.00	4329	64.00	401	92.00	2745	143.00	1223
39.00	1285	65.00	490	93.00	4054	145.00	237
40.00	462	67.00	333	94.00	12814	146.00	110
41.00	33	68.00	10012	95.00	100624	148.00	124
44.00	428	69.00	10707	96.00	6659	155.00	283
45.00	961	70.00	691	97.00	317	159.00	109
47.00	1184	72.00	718	104.00	454	161.00	50
48.00	737	73.00	4143	105.00	216	172.00	764
49.00	4411	74.00	16880	106.00	384	173.00	1028
50.00	18832	75.00	49080	113.00	54	174.00	86792
51.00	5727	76.00	4449	116.00	398	175.00	6317
52.00	263	77.00	744	117.00	601	176.00	82816
53.00	128	78.00	626	118.00	484	177.00	5784
54.00	58	79.00	3423	119.00	710	178.00	136
55.00	179	80.00	1184	128.00	429	207.00	81
56.00	1523	81.00	3354	129.00	191	269.00	61
57.00	2788	82.00	913	130.00	386		
58.00	228	83.00	236	131.00	242		
60.00	1000	86.00	107	135.00	123		
61.00	4830	87.00	4349	137.00	179		

Eurofins Air Toxics Inc.

Data file : /var/chem/msd17.i/02oct15.b/17100201.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 02-OCT-2015 08:45
Operator : cb Inst ID: msd17.i
Smp Info : 1.0ml #2736-191; BFB Tune Check
Misc Info : 36ng
Comment :
Method : /var/chem/msd17.i/02oct15.b/bfb30.m
Meth Date : 02-Oct-2015 09:09 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.847	9.840	0.007	95	69624			100.00- 100.00	100.00
9.847	9.840	0.007	50	13282			8.00- 40.00	19.08
9.847	9.840	0.007	75	35501			30.00- 66.00	50.99
9.847	9.840	0.007	96	4744			5.00- 9.00	6.81
9.847	9.840	0.007	173	885			0.00- 1.99	1.53
9.847	9.840	0.007	174	57888			50.00- 120.00	83.14
9.847	9.840	0.007	175	4054			4.00- 9.00	7.00
9.847	9.840	0.007	176	56976			93.00- 101.00	98.42
9.847	9.840	0.007	177	3730			5.00- 9.00	6.55

Data File: /var/chem/msd17.i/02oct15.b/17100201.d

Date : 02-OCT-2015 08:45

Client ID: BFB

Instrument: msd17.i

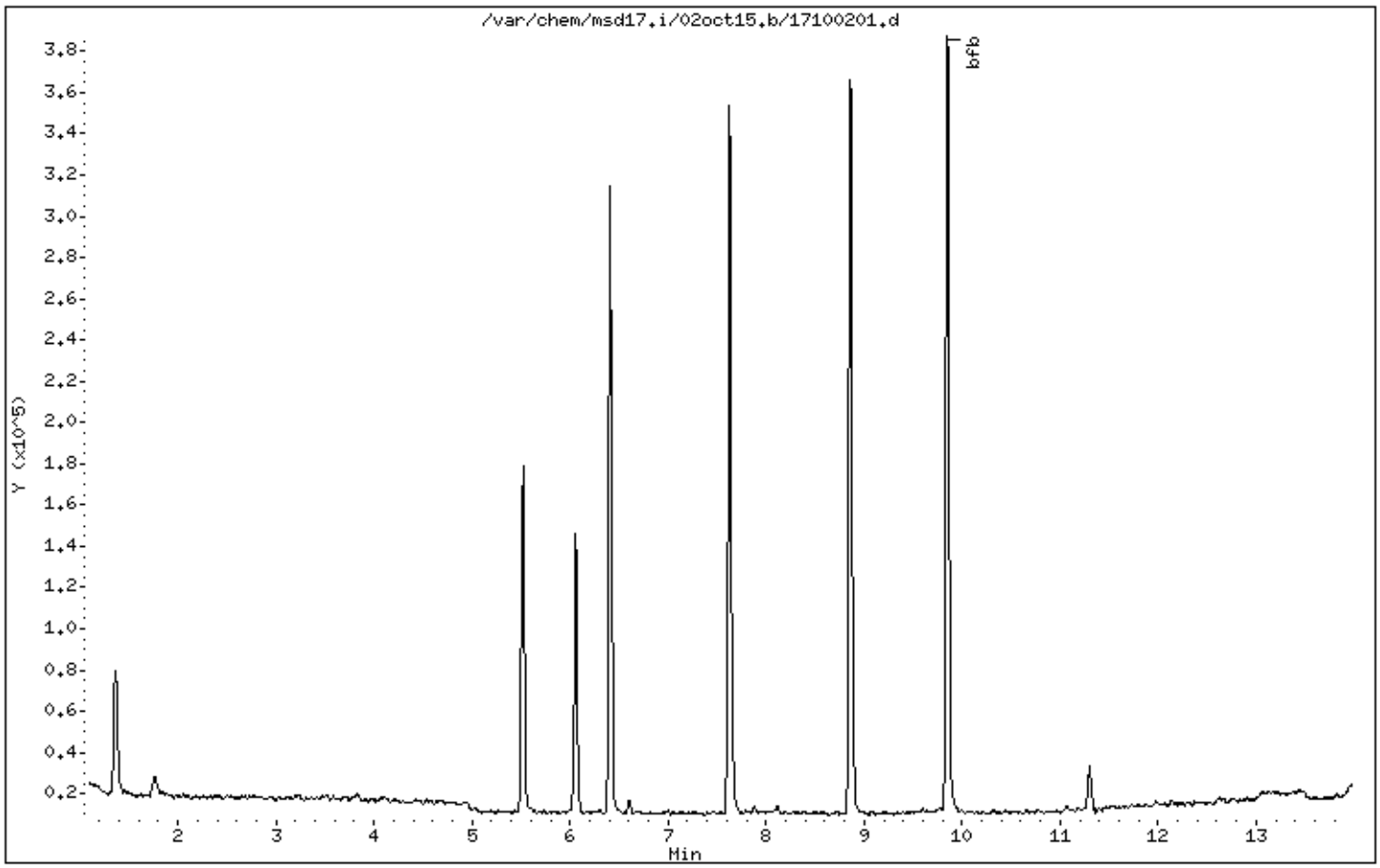
Sample Info: 1.0ml #2736-191; BFB Tune Check

Volume Injected (uL): 1.0

Operator: cb

Column phase:

Column diameter: 2.00



Data File: /var/chem/msd17.i/02oct15.b/17100201.d

Date : 02-OCT-2015 08:45

Client ID: BFB

Instrument: msd17.i

Sample Info: 1.0ml #2736-191; BFB Tune Check

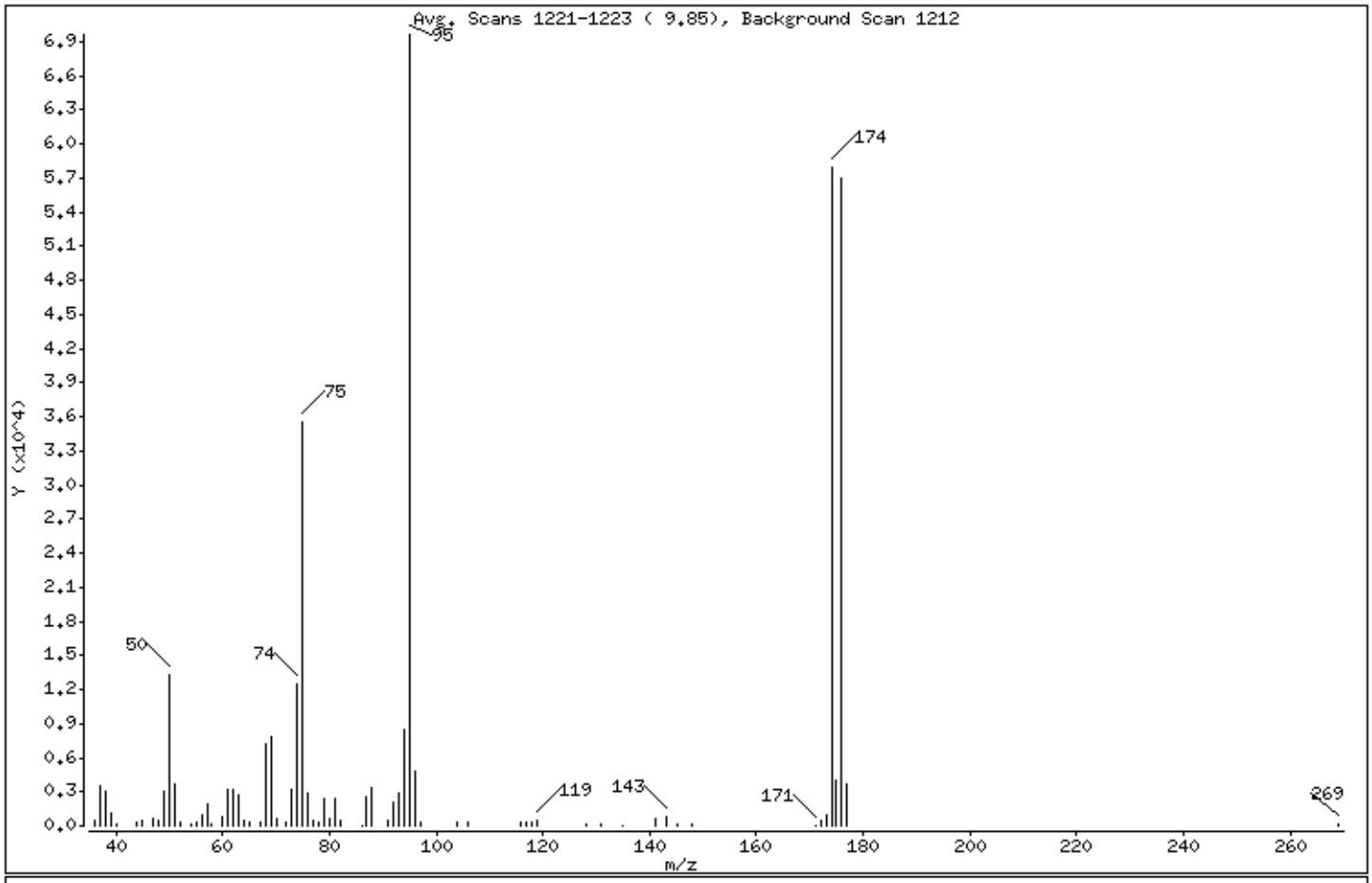
Volume Injected (uL): 1.0

Operator: cb

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	19.08
75	30.00 - 66.00% of mass 95	50.99
96	5.00 - 9.00% of mass 95	6.81
173	Less than 1.99% of mass 174	1.27 (1.53)
174	50.00 - 120.00% of mass 95	83.14
175	4.00 - 9.00% of mass 174	5.82 (7.00)
176	93.00 - 101.00% of mass 174	81.83 (98.42)
177	5.00 - 9.00% of mass 176	5.36 (6.55)

Date : 02-OCT-2015 08:45

Client ID: BFB Instrument: msd17.i

Sample Info: 1.0ml #2736-191; BFB Tune Check

Volume Injected (uL): 1.0 Operator: cb

Column phase: Column diameter: 2.00

Data File: 17100201.d
Spectrum: Avg. Scans 1221-1223 (9.85), Background Scan 1212
Location of Maximum: 95.00
Number of points: 70

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	495	60.00	732	80.00	676	119.00	448
37.00	3571	61.00	3190	81.00	2342	128.00	219
38.00	3019	62.00	3177	82.00	457	131.00	167
39.00	1102	63.00	2723	86.00	53	135.00	52
40.00	197	64.00	438	87.00	2596	141.00	626
44.00	313	65.00	347	88.00	3319	143.00	846
45.00	519	67.00	284	91.00	458	145.00	222
47.00	568	68.00	7164	92.00	2095	148.00	125
48.00	451	69.00	7810	93.00	2954	171.00	56
49.00	3068	70.00	636	94.00	8489	172.00	554
50.00	13282	72.00	386	95.00	69624	173.00	885
51.00	3605	73.00	3224	96.00	4744	174.00	57888
52.00	242	74.00	12429	97.00	258	175.00	4054
54.00	129	75.00	35496	104.00	253	176.00	56976
55.00	357	76.00	2927	106.00	313	177.00	3730
56.00	945	77.00	517	116.00	294	269.00	128
57.00	1878	78.00	330	117.00	398		
58.00	125	79.00	2351	118.00	341		

Shipping/ Receiving Documents

Eurofins Air Toxics, Inc. Sample Receipt Confirmation Cover Page

Thank you for choosing Eurofins Air Toxics, Inc. (EATL). We have received your samples and have listed any Sample Receipt Descrepancies below.

In order to expedite analysis and reporting, please review the attached information for accuracy.

For corrections call: **Ausha Scott at 916-985-1000**

EATL will proceed with the analysis as specified on the Chain of Custody (COC) and Sample Receipt Summary page.

Please note : The Sample Receipt Confirmation, including the total workorder charge, is subject to change upon secondary review. Our aim is to provide a confirmation to you in a timely manner. Sample Receipt Discrepancies, if any, may not include discrepancies regarding sample receipt pressure(s). Additionally, the COC will be provided with the final report.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 6:30 A.M to 5:30 P.M. PST

eurofins | Air Toxics

Sample Transportation Notice

Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Page 1 of 1

Project Manager: ROB UPPENCAMP

Collected by: (Print and Sign) R WOODRUFF / M HEAP

Company: ARCADIS Email: robuppencamp@arcadis.com

Address: 132 E. WASHINGTON SUITE 600 City: INPLS State: IN Zip: 46204

Phone: 317-231-6500 Fax: 317-231-6514

Project Info:

P.O. #: LA003307.0001

Project #: LA003307.0001

Project Name: Grenada Manufacturing

Turn Around Time: ☒ Normal ☐ Rush ____ specify

Lab Use Only: Pressurized by: ____ Date: ____ Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
[illegible]	6-SS (092315)	31782	9-23-15	1117/1130	TO-15, Project List	30	4.5		
[illegible]	1-SS (092315)	11-1629		1216/1227	TO-15 Project List	30	5.75		
[illegible]	1-DUP-SS (092315)	34618		1206/1230	TO-15 Project List	30	5		
[illegible]	5-SS (092315)	1358		1319/1332	TO-15 Project List	30	5		
[illegible]	2-SS (092315)	11-1901		1423/1439	TO-15 Project List	30	4.5		
[illegible]	3-SS (092315)	15794		1547/1601	TO-15 Project List	30	7		
[illegible]	4-SS (092315)	36899		1700/1713	TO-15 Project List	30	5		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	9-24-15 1500	[signature]	9/30/15 1235
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fedex		N/A	Good	Yes No (None)	1509511

Form 1283 rev.11

eurofins | Air Toxics

SAMPLE RECEIPT SUMMARY

WORKORDER 1509511

Client

Ms. Marie Heap
Arcadis U.S., Inc.
132 East Washington St., Suite 600
Indianapolis, IN 46204

Phone

317-231-6500

Fax

317-231-6514

Date Promised: 10/13/15
Date Completed: 10/12/15
Date Received: 9/30/15
PO#: LA003307.001
Project#: LA003307.001 Grenada Manufacturing

Sales Rep: N/A

Total $: $ 1,221.00
Logged By: JCW

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	6-SS(092315)	TO-15	9/23/2015	4.5 "Hg	$110.00
02A	1-SS(092315)	TO-15	9/23/2015	5.3 "Hg	$110.00
03A	1-DUP-SS(092315)	TO-15	9/23/2015	4.5 "Hg	$110.00
04A	5-SS(092315)	TO-15	9/23/2015	4.5 "Hg	$110.00
05A	2-SS(092315)	TO-15	9/23/2015	3.9 "Hg	$110.00
06A	3-SS(092315)	TO-15	9/23/2015	3.7 "Hg	$110.00
07A	4-SS(092315)	TO-15	9/23/2015	4.3 "Hg	$110.00
08A	Lab Blank	TO-15	NA	NA	$0.00
09A	CCV	TO-15	NA	NA	$0.00
10A	LCS	TO-15	NA	NA	$0.00
10AA	LCSD	TO-15	NA	NA	$0.00

Misc. Charges	1 Liter Summa Canister (100% Certified) (8) @ $40.00 each., Shipment 10	$320.00
	Blue Body Flow Controller (100% Certified) (8) @ $10.00 each., Shipmen	$80.00
	eCVP (7) @ $5.00 each.	$35.00
	Duplicate Sampling T (2) @ $8.00 each.	$16.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: Grenada/20635

BILL TO: Accounts Payable
Arcadis U.S., Inc.
630 Plaza Drive
Suite 600
Highlands Ranch, CO 80129

Analysis Code: TO-14A

TERMS:

Reporting Method: TO-15 (Sh)-Arcadis (Grenada)

Sample Discrepancy Report

Identification

Initiated By: HDB **Project ID:**20635 **PM**: AS **Date:** 10/12/2015 **Discrepancy Type:** ☒ **1.** ☐ **2.** ☐ **3.**

Workorder(s) affected:1509511 **Sample(s) affected:** -06A

1. Sample Receipt Discrepancies

Narration Not Required:

1.1. ☐ Sample container (cartridge/tube/VOA vial) was received broken, however sample was intact.

1.2. ☐ No brass cap on canister.

1.3. ☐ Date of Collection noted on first sample, but no arrow down to indicate all samples.

Notify Lab for further determination:

1.4. ☐ Tedlar bag received with minimal volume.

Initials: _____ Date: _____

Narration Required in Lab Narrative and Sample Confirmation:

1.5. ☐ COC was not filled out in ink.

1.6. ☐ COC improperly relinquished / received.

1.7. ☒ Sample tags / can numbers do not match the COC.

1.8. ☐ Sample date ☐ error / ☐ missing on COC but noted on sample tag (check one).

1.9. ☐ Custody Seal on the outside of the container was ☐ broken / ☐ improperly placed (check one).

1.10. ☐ ID-none on the sample Tag/Blank

1.11. ☐ Other (describe below).

Describe the Discrepancy: COC has 15794, can has 15744.

2. Sample Receipt/Screening Discrepancies requiring PM notification

Document on Cover Page of Sample Receipt Confirmation and in Receiving Notes of Lab Narrative

If Section II. is filled out PM must be notified within 24 hrs of initiation

2.1. ☐ COC was not received with samples.

2.2. ☐ Analysis method(s) is ☐ not specified / ☐ incorrectly specified (check one) on the COC.

2.3. ☐ Incorrect sampling media / container for analysis requested.

2.4. ☐ Number of samples on the COC does not match the number of samples that were received.

2.5. ☐ Samples were received expired.

2.6. ☐ Sampling date (time for sulfur) is not documented for ☐ *some* / ☐ *any* samples (check one).

2.7. ☐ Sample received with amount of H_2O in the Tedlar Bag.

2.8. ☐ Sample cannot be analyzed. Container was ☐ received broken / ☐ leaking / ☐ flat / ☐ defective.

2.9. ☐ Tedlar bag / canister received emitting a strong odor; Sample ☐ can / ☐ cannot (check one) be analyzed.

2.10. ☐ Tedlar Bag for Sulfur analysis has metal fitting.

2.11. ☐ Environmental Supply Company valves

2.12. ☐ Sorbent samples-sampling volume was not provided

2.13. ☐ Flow controller used – canister samples received at ambient or under pressure.

2.14. ☐ Canister was at ambient pressure at time of pressurization and (check all that apply):

- ☐ Canister failed leak check on two manifolds,
- ☐ Canister valve was open,
- ☐ Brass nut was loose/not present.
- ☐ Sample can be analyzed
- ☐ Cannot be analyzed

2.15. ☐ Canister sample received with a vacuum difference >5.0"Hg between the receipt vac. And the final vac. reported on the COC, indicating loss of vacuum.

2.16. ☐ Canister sample received at >15"Hg (*not* identified as a Trip/Field Blank).

2.17. ☐ Canister Trip Blank received at low vacuum (<25"Hg).

2.18. ☐ Sorbent Sample received outside method required temperature of 2°C to 6°C; ☐ ice / ☐ blue ice (check one) was present. A temp. Blank ☐ was / ☐ was not present (check one).

2.19. ☐ Flow Controller RPD of = 20% was not met.

2.20. ☐ Other (describe below)

Initials: _____ **Date:** _____ **Notify Receiving:** ☐ **Notify PM:** ☐

Describe the Discrepancy:

3. Lab Discrepancies requiring Team Leader/PM notification

Document in Analytical Notes of Lab Narrative

If Section III. is filled out PM must be notified within 24 hrs of initiation

3.1. ☐ Tedlar Bag found to be leaking at the time of analysis; sample ☐ can / ☐ cannot (check one) be analyzed.

3.2. ☐ Tedlar Bag found to be flat/low volume; sample cannot be analyzed.

3.3. ☐ Sulfur samples received with insufficient time to analyze prior to expiration.

3.4. ☐ Canister found to be leaking at the time of analysis.

3.5. ☐ VOST tube saturated; bag dilution necessary.

3.6. ☐ Sample loss due to instrument malfunction / broken glassware.

3.7. ☐ Low/high surrogate recoveries noted in QC/sample(s) for extractable samples.

3.8. ☐ Reporting Limit was raised.

3.9. ☐ Post weight > Pre weight in field/lab Blank for PM10/TSP samples.

3.10. ☐ Other (describe below).

Initials: _____ **Date:** _____ **Notify Receiving:** ☐ **Notify PM:** ☐ _____

Team Lead Initials: _____ **Date:** _____

Describe the Discrepancy: _____

_____

_____

How Does this Affect Client: _____

_____

_____

Project Manager Use Only

Project Manager Notification ☐ **Section 2 Complete** ☐ **Section 3 Complete**

Action:

☐ It is not necessary to notify the client. Narrate the discrepancy in Receiving Notes/Analytical Notes of Lab Narrative.

PM Initials:_____ Date: _____

☐ Client notification required. See attached client contact / email, or comments below:

Client Notification:

PM Initials:_____ Person notified: _____ Date: _____

☐ Waiting for Client Reply

Comments: _____

_____

☐ Notify Lab Name: _____ Date: _____ **Notify Receiving:** ☐

☐ **Additional notifications attached.**

Additional Comments:

_____

Other Records

Dilution Factor = $\frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7\text{psi} + \text{Final Pressure (psi)}}{14.7\text{psi} - [\text{Init. Pressure (“Hg)})*(14.7\text{psi}/30\text{”Hg})]}$

Dilution Factor = $\frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7\text{psi} + \text{Final Pressure (psi)}}{14.7\text{psi} + \text{Initial Pressure (psi)}}$

Initial Vacuum (" of Hg)	5 psi Final Pressure Dilution Factor	15 psi Final Pressure Dilution Factor
0.0	1.34	2.02
0.2	1.35	2.03
0.4	1.36	2.05
0.5	1.36	2.05
0.6	1.37	2.06
0.8	1.38	2.08
1.0	1.39	2.09
1.2	1.40	2.10
1.4	1.40	2.12
1.5	1.41	2.13
1.6	1.42	2.13
1.8	1.42	2.15
2.0	1.44	2.16
2.2	1.45	2.18
2.4	1.46	2.20
2.5	1.46	2.20
2.6	1.47	2.21
2.8	1.48	2.23
3.0	1.49	2.24
3.2	1.50	2.26
3.4	1.51	2.28
3.5	1.52	2.29
3.6	1.52	2.30
3.8	1.53	2.31
4.0	1.55	2.33
4.2	1.56	2.35
4.4	1.57	2.37
4.5	1.58	2.38
4.6	1.58	2.39
4.8	1.60	2.40
5.0	1.61	2.42
5.2	1.62	2.44
5.4	1.63	2.46
5.5	1.64	2.47
5.6	1.65	2.48
5.8	1.66	2.50
6.0	1.68	2.52
6.2	1.69	2.55
6.4	1.70	2.57
6.5	1.71	2.58
6.6	1.72	2.59
6.8	1.73	2.61
7.0	1.75	2.64
7.2	1.76	2.66
7.4	1.78	2.68
7.5	1.79	2.69
7.6	1.79	2.70

Initial Vacuum (" of Hg)	5 psi Final Pressure Dilution Factor	15 psi Final Pressure Dilution Factor
7.7	1.80	2.72
7.8	1.81	2.73
8.0	1.83	2.76
8.2	1.84	2.78
8.4	1.86	2.81
8.5	1.87	2.82
8.6	1.88	2.83
8.8	1.90	2.86
9.0	1.91	2.89
9.2	1.93	2.91
9.4	1.95	2.94
9.5	1.96	2.96
9.6	1.97	2.97
9.8	1.99	3.00
10.0	2.01	3.03
10.2	2.03	3.06
10.4	2.05	3.09
10.5	2.06	3.11
10.6	2.07	3.12
10.8	2.09	3.16
11.0	2.12	3.19
11.2	2.14	3.22
11.4	2.16	3.26
11.5	2.17	3.28
11.6	2.18	3.29
11.8	2.21	3.33
12.0	2.23	3.37
12.2	2.26	3.40
12.4	2.28	3.44
12.5	2.30	3.46
12.6	2.31	3.48
12.8	2.34	3.52
13.0	2.36	3.56
13.2	2.39	3.61
13.4	2.42	3.65
13.5	2.44	3.67
13.6	2.45	3.70
13.8	2.48	3.74
14.0	2.51	3.79
14.2	2.54	3.84
14.4	2.58	3.88
14.5	2.59	3.91
14.6	2.61	3.94
14.8	2.64	3.99
15.0	2.68	4.04
15.2	2.72	4.10
15.4	2.75	4.15

Initial Vacuum (" of Hg)	5 psi Final Pressure Dilution Factor	15 psi Final Pressure Dilution Factor
15.5	2.77	4.18
15.6	2.79	4.21
15.8	2.83	4.27
16.0	2.87	4.33
16.2	2.91	4.39
16.4	2.96	4.46
16.5	2.98	4.49
16.6	3.00	4.52
16.8	3.05	4.59
17.0	3.09	4.66
17.2	3.14	4.74
17.4	3.19	4.81
17.5	3.22	4.85
17.6	3.24	4.89
17.8	3.30	4.97
18.0	3.35	5.05
18.2	3.41	5.14
18.4	3.47	5.22
18.5	3.50	5.27
18.6	3.53	5.32
18.8	3.59	5.41
19.0	3.65	5.51
19.2	3.72	5.61
19.4	3.79	5.72
19.5	3.83	5.77
19.6	3.87	5.83
19.8	3.94	5.94
20.0	4.02	6.06
20.2	4.10	6.18
20.4	4.19	6.31
20.5	4.23	6.38
20.6	4.28	6.45
20.8	4.37	6.59
21.0	4.47	6.73
21.2	4.57	6.89
21.4	4.67	7.05
21.5	4.73	7.13
21.6	4.79	7.22
21.8	4.90	7.39
22.0	5.03	7.58
22.4	5.29	7.98

Initial Vacuum (" of Hg)	5 psi Final Pressure Dilution Factor	15 psi Final Pressure Dilution Factor
22.5	5.36	8.08
22.6	5.43	8.19
22.8	5.58	8.42
23.0	5.74	8.66
23.2	5.91	8.91
23.4	6.09	9.18
23.5	6.19	9.32
23.6	6.28	9.47
23.8	6.48	9.78
24.0	6.70	10.10
24.2	6.93	10.45
24.4	7.18	10.82
24.5	7.31	11.02
24.6	7.45	11.22
24.8	7.73	11.66
25.0	8.04	12.12
25.2	8.38	12.63
25.4	8.74	13.18
25.5	8.93	13.47
25.6	9.14	13.78
25.8	9.57	14.43
26.0	10.05	15.15
26.2	10.58	15.95
26.4	11.17	16.84
26.5	11.49	17.32
26.6	11.82	17.83
26.8	12.56	18.94
27.0	13.40	20.20
27.2	14.36	21.65
27.4	15.46	23.31
27.5	16.08	24.24
27.6	16.75	25.26
27.8	18.27	27.55
28.0	20.10	30.31
28.2	22.34	33.67
28.4	25.13	37.88
28.5	26.80	40.41
28.6	28.72	43.29
28.8	33.50	50.51
29.0	40.20	60.61

Compound Listing

TO-15 (Sh)-Arcadis (Grenada)

CAS Number	Compound	Detection Limit ppbv	Type
75-01-4	Vinyl Chloride	0.50	
75-35-4	1,1-Dichloroethene	0.50	
75-09-2	Methylene Chloride	5.0	
156-60-5	trans-1,2-Dichloroethene	0.50	
156-59-2	cis-1,2-Dichloroethene	0.50	
67-66-3	Chloroform	0.50	
107-06-2	1,2-Dichloroethane	0.50	
108-38-3	m,p-Xylene	0.50	
95-47-6	o-Xylene	0.50	
79-01-6	Trichloroethene	0.50	
108-88-3	Toluene	0.50	
79-00-5	1,1,2-Trichloroethane	0.50	
127-18-4	Tetrachloroethene	0.50	
100-41-4	Ethyl Benzene	0.50	
95-63-6	1,2,4-Trimethylbenzene	0.50	
2037-26-5	Toluene-d8		
17060-07-0	1,2-Dichloroethane-d4		
460-00-4	4-Bromofluorobenzene		
71-43-2	Benzene	0.50	

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Media Certification Report

Canister Number: 1L# 31782
Can#: 103570-31782
Date : 09/16/15 20:17
Data File: i091614.d

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.01	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.01	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.05	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.01	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.01	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.01	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.01	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.02	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	0.10	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.01	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.01	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.01	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.05	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.01	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.01	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		96.00	% Recovery
4-Bromofluorobenzene	460-00-4		101.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	101.00	% Recovery
Toluene-d8	2037-26-5		98.00	% Recovery
Toluene-d8	2037-26-5	0.25	98.00	% Recovery

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Media Certification Report

Canister Number: 1L#1L1624 w/Batch
Can#: 103570-1L1624
Date : 09/16/15 16:18
Data File: i091609.d

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Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.01	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.01	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.05	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.01	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.01	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.01	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.01	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.02	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	0.10	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.01	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.01	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.01	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.05	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.01	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.01	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		90.00	% Recovery
4-Bromofluorobenzene	460-00-4		100.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	100.00	% Recovery
Toluene-d8	2037-26-5		100.00	% Recovery
Toluene-d8	2037-26-5	0.25	100.00	% Recovery

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Media Certification Report

Canister Number: 1L# 34618
Can#: 103570-34618
Date : 09/16/15 19:40
Data File: i091613.d

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.01	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.01	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.05	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.01	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.01	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.01	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.01	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.02	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	0.10	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.01	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.01	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.01	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.05	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.01	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.01	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		95.00	% Recovery
4-Bromofluorobenzene	460-00-4		100.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	100.00	% Recovery
Toluene-d8	2037-26-5		103.00	% Recovery
Toluene-d8	2037-26-5	0.25	103.00	% Recovery

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Media Certification Report

Canister Number: 1L#1358
Can#: 103570-1358
Date : 08/18/15 23:34
Data File: i081814.d

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Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.01	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.01	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.05	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.01	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.01	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.01	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.01	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.02	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	0.10	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.01	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.01	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.01	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.05	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.01	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.01	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		97.00	% Recovery
4-Bromofluorobenzene	460-00-4		100.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	100.00	% Recovery
Toluene-d8	2037-26-5		105.00	% Recovery
Toluene-d8	2037-26-5	0.25	105.00	% Recovery

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Media Certification Report

Canister Number: 1L# 1L1901w/Batch
Can#: 103570-1L1901
Date : 09/16/15 15:41
Data File: i091608.d

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.01	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.01	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.05	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.01	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.01	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.01	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.01	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.02	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	0.10	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.01	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.01	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.01	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.05	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.01	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.01	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		96.00	% Recovery
4-Bromofluorobenzene	460-00-4		101.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	101.00	% Recovery
Toluene-d8	2037-26-5		99.00	% Recovery
Toluene-d8	2037-26-5	0.25	99.00	% Recovery

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Media Certification Report

Canister Number: 1L# 15744
Can#: 103570-15744
Date : 09/16/15 19:02
Data File: i091612.d

www.airtoxics.com
1-800-985-5955

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.01	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.01	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.05	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.01	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.01	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.01	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.01	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.02	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	0.10	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.01	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.01	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.01	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.05	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.01	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.01	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		92.00	% Recovery
4-Bromofluorobenzene	460-00-4		96.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	96.00	% Recovery
Toluene-d8	2037-26-5		99.00	% Recovery
Toluene-d8	2037-26-5	0.25	99.00	% Recovery

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1-800-985-5955

Media Certification Report

Canister Number: 1L#36399
Can#: 103570-36399
Date : 09/10/15 23:25
Data File: i091023.d

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.01	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.01	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.05	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.01	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.01	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.01	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.01	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.02	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	0.10	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.01	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.01	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.01	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.05	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.01	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.01	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		98.00	% Recovery
4-Bromofluorobenzene	460-00-4		100.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	100.00	% Recovery
Toluene-d8	2037-26-5		102.00	% Recovery
Toluene-d8	2037-26-5	0.25	102.00	% Recovery

Eurofins Air Toxics, Inc.	Data Review Checklist			Release Date: 03/26/15
Workorder # 1509511	Form F1.27	Revision #11	Revision date: 03/26/15	Page 1 of 2

S1	S2	S3	S4	D	Section 1 – Spec Out	Initials/Instrument/Date	S1: CB/17/10-2-15	S2:	S3:	S4:
✓					Project Identification (PID), Project Requirements Table (PRT), Daily QC and ICAL met Criteria					
✓					Lumen QC and ICAL evaluation (ref. SOP/Method) report initialed and in folder					
✓					Manual Integrations included and approved					
✓					Chain of Custody verified for special comments (add comments below)					
✓					Non-standard Target sublist printed					

Profile, analyses, reporting, special notes and unusual circumstances:

Ø out QC

A1	A2	A3	A4	D	Section 2 – Sample Analysis	Initials/Date	A1: JMB 10/3/15	A2:	A3:	A4:
✓					Internal Standard/Surrogate Recoveries, Dilution Factors, Load Volumes, Initial/Final Pressures, and Canister #s Verified					
N/A				MD	a) Tedlar Bag IDs verified against COC b) Tedlar Bag ID confirmed with loading sequence/leg of instrument					
N/A					Manual Integrations/Bag or Can Dilution Forms/Re-pressurization Forms/Bag-Can Transfer Forms present (circle all that apply)					
✓					12/24 Hr clock time & Hold Time met for all samples					
✓					Re-analysis of sample(s) have been evaluated for comparability and/or samples have been checked for trends (Inf/Eff).					
✓					All runs have been evaluated for potential carry-over (TPHg/non-Target/over-range compounds etc)					

Analytical and special notes:

01A-07A = full loads. Field Dups OK ✓

D1	D2	D3	D4	T	3T	Section 3 – Target Data Reduction	Technical Review Needed? Circle one: Yes/No	T:		
						Initials/Instrument/Date MSD-17 10/2/15	D1: HRB 10/12/15	D2:	D3:	D4:
NA						CAR #	(if applicable)			
✓						Spectra Verified *(documentation of spectral defense included if applicable)*				
NA						TICs resemble reference spectra/ TICs between sample dups. are consistent *(if applicable)*				
✓						Lab Narrative is correct				
NA						TPH/NMOC calculations complete and included in folder				

Special notes: -06A → can ID discrepancy -02A/-03A > ED ok

A	3T	Section 4- Atlas Data Entry	Lumen verified and included in folder	Circle one: Yes/No
		Initials/Date: HRB 10/12/15	3rd Tier: *(needed only for DOD or per client request)* NO ISSUES	
✓		Sample Discrepancy Report (SDR) complete and approved *(if applicable)*	created during w/rk-up	
NA		Manually entered results are checked		
✓		At least one result per sample is verified against Target quant sheets		
✓		Appropriate data qualifier flags are applied		
✓		Final invoice is correct/ Final PDF report, COC and EDD reviewed and correct		

Special Notes:

Note (1) *Please check all the appropriate boxes. Indicate "NA" for any statement that doesn't apply*
Note (2) 3rd Tier Report Reviewer and Write Up Reviewer must be separate individuals for DoD & Client Specific Projects

Eurofins Air Toxics, Inc.	Reissued - Data Review Checklist			Release Date 01/29/14
	Form F 1.27	Revision #8	Revision date 01/29/14	Page 2 of 2

Workorder # :				Reason for Reissue:
W	T	3T	Q	
				Reissue Request form Present
				Client or QA or Lab contact present with reason for reissue
				Review all affected data
				Report header has correct R1, R2 etc
				The Lab Narrative clearly explains the reissue (Date, Reason and whether client requested)
				Date for Reissue in Report Header matches date in Lab Narrative
				Check Project Profile for correct reporting instructions (multiple clients, # hardcopies, etc)
				Corrective Action issued - #
				The reissued workorder has been approved by QA Manager or a Technical Director
Additional Comments:				

Write Up (Initials/Date)	Tech Review (Initials/Date)	*3rd Tier Review ** 3rd Tier Report Review is for DoD & Client Specific projects only* (Initials/Date)	QA Review (Initials/Date)

Workorder # :				Reason for Reissue:
W	T	3T	Q	
				Reissue Request form Present
				Client or QA or Lab contact present with reason for reissue
				Review all affected data
				Report header has correct R1, R2 etc
				The Lab Narrative clearly explains the reissue (Date, Reason and whether client requested)
				Date for Reissue in Report Header matches date in Lab Narrative
				Check Project Profile for correct reporting instructions (multiple clients, # hardcopies, etc)
				Corrective Action issued - #
				The reissued workorder has been approved by QA Manager or a Technical Director
Additional Comments:				

Write Up (Initials/Date)	Tech Review (Initials/Date)	*3rd Tier Review ** 3rd Tier Report Review is for DoD & Client Specific projects only* (Initials/Date)	QA Review (Initials/Date)

Note (1) *Please check all the appropriate boxes. Indicate "NA" for any statement that doesn't apply*
Note (2) 3rd Tier Report Reviewer and Write Up Reviewer must be separate individuals for DoD & Client Specific Projects

Not Applicable

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Sample Transportation Notice

Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager: ROB UPPENCAMP
Collected by: (Print and Sign) R WOODRUFF / M HEAP
Company: ARCADIS Email: rob.uppencamp@arcadis.com
Address: 132 E. WASHINGTON SUITE 600 City: INPLS State: IN Zip: 46204
Phone: 317-231-6500 Fax: 317-231-6514

Project Info:
P.O. #: LA003307.0001
Project #: LA003307.0001
Project Name: Grenada Manufacturing

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	6-SS (092315)	31782	9-23-15	1117/1130	TO-15, Project List	30	4.5		
02A	1-SS (092315)	1L1624	↓	1216/1227	TO-15 Project List	30	5.75		
03A	1-DUP-SS (092315)	34618	↓	1216/1230	TO-15 Project List	30	5		
04A	5-SS (092315)	1358	↓	1319/1332	TO-15 Project List	30	5		
05A	2-SS (092315)	1L1901	↓	1423/1439	TO-15 Project List	30	4.5		
06A	3-SS (092315)	15794	↓	1547/1601	TO-15 Project List	30	7		
07A	4-SS (092315)	36399	↓	1700/1713	TO-15 Project List	30	5		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	9-24-15 1500	Candice H Cothrey EAIL	9/30/15 1235

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fedex		N/A	Good	Yes No None	1509511

Form 1293 rev.11

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10/12/2015
Ms. Marie Heap
Arcadis U.S., Inc.
132 East Washington St., Suite 600

Indianapolis IN 46204

Project Name: Grenada Manufacturing
Project #: IN000899.2013
Workorder #: 1509512

Dear Ms. Marie Heap

The following report includes the data for the above referenced project for sample(s) received on 9/30/2015 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott

Project Manager

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WORK ORDER #: 1509512

Work Order Summary

CLIENT:	Ms. Marie Heap Arcadis U.S., Inc. 132 East Washington St., Suite 600 Indianapolis, IN 46204	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317-231-6500	**P.O. #**	IN000899.2013
FAX:	317-231-6514	**PROJECT #**	IN000899.2013 Grenada Manufacturing
DATE RECEIVED:	09/30/2015	**CONTACT:**	Ausha Scott
DATE COMPLETED:	10/12/2015		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	1-AA(092215)	Modified TO-15	9.0 "Hg	5 psi
01B	1-AA(092215)	Modified TO-15	9.0 "Hg	5 psi
02A	2-AA(092215)	Modified TO-15	8.0 "Hg	5 psi
02B	2-AA(092215)	Modified TO-15	8.0 "Hg	5 psi
03A	6-IA(092215)	Modified TO-15	7.0 "Hg	5 psi
03B	6-IA(092215)	Modified TO-15	7.0 "Hg	5 psi
04A	1-IA(092215)	Modified TO-15	8.0 "Hg	5 psi
04B	1-IA(092215)	Modified TO-15	8.0 "Hg	5 psi
05A	5-IA(092215)	Modified TO-15	9.0 "Hg	5 psi
05B	5-IA(092215)	Modified TO-15	9.0 "Hg	5 psi
06A	2-IA(092215)	Modified TO-15	7.0 "Hg	5 psi
06B	2-IA(092215)	Modified TO-15	7.0 "Hg	5 psi
07A	3-IA(092215)	Modified TO-15	7.0 "Hg	5 psi
07B	3-IA(092215)	Modified TO-15	7.0 "Hg	5 psi
08A	4-IA(092215)	Modified TO-15	7.5 "Hg	5 psi
08B	4-IA(092215)	Modified TO-15	7.5 "Hg	5 psi
09A	Lab Blank	Modified TO-15	NA	NA
09B	Lab Blank	Modified TO-15	NA	NA
10A	CCV	Modified TO-15	NA	NA
10B	CCV	Modified TO-15	NA	NA
11A	LCS	Modified TO-15	NA	NA
11AA	LCSD	Modified TO-15	NA	NA
11B	LCS	Modified TO-15	NA	NA

Continued on next page

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WORK ORDER #: 1509512

Work Order Summary

CLIENT:	Ms. Marie Heap Arcadis U.S., Inc. 132 East Washington St., Suite 600 Indianapolis, IN 46204	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317-231-6500	**P.O. #**	IN000899.2013
FAX:	317-231-6514	**PROJECT #**	IN000899.2013 Grenada Manufacturing
DATE RECEIVED:	09/30/2015	**CONTACT:**	Ausha Scott
DATE COMPLETED:	10/12/2015		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
11BB	LCSD	Modified TO-15	NA	NA

CERTIFIED BY:  DATE: 10/12/15

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15 Full Scan/SIM
Arcadis U.S., Inc.
Workorder# 1509512

Eight 6 Liter Summa Canister (SIM Certified) samples were received on September 30, 2015. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the Full Scan and SIM acquisition modes. The method involves concentrating up to 1.0 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-15***	***ATL Modifications***
ICAL %RSD acceptance criteria	</=30% RSD with 2 compounds allowed out to < 40% RSD	For Full Scan: 30% RSD with 4 compounds allowed out to < 40% RSD For SIM: Project specific; default criteria is </=30% RSD with 10% of compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	For Full Scan: </= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers For SIM: Project specific; default criteria is </= 30% Difference with 10% of compounds allowed out up to </=40%.; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

The Chain of Custody (COC) information for sample 2-AA(092215) did not match the information on the canister with regard to canister identification. The information on the canister was used to process and report the sample.

Analytical Notes

The results for each sample in this report were acquired from two separate data files originating from the same analytical run. The two data files have the same base file name and are differentiated with a "sim" extension on the SIM data file.

Dilution was performed on samples 6-IA(092215), 1-IA(092215), 2-IA(092215), and 3-IA(092215) due to the presence of high level non-target species.

Definition of Data Qualifying Flags

Nine qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

CN - See case narrative explanation

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: 1-AA(092215)

Lab ID#: 1509512-01A

No Detections Were Found.

Client Sample ID: 1-AA(092215)

Lab ID#: 1509512-01B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.019	0.040	0.049	0.10
cis-1,2-Dichloroethene	0.038	0.21	0.15	0.85
Benzene	0.096	0.095 J	0.30	0.30 J
Trichloroethene	0.038	0.22	0.20	1.2
Toluene	0.038	0.18	0.14	0.66
m,p-Xylene	0.076	0.12	0.33	0.52
o-Xylene	0.038	0.066	0.16	0.29

Client Sample ID: 2-AA(092215)

Lab ID#: 1509512-02A

No Detections Were Found.

Client Sample ID: 2-AA(092215)

Lab ID#: 1509512-02B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	0.018 J	0.047	0.046 J
cis-1,2-Dichloroethene	0.037	0.17	0.14	0.67
Benzene	0.092	0.099	0.29	0.32
Trichloroethene	0.037	0.19	0.20	1.0
Toluene	0.037	0.24	0.14	0.89
Ethyl Benzene	0.037	0.054	0.16	0.24
m,p-Xylene	0.073	0.19	0.32	0.83
o-Xylene	0.037	0.083	0.16	0.36

Client Sample ID: 6-IA(092215)

Lab ID#: 1509512-03A

No Detections Were Found.

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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: 6-IA(092215)

Lab ID#: 1509512-03B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.088	0.097	0.35	0.38
Chloroform	0.088	0.12	0.43	0.56
Trichloroethene	0.088	0.12	0.47	0.65
Toluene	0.088	1.0	0.33	3.9
Ethyl Benzene	0.088	0.14	0.38	0.63
m,p-Xylene	0.18	0.49	0.76	2.1
o-Xylene	0.088	0.23	0.38	1.0

Client Sample ID: 1-IA(092215)

Lab ID#: 1509512-04A

No Detections Were Found.

Client Sample ID: 1-IA(092215)

Lab ID#: 1509512-04B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.092	0.15	0.36	0.61
Chloroform	0.092	0.15	0.45	0.75
Benzene	0.23	1.2	0.73	3.8
1,2-Dichloroethane	0.092	0.21	0.37	0.84
Trichloroethene	0.092	0.20	0.49	1.1
Toluene	0.092	1.4	0.34	5.4
Ethyl Benzene	0.092	0.23	0.40	1.0
m,p-Xylene	0.18	0.59	0.80	2.6
o-Xylene	0.092	0.22	0.40	0.95

Client Sample ID: 5-IA(092215)

Lab ID#: 1509512-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.38	0.59	1.3	2.0

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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: 5-IA(092215)

Lab ID#: 1509512-05B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.019	0.024	0.049	0.062
cis-1,2-Dichloroethene	0.038	0.16	0.15	0.65
Chloroform	0.038	0.044	0.19	0.21
Benzene	0.096	0.27	0.30	0.86
1,2-Dichloroethane	0.038	0.044	0.15	0.18
Trichloroethene	0.038	0.16	0.20	0.86
Toluene	0.038	0.70	0.14	2.6
Ethyl Benzene	0.038	0.12	0.16	0.55
m,p-Xylene	0.076	0.37	0.33	1.6
o-Xylene	0.038	0.13	0.16	0.56

Client Sample ID: 2-IA(092215)

Lab ID#: 1509512-06A

No Detections Were Found.

Client Sample ID: 2-IA(092215)

Lab ID#: 1509512-06B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.088	0.14	0.35	0.57
Chloroform	0.088	0.19	0.43	0.91
Benzene	0.22	0.25	0.70	0.81
1,2-Dichloroethane	0.088	1.7	0.35	7.0
Trichloroethene	0.088	0.20	0.47	1.1
Toluene	0.088	2.1	0.33	7.9
Ethyl Benzene	0.088	0.20	0.38	0.85
m,p-Xylene	0.18	0.43	0.76	1.9
o-Xylene	0.088	0.25	0.38	1.1

Client Sample ID: 3-IA(092215)

Lab ID#: 1509512-07A

No Detections Were Found.

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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: 3-IA(092215)

Lab ID#: 1509512-07B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	0.35	0.86	1.7	4.2
Toluene	0.35	1.5	1.3	5.6

Client Sample ID: 4-IA(092215)

Lab ID#: 1509512-08A

No Detections Were Found.

Client Sample ID: 4-IA(092215)

Lab ID#: 1509512-08B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	0.031	0.046	0.079
cis-1,2-Dichloroethene	0.036	0.14	0.14	0.58
Chloroform	0.036	0.19	0.17	0.94
Benzene	0.090	0.58	0.28	1.8
1,2-Dichloroethane	0.036	0.30	0.14	1.2
Trichloroethene	0.036	0.18	0.19	0.99
Toluene	0.036	0.72	0.13	2.7
Ethyl Benzene	0.036	0.10	0.16	0.43
m,p-Xylene	0.072	0.26	0.31	1.1
o-Xylene	0.036	0.13	0.16	0.56

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Client Sample ID: 1-AA(092215)

Lab ID#: 1509512-01A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100507**	**Date of Collection: 9/23/15 10:43:00 AM**	
Dil. Factor:	**1.91**	**Date of Analysis: 10/5/15 01:51 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.38	Not Detected	1.3	Not Detected
1,2,4-Trimethylbenzene	0.19	Not Detected	0.94	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	97	70-130

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Client Sample ID: 1-AA(092215)

Lab ID#: 1509512-01B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100507sim**	**Date of Collection:**	**9/23/15 10:43:00 AM**
Dil. Factor:	**1.91**	**Date of Analysis:**	**10/5/15 01:51 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.019	0.040	0.049	0.10
1,1-Dichloroethene	0.019	Not Detected	0.076	Not Detected
trans-1,2-Dichloroethene	0.19	Not Detected	0.76	Not Detected
cis-1,2-Dichloroethene	0.038	0.21	0.15	0.85
Chloroform	0.038	Not Detected	0.19	Not Detected
Benzene	0.096	0.095 J	0.30	0.30 J
1,2-Dichloroethane	0.038	Not Detected	0.15	Not Detected
Trichloroethene	0.038	0.22	0.20	1.2
Toluene	0.038	0.18	0.14	0.66
1,1,2-Trichloroethane	0.038	Not Detected	0.21	Not Detected
Tetrachloroethene	0.038	Not Detected	0.26	Not Detected
Ethyl Benzene	0.038	Not Detected	0.16	Not Detected
m,p-Xylene	0.076	0.12	0.33	0.52
o-Xylene	0.038	0.066	0.16	0.29

J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	92	70-130

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Client Sample ID: 2-AA(092215)

Lab ID#: 1509512-02A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100508**	**Date of Collection: 9/23/15 4:17:00 PM**	
Dil. Factor:	**1.83**	**Date of Analysis: 10/5/15 02:46 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.37	Not Detected	1.3	Not Detected
1,2,4-Trimethylbenzene	0.18	Not Detected	0.90	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	93	70-130

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Client Sample ID: 2-AA(092215)

Lab ID#: 1509512-02B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100508sim**	**Date of Collection:**	**9/23/15 4:17:00 PM**
Dil. Factor:	**1.83**	**Date of Analysis:**	**10/5/15 02:46 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	0.018 J	0.047	0.046 J
1,1-Dichloroethene	0.018	Not Detected	0.072	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.72	Not Detected
cis-1,2-Dichloroethene	0.037	0.17	0.14	0.67
Chloroform	0.037	Not Detected	0.18	Not Detected
Benzene	0.092	0.099	0.29	0.32
1,2-Dichloroethane	0.037	Not Detected	0.15	Not Detected
Trichloroethene	0.037	0.19	0.20	1.0
Toluene	0.037	0.24	0.14	0.89
1,1,2-Trichloroethane	0.037	Not Detected	0.20	Not Detected
Tetrachloroethene	0.037	Not Detected	0.25	Not Detected
Ethyl Benzene	0.037	0.054	0.16	0.24
m,p-Xylene	0.073	0.19	0.32	0.83
o-Xylene	0.037	0.083	0.16	0.36

J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	94	70-130

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Client Sample ID: 6-IA(092215)

Lab ID#: 1509512-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100509**	**Date of Collection: 9/23/15 10:58:00 AM**	
Dil. Factor:	**4.38**	**Date of Analysis: 10/5/15 03:37 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.88	Not Detected	3.0	Not Detected
1,2,4-Trimethylbenzene	0.44	Not Detected	2.2	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	101	70-130

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Client Sample ID: 6-IA(092215)

Lab ID#: 1509512-03B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100509sim**	**Date of Collection:**	**9/23/15 10:58:00 AM**
Dil. Factor:	**4.38**	**Date of Analysis:**	**10/5/15 03:37 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.044	Not Detected	0.11	Not Detected
1,1-Dichloroethene	0.044	Not Detected	0.17	Not Detected
trans-1,2-Dichloroethene	0.44	Not Detected	1.7	Not Detected
cis-1,2-Dichloroethene	0.088	0.097	0.35	0.38
Chloroform	0.088	0.12	0.43	0.56
Benzene	0.22	Not Detected	0.70	Not Detected
1,2-Dichloroethane	0.088	Not Detected	0.35	Not Detected
Trichloroethene	0.088	0.12	0.47	0.65
Toluene	0.088	1.0	0.33	3.9
1,1,2-Trichloroethane	0.088	Not Detected	0.48	Not Detected
Tetrachloroethene	0.088	Not Detected	0.59	Not Detected
Ethyl Benzene	0.088	0.14	0.38	0.63
m,p-Xylene	0.18	0.49	0.76	2.1
o-Xylene	0.088	0.23	0.38	1.0

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	97	70-130

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Client Sample ID: 1-IA(092215)

Lab ID#: 1509512-04A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100510**	**Date of Collection: 9/23/15 12:02:00 PM**	
Dil. Factor:	**4.58**	**Date of Analysis: 10/5/15 04:24 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.92	Not Detected	3.2	Not Detected
1,2,4-Trimethylbenzene	0.46	Not Detected	2.2	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	95	70-130

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Client Sample ID: 1-IA(092215)

Lab ID#: 1509512-04B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100510sim**	**Date of Collection:**	**9/23/15 12:02:00 PM**
Dil. Factor:	**4.58**	**Date of Analysis:**	**10/5/15 04:24 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.046	Not Detected	0.12	Not Detected
1,1-Dichloroethene	0.046	Not Detected	0.18	Not Detected
trans-1,2-Dichloroethene	0.46	Not Detected	1.8	Not Detected
cis-1,2-Dichloroethene	0.092	0.15	0.36	0.61
Chloroform	0.092	0.15	0.45	0.75
Benzene	0.23	1.2	0.73	3.8
1,2-Dichloroethane	0.092	0.21	0.37	0.84
Trichloroethene	0.092	0.20	0.49	1.1
Toluene	0.092	1.4	0.34	5.4
1,1,2-Trichloroethane	0.092	Not Detected	0.50	Not Detected
Tetrachloroethene	0.092	Not Detected	0.62	Not Detected
Ethyl Benzene	0.092	0.23	0.40	1.0
m,p-Xylene	0.18	0.59	0.80	2.6
o-Xylene	0.092	0.22	0.40	0.95

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130

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Client Sample ID: 5-IA(092215)

Lab ID#: 1509512-05A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100511**	**Date of Collection: 9/23/15 1:05:00 PM**	
Dil. Factor:	**1.91**	**Date of Analysis: 10/5/15 05:19 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.38	0.59	1.3	2.0
1,2,4-Trimethylbenzene	0.19	Not Detected	0.94	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	98	70-130

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Client Sample ID: 5-IA(092215)

Lab ID#: 1509512-05B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100511sim**	**Date of Collection: 9/23/15 1:05:00 PM**	
Dil. Factor:	**1.91**	**Date of Analysis: 10/5/15 05:19 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.019	0.024	0.049	0.062
1,1-Dichloroethene	0.019	Not Detected	0.076	Not Detected
trans-1,2-Dichloroethene	0.19	Not Detected	0.76	Not Detected
cis-1,2-Dichloroethene	0.038	0.16	0.15	0.65
Chloroform	0.038	0.044	0.19	0.21
Benzene	0.096	0.27	0.30	0.86
1,2-Dichloroethane	0.038	0.044	0.15	0.18
Trichloroethene	0.038	0.16	0.20	0.86
Toluene	0.038	0.70	0.14	2.6
1,1,2-Trichloroethane	0.038	Not Detected	0.21	Not Detected
Tetrachloroethene	0.038	Not Detected	0.26	Not Detected
Ethyl Benzene	0.038	0.12	0.16	0.55
m,p-Xylene	0.076	0.37	0.33	1.6
o-Xylene	0.038	0.13	0.16	0.56

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	94	70-130

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Client Sample ID: 2-IA(092215)

Lab ID#: 1509512-06A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100512**	**Date of Collection: 9/23/15 2:08:00 PM**	
Dil. Factor:	**4.38**	**Date of Analysis: 10/5/15 06:04 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.88	Not Detected	3.0	Not Detected
1,2,4-Trimethylbenzene	0.44	Not Detected	2.2	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: 2-IA(092215)

Lab ID#: 1509512-06B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100512sim**	**Date of Collection: 9/23/15 2:08:00 PM**	
Dil. Factor:	**4.38**	**Date of Analysis: 10/5/15 06:04 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.044	Not Detected	0.11	Not Detected
1,1-Dichloroethene	0.044	Not Detected	0.17	Not Detected
trans-1,2-Dichloroethene	0.44	Not Detected	1.7	Not Detected
cis-1,2-Dichloroethene	0.088	0.14	0.35	0.57
Chloroform	0.088	0.19	0.43	0.91
Benzene	0.22	0.25	0.70	0.81
1,2-Dichloroethane	0.088	1.7	0.35	7.0
Trichloroethene	0.088	0.20	0.47	1.1
Toluene	0.088	2.1	0.33	7.9
1,1,2-Trichloroethane	0.088	Not Detected	0.48	Not Detected
Tetrachloroethene	0.088	Not Detected	0.59	Not Detected
Ethyl Benzene	0.088	0.20	0.38	0.85
m,p-Xylene	0.18	0.43	0.76	1.9
o-Xylene	0.088	0.25	0.38	1.1

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: 3-IA(092215)

Lab ID#: 1509512-07A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100513**	**Date of Collection: 9/23/15 3:33:00 PM**	
Dil. Factor:	**17.5**	**Date of Analysis: 10/5/15 06:49 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	3.5	Not Detected	12	Not Detected
1,2,4-Trimethylbenzene	1.8	Not Detected	8.6	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	98	70-130

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Client Sample ID: 3-IA(092215)

Lab ID#: 1509512-07B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100513sim**	**Date of Collection: 9/23/15 3:33:00 PM**	
Dil. Factor:	**17.5**	**Date of Analysis: 10/5/15 06:49 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.18	Not Detected	0.45	Not Detected
1,1-Dichloroethene	0.18	Not Detected	0.69	Not Detected
trans-1,2-Dichloroethene	1.8	Not Detected	6.9	Not Detected
cis-1,2-Dichloroethene	0.35	Not Detected	1.4	Not Detected
Chloroform	0.35	0.86	1.7	4.2
Benzene	0.88	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.35	Not Detected	1.4	Not Detected
Trichloroethene	0.35	Not Detected	1.9	Not Detected
Toluene	0.35	1.5	1.3	5.6
1,1,2-Trichloroethane	0.35	Not Detected	1.9	Not Detected
Tetrachloroethene	0.35	Not Detected	2.4	Not Detected
Ethyl Benzene	0.35	Not Detected	1.5	Not Detected
m,p-Xylene	0.70	Not Detected	3.0	Not Detected
o-Xylene	0.35	Not Detected	1.5	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: 4-IA(092215)

Lab ID#: 1509512-08A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100514**	**Date of Collection: 9/23/15 4:47:00 PM**	
Dil. Factor:	**1.79**	**Date of Analysis: 10/5/15 07:52 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.36	Not Detected	1.2	Not Detected
1,2,4-Trimethylbenzene	0.18	Not Detected	0.88	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	96	70-130

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Client Sample ID: 4-IA(092215)

Lab ID#: 1509512-08B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100514sim**	**Date of Collection:**	**9/23/15 4:47:00 PM**
Dil. Factor:	**1.79**	**Date of Analysis:**	**10/5/15 07:52 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	0.031	0.046	0.079
1,1-Dichloroethene	0.018	Not Detected	0.071	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.71	Not Detected
cis-1,2-Dichloroethene	0.036	0.14	0.14	0.58
Chloroform	0.036	0.19	0.17	0.94
Benzene	0.090	0.58	0.28	1.8
1,2-Dichloroethane	0.036	0.30	0.14	1.2
Trichloroethene	0.036	0.18	0.19	0.99
Toluene	0.036	0.72	0.13	2.7
1,1,2-Trichloroethane	0.036	Not Detected	0.20	Not Detected
Tetrachloroethene	0.036	Not Detected	0.24	Not Detected
Ethyl Benzene	0.036	0.10	0.16	0.43
m,p-Xylene	0.072	0.26	0.31	1.1
o-Xylene	0.036	0.13	0.16	0.56

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1509512-09A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100506**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/5/15 12:51 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.20	Not Detected	0.69	Not Detected
1,2,4-Trimethylbenzene	0.10	Not Detected	0.49	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	93	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1509512-09B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100506sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/5/15 12:51 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.010	Not Detected	0.026	Not Detected
1,1-Dichloroethene	0.010	Not Detected	0.040	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
cis-1,2-Dichloroethene	0.020	Not Detected	0.079	Not Detected
Chloroform	0.020	Not Detected	0.098	Not Detected
Benzene	0.050	Not Detected	0.16	Not Detected
1,2-Dichloroethane	0.020	Not Detected	0.081	Not Detected
Trichloroethene	0.020	Not Detected	0.11	Not Detected
Toluene	0.020	Not Detected	0.075	Not Detected
1,1,2-Trichloroethane	0.020	Not Detected	0.11	Not Detected
Tetrachloroethene	0.020	Not Detected	0.14	Not Detected
Ethyl Benzene	0.020	Not Detected	0.087	Not Detected
m,p-Xylene	0.040	Not Detected	0.17	Not Detected
o-Xylene	0.020	Not Detected	0.087	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	91	70-130

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Client Sample ID: CCV

Lab ID#: 1509512-10A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100502**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/5/15 09:23 AM**	

Compound	**%Recovery**
Methylene Chloride	93
1,2,4-Trimethylbenzene	95

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: CCV

Lab ID#: 1509512-10B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100502sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/5/15 09:23 AM**	

Compound	%Recovery
Vinyl Chloride	99
1,1-Dichloroethene	94
trans-1,2-Dichloroethene	89
cis-1,2-Dichloroethene	101
Chloroform	103
Benzene	88
1,2-Dichloroethane	108
Trichloroethene	87
Toluene	96
1,1,2-Trichloroethane	93
Tetrachloroethene	88
Ethyl Benzene	103
m,p-Xylene	99
o-Xylene	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	98	70-130

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Client Sample ID: LCS

Lab ID#: 1509512-11A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100503**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/5/15 10:09 AM**	

Compound	%Recovery	Method Limits
Methylene Chloride	102	70-130
1,2,4-Trimethylbenzene	95	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	95	70-130

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Client Sample ID: LCSD

Lab ID#: 1509512-11AA

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/5/15 10:48 AM**	

Compound	%Recovery	Method Limits
Methylene Chloride	104	70-130
1,2,4-Trimethylbenzene	92	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	93	70-130

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Client Sample ID: LCS

Lab ID#: 1509512-11B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100503sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/5/15 10:09 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	111	70-130
1,1-Dichloroethene	100	70-130
trans-1,2-Dichloroethene	81	70-130
cis-1,2-Dichloroethene	118	70-130
Chloroform	109	70-130
Benzene	96	70-130
1,2-Dichloroethane	115	70-130
Trichloroethene	94	70-130
Toluene	104	70-130
1,1,2-Trichloroethane	100	70-130
Tetrachloroethene	95	70-130
Ethyl Benzene	111	70-130
m,p-Xylene	108	70-130
o-Xylene	112	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130

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Client Sample ID: LCSD

Lab ID#: 1509512-11BB

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100504sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/5/15 10:48 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	110	70-130
1,1-Dichloroethene	101	70-130
trans-1,2-Dichloroethene	83	70-130
cis-1,2-Dichloroethene	119	70-130
Chloroform	110	70-130
Benzene	96	70-130
1,2-Dichloroethane	116	70-130
Trichloroethene	94	70-130
Toluene	102	70-130
1,1,2-Trichloroethane	101	70-130
Tetrachloroethene	96	70-130
Ethyl Benzene	106	70-130
m,p-Xylene	101	70-130
o-Xylene	103	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	93	70-130



Electronic Comprehensive Validation Package (eCVP)

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COMPREHENSIVE VALIDATION PACKAGE

Modified TO-15

INVENTORY SHEET

Work Order #: 1509512

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Comments:

Completed by:

Vera Belitsky	Vera Belitsky / Document Control	10/23/15
(Signature)	(Print Name & Title)	(Date)

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WORK ORDER #: 1509512

Work Order Summary

CLIENT:	Ms. Marie Heap Arcadis U.S., Inc. 132 East Washington St., Suite 600 Indianapolis, IN 46204	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317-231-6500	**P.O. #**	IN000899.2013
FAX:	317-231-6514	**PROJECT #**	IN000899.2013 Grenada Manufacturing
DATE RECEIVED:	09/30/2015	**CONTACT:**	Ausha Scott
DATE COMPLETED:	10/12/2015		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	1-AA(092215)	Modified TO-15	9.0 "Hg	5 psi
01B	1-AA(092215)	Modified TO-15	9.0 "Hg	5 psi
02A	2-AA(092215)	Modified TO-15	8.0 "Hg	5 psi
02B	2-AA(092215)	Modified TO-15	8.0 "Hg	5 psi
03A	6-IA(092215)	Modified TO-15	7.0 "Hg	5 psi
03B	6-IA(092215)	Modified TO-15	7.0 "Hg	5 psi
04A	1-IA(092215)	Modified TO-15	8.0 "Hg	5 psi
04B	1-IA(092215)	Modified TO-15	8.0 "Hg	5 psi
05A	5-IA(092215)	Modified TO-15	9.0 "Hg	5 psi
05B	5-IA(092215)	Modified TO-15	9.0 "Hg	5 psi
06A	2-IA(092215)	Modified TO-15	7.0 "Hg	5 psi
06B	2-IA(092215)	Modified TO-15	7.0 "Hg	5 psi
07A	3-IA(092215)	Modified TO-15	7.0 "Hg	5 psi
07B	3-IA(092215)	Modified TO-15	7.0 "Hg	5 psi
08A	4-IA(092215)	Modified TO-15	7.5 "Hg	5 psi
08B	4-IA(092215)	Modified TO-15	7.5 "Hg	5 psi
09A	Lab Blank	Modified TO-15	NA	NA
09B	Lab Blank	Modified TO-15	NA	NA
10A	CCV	Modified TO-15	NA	NA
10B	CCV	Modified TO-15	NA	NA
11A	LCS	Modified TO-15	NA	NA
11AA	LCSD	Modified TO-15	NA	NA
11B	LCS	Modified TO-15	NA	NA

Continued on next page

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WORK ORDER #: 1509512

Work Order Summary

CLIENT:	Ms. Marie Heap Arcadis U.S., Inc. 132 East Washington St., Suite 600 Indianapolis, IN 46204	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317-231-6500	**P.O. #**	IN000899.2013
FAX:	317-231-6514	**PROJECT #**	IN000899.2013 Grenada Manufacturing
DATE RECEIVED:	09/30/2015	**CONTACT:**	Ausha Scott
DATE COMPLETED:	10/12/2015		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
11BB	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 10/12/15

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 956
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15 Full Scan/SIM
Arcadis U.S., Inc.
Workorder# 1509512

Eight 6 Liter Summa Canister (SIM Certified) samples were received on September 30, 2015. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the Full Scan and SIM acquisition modes. The method involves concentrating up to 1.0 liters of air. The concentrated aliquot is then flash vaporized and swept through a water management system to remove water vapor. Following dehumidification, the sample passes directly into the GC/MS for analysis.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-15***	***ATL Modifications***
ICAL %RSD acceptance criteria	</=30% RSD with 2 compounds allowed out to < 40% RSD	For Full Scan: 30% RSD with 4 compounds allowed out to < 40% RSD For SIM: Project specific; default criteria is </=30% RSD with 10% of compounds allowed out to < 40% RSD
Daily Calibration	+- 30% Difference	For Full Scan: </= 30% Difference with four allowed out up to </=40%.; flag and narrate outliers For SIM: Project specific; default criteria is </= 30% Difference with 10% of compounds allowed out up to </=40%.; flag and narrate outliers
Blank and standards	Zero air	Nitrogen
Method Detection Limit	Follow 40CFR Pt.136 App. B	The MDL met all relevant requirements in Method TO-15 (statistical MDL less than the LOQ). The concentration of the spiked replicate may have exceeded 10X the calculated MDL in some cases

Receiving Notes

The Chain of Custody (COC) information for sample 2-AA(092215) did not match the information on the canister with regard to canister identification. The information on the canister was used to process and report the sample.

Analytical Notes

The results for each sample in this report were acquired from two separate data files originating from the same analytical run. The two data files have the same base file name and are differentiated with a "sim"

extension on the SIM data file.

Dilution was performed on samples 6-IA(092215), 1-IA(092215), 2-IA(092215), and 3-IA(092215) due to the presence of high level non-target species.

Definition of Data Qualifying Flags

Nine qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

CN - See case narrative explanation

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
1-AA(092215)	1509512-01A	9/23/2015	9/30/2015	NA	12	10/ 5/2015	NA	Good
1-AA(092215)	1509512-01B	9/23/2015	9/30/2015	NA	12	10/ 5/2015	NA	Good
2-AA(092215)	1509512-02A	9/23/2015	9/30/2015	NA	12	10/ 5/2015	NA	Good
2-AA(092215)	1509512-02B	9/23/2015	9/30/2015	NA	12	10/ 5/2015	NA	Good
6-IA(092215)	1509512-03A	9/23/2015	9/30/2015	NA	12	10/ 5/2015	NA	Good
6-IA(092215)	1509512-03B	9/23/2015	9/30/2015	NA	12	10/ 5/2015	NA	Good
1-IA(092215)	1509512-04A	9/23/2015	9/30/2015	NA	12	10/ 5/2015	NA	Good
1-IA(092215)	1509512-04B	9/23/2015	9/30/2015	NA	12	10/ 5/2015	NA	Good
5-IA(092215)	1509512-05A	9/23/2015	9/30/2015	NA	12	10/ 5/2015	NA	Good
5-IA(092215)	1509512-05B	9/23/2015	9/30/2015	NA	12	10/ 5/2015	NA	Good
2-IA(092215)	1509512-06A	9/23/2015	9/30/2015	NA	12	10/ 5/2015	NA	Good
2-IA(092215)	1509512-06B	9/23/2015	9/30/2015	NA	12	10/ 5/2015	NA	Good
3-IA(092215)	1509512-07A	9/23/2015	9/30/2015	NA	12	10/ 5/2015	NA	Good
3-IA(092215)	1509512-07B	9/23/2015	9/30/2015	NA	12	10/ 5/2015	NA	Good
4-IA(092215)	1509512-08A	9/23/2015	9/30/2015	NA	12	10/ 5/2015	NA	Good
4-IA(092215)	1509512-08B	9/23/2015	9/30/2015	NA	12	10/ 5/2015	NA	Good
Lab Blank	1509512-09A	NA	NA	NA	NA	10/ 5/2015	NA	Good
Lab Blank	1509512-09B	NA	NA	NA	NA	10/ 5/2015	NA	Good
CCV	1509512-10A	NA	NA	NA	NA	10/ 5/2015	NA	Good
CCV	1509512-10B	NA	NA	NA	NA	10/ 5/2015	NA	Good
LCS	1509512-11A	NA	NA	NA	NA	10/ 5/2015	NA	Good
LCSD	1509512-11AA	NA	NA	NA	NA	10/ 5/2015	NA	Good
LCS	1509512-11B	NA	NA	NA	NA	10/ 5/2015	NA	Good
LCSD	1509512-11BB	NA	NA	NA	NA	10/ 5/2015	NA	Good

Sample Results and Raw Data

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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: 1-AA(092215)

Lab ID#: 1509512-01A

No Detections Were Found.

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Client Sample ID: 1-AA(092215)

Lab ID#: 1509512-01A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100507**	**Date of Collection: 9/23/15 10:43:00 AM**	
Dil. Factor:	**1.91**	**Date of Analysis: 10/5/15 01:51 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.38	Not Detected	1.3	Not Detected
1,2,4-Trimethylbenzene	0.19	Not Detected	0.94	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	99	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	97	70-130

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TO15/Modified TO-14A

Data file : /chem/msdv.i/05Oct2015.b/v100507.d
Lab Smp Id: 1509512-01A
Inj Date : 05-OCT-2015 13:51
Operator : mjs Inst ID: msdv.i
Smp Info : 250mL #6L1237
Misc Info : 9.0"Hg ->5.0psi
Comment : Low Level GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m
Meth Date : 05-Oct-2015 11:52 mskidmor Quant Type: ISTD
Cal Date : 29-SEP-2015 21:58 Cal File: v092913.d
Als bottle: 1
Dil Factor: 1.91000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 54 Bromochloromethane						CAS #: 74-97-5	
15.743	15.743 (1.000)	130	72211	5.00000		80.00- 120.00	100.00
15.743	15.743 (1.000)	128	53534			48.04- 108.04	74.14
15.743	15.743 (1.000)	49	196446			284.77- 344.77	272.04
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.111	17.111 (1.000)	114	326689	5.00000		80.00- 120.00	100.00
17.111	17.111 (1.000)	88	42143			0.00- 44.16	12.90
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.029	22.029 (1.000)	117	279884	5.00000		80.00- 120.00	100.00
22.029	22.029 (1.000)	82	138475			18.70- 78.70	49.48
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.562	16.562 (1.052)	65	126254	4.95760	4.958	80.00- 120.00	100.00
16.562	16.562 (1.052)	67	56658			19.41- 79.41	44.88
$ 80 Toluene-d8						CAS #: 2037-26-5	
19.615	19.615 (1.146)	98	305335	4.95818	4.958	80.00- 120.00	100.00
19.615	19.615 (1.146)	70	32079			0.00- 40.74	10.51

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.615	19.615 (1.146)	100	200295			34.93- 94.93	65.60
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.535	23.535 (1.068)	174	139846	4.86342	4.863	80.00- 120.00	100.00
23.535	23.535 (1.068)	95	159269			94.06- 154.06	113.89
23.535	23.535 (1.068)	176	135183			68.95- 128.95	96.67

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100507.d
Lab Smp Id: 1509512-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: mjs
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: 9.0"Hg ->5.0psi

Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	78102	46861	109343	72211	-7.54
71 1,4-Difluorobenze	340477	204286	476668	326689	-4.05
92 Chlorobenzene-d5	294231	176539	411923	279884	-4.88

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.74	15.41	16.07	15.74	0.00
71 1,4-Difluorobenze	17.11	16.78	17.44	17.11	0.00
92 Chlorobenzene-d5	22.03	21.70	22.36	22.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Oct-2015 12:22

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RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509512-01A
Level: LOW Operator: mjs
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: 9.0"Hg ->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	4.958	99.15	70-130
$ 80 Toluene-d8	5.000	4.958	99.16	70-130
$ 106 Bromofluorobenzene	5.000	4.863	97.27	70-130

Data File: /chem/msdv.i/05Oct2015.b/v100507.d

Date : 05-OCT-2015 13:51

Client ID:

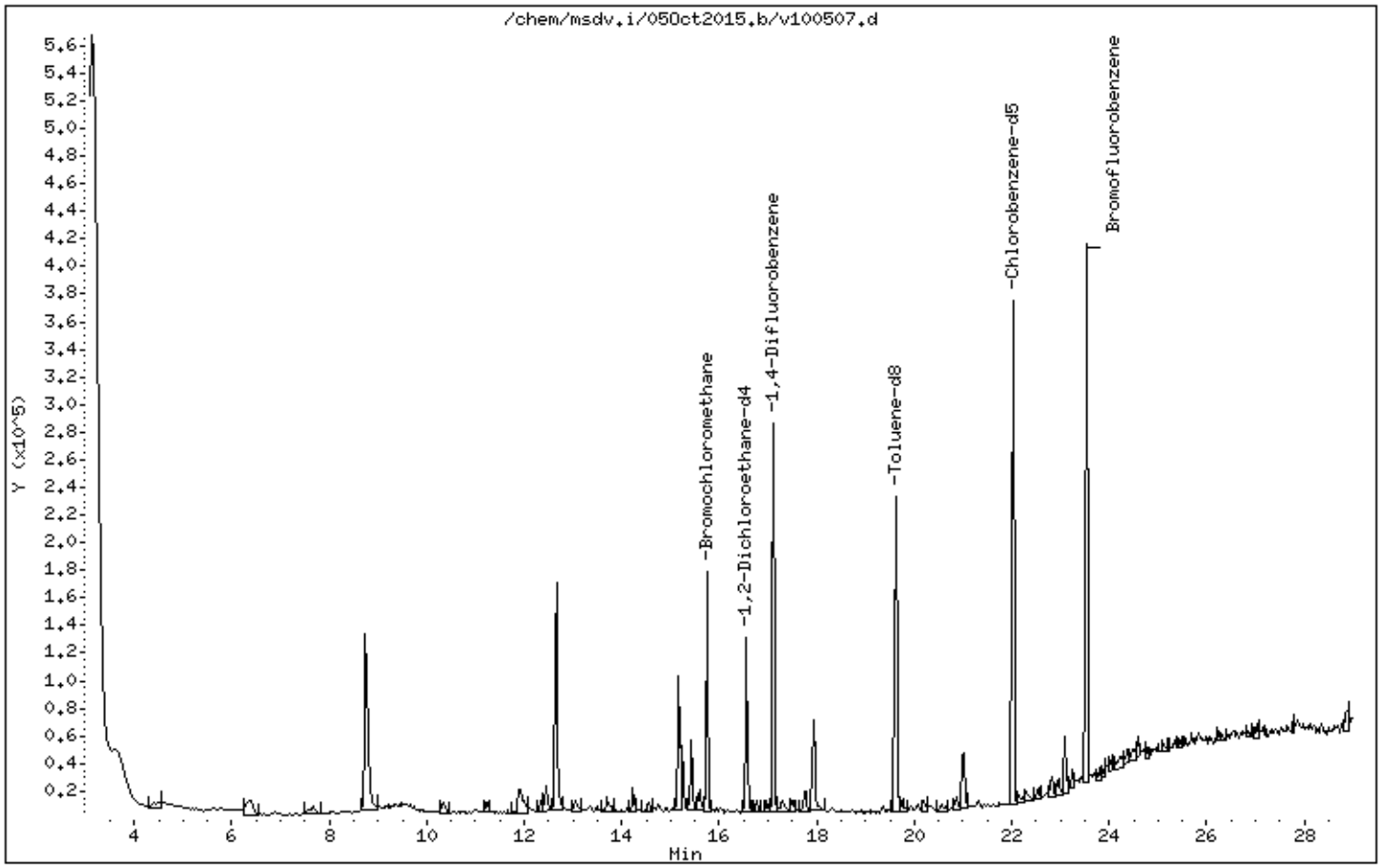
Instrument: msdv.i

Sample Info: 250mL #6L1237

Operator: mjs

Column phase: RTx-624

Column diameter: 0.32



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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: 1-AA(092215)

Lab ID#: 1509512-01B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.019	0.040	0.049	0.10
cis-1,2-Dichloroethene	0.038	0.21	0.15	0.85
Benzene	0.096	0.095 J	0.30	0.30 J
Trichloroethene	0.038	0.22	0.20	1.2
Toluene	0.038	0.18	0.14	0.66
m,p-Xylene	0.076	0.12	0.33	0.52
o-Xylene	0.038	0.066	0.16	0.29

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Client Sample ID: 1-AA(092215)

Lab ID#: 1509512-01B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100507sim**	**Date of Collection:**	**9/23/15 10:43:00 AM**
Dil. Factor:	**1.91**	**Date of Analysis:**	**10/5/15 01:51 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.019	0.040	0.049	0.10
1,1-Dichloroethene	0.019	Not Detected	0.076	Not Detected
trans-1,2-Dichloroethene	0.19	Not Detected	0.76	Not Detected
cis-1,2-Dichloroethene	0.038	0.21	0.15	0.85
Chloroform	0.038	Not Detected	0.19	Not Detected
Benzene	0.096	0.095 J	0.30	0.30 J
1,2-Dichloroethane	0.038	Not Detected	0.15	Not Detected
Trichloroethene	0.038	0.22	0.20	1.2
Toluene	0.038	0.18	0.14	0.66
1,1,2-Trichloroethane	0.038	Not Detected	0.21	Not Detected
Tetrachloroethene	0.038	Not Detected	0.26	Not Detected
Ethyl Benzene	0.038	Not Detected	0.16	Not Detected
m,p-Xylene	0.076	0.12	0.33	0.52
o-Xylene	0.038	0.066	0.16	0.29

J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	92	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/05Oct2015.b/v100507sim.d
Lab Smp Id: 1509512-01B
Inj Date : 05-OCT-2015 13:51
Operator : mjs Inst ID: msdv.i
Smp Info : 250mL #6L1237
Misc Info : 9.0"Hg ->5.0psi
Comment : SIM GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 05-Oct-2015 12:58 mskidmor Quant Type: ISTD
Cal Date : 29-SEP-2015 14:34 Cal File: v092903sim.d
Als bottle: 1
Dil Factor: 1.91000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 31 Bromochloromethane					CAS #: 74-97-5		
15.757	15.757 (1.000)	130	77893	5.00000		80.00- 120.00	100.00
15.757	15.757 (1.000)	128	60529			48.13- 108.13	77.71
15.757	15.757 (1.000)	49	213698			238.09- 298.09	274.35
* 40 1,4-Difluorobenzene					CAS #: 540-36-3		
17.125	17.125 (1.000)	114	334103	5.00000		80.00- 120.00	100.00
17.125	17.125 (1.000)	88	47667			0.00- 44.50	14.27
* 56 Chlorobenzene-d5					CAS #: 3114-55-4		
22.042	22.042 (1.000)	117	274604	5.00000		80.00- 120.00	100.00
22.015	22.042 (1.000)	82	128843			16.61- 76.61	46.92
$ 37 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.548	16.548 (1.050)	65	133049	5.17559	5.176	80.00- 120.00	100.00
16.548	16.548 (1.050)	67	59993			19.91- 79.91	45.09
$ 47 Toluene-d8					CAS #: 2037-26-5		
19.629	19.629 (1.146)	98	265137	4.91154	4.912	80.00- 120.00	100.00
19.629	19.629 (1.146)	70	29241			0.00- 41.04	11.03

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.629	19.629 (1.146)	100	163987			32.99- 92.99	61.85
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	140214	4.58337	4.583	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	160213			84.02- 144.02	114.26
23.548	23.548 (1.068)	176	136380			67.56- 127.56	97.27
5 Vinyl Chloride					CAS #: 75-01-4		
7.840	7.809 (0.498)	62	789	0.02123	0.04054	80.00- 120.00	100.00
7.840	7.809 (0.498)	64	228			0.00- 57.67	29.01
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.437	15.437 (0.980)	98	2210	0.11170	0.2134	80.00- 120.00	100.00
15.437	15.437 (0.980)	61	7745			264.63- 324.63	350.43
15.437	15.437 (0.980)	96	3692			126.49- 186.49	167.07
36 Benzene					CAS #: 71-43-2		
16.576	16.576 (0.968)	78	4395	0.04966	0.09485	80.00- 120.00	100.00(a)
16.576	16.576 (0.968)	77	1073			0.00- 52.79	24.43
41 Trichloroethene					CAS #: 79-01-6		
17.509	17.509 (1.022)	130	6136	0.11743	0.2243	80.00- 120.00	100.00
17.509	17.509 (1.022)	95	5876			64.71- 124.71	95.75
17.509	17.509 (1.022)	97	3661			31.19- 91.19	59.66
48 Toluene					CAS #: 108-88-3		
19.763	19.764 (1.154)	91	9332	0.09215	0.1760	80.00- 120.00	100.00
19.763	19.764 (1.154)	92	5540			28.99- 88.99	59.37
59 m,p-Xylene					CAS #: 108-38-3		
22.317	22.317 (1.012)	106	2225	0.06292	0.1202	80.00- 120.00	100.00
22.289	22.317 (1.011)	91	4910			185.00- 245.00	220.65
61 o-Xylene					CAS #: 95-47-6		
22.839	22.839 (1.036)	106	1164	0.03485	0.06656	80.00- 120.00	100.00
22.839	22.839 (1.036)	91	4155			198.20- 258.20	356.86

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Report Date: 12-Oct-2015 12:27

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100507sim.d
Lab Smp Id: 1509512-01B
Analysis Type: VOA
Quant Type: ISTD
Operator: mjs
Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Level: LOW
Sample Type: AIR
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 9.0"Hg ->5.0psi

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	81342	48805	113879	77893	-4.24
40 1,4-Difluorobenze	339188	203513	474863	334103	-1.50
56 Chlorobenzene-d5	289088	173453	404723	274604	-5.01

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Oct-2015 12:27

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509512-01B
Level: LOW Operator: mjs
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 9.0"Hg ->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 37 1,2-Dichloroethane	5.000	5.176	103.51	70-130
$ 47 Toluene-d8	5.000	4.912	98.23	70-130
$ 66 Bromofluorobenzene	5.000	4.583	91.67	70-130

Data File: /chem/msdv.i/05Oct2015.b/v100507sim.d

Page 1

Date : 05-OCT-2015 13:51

Client ID:

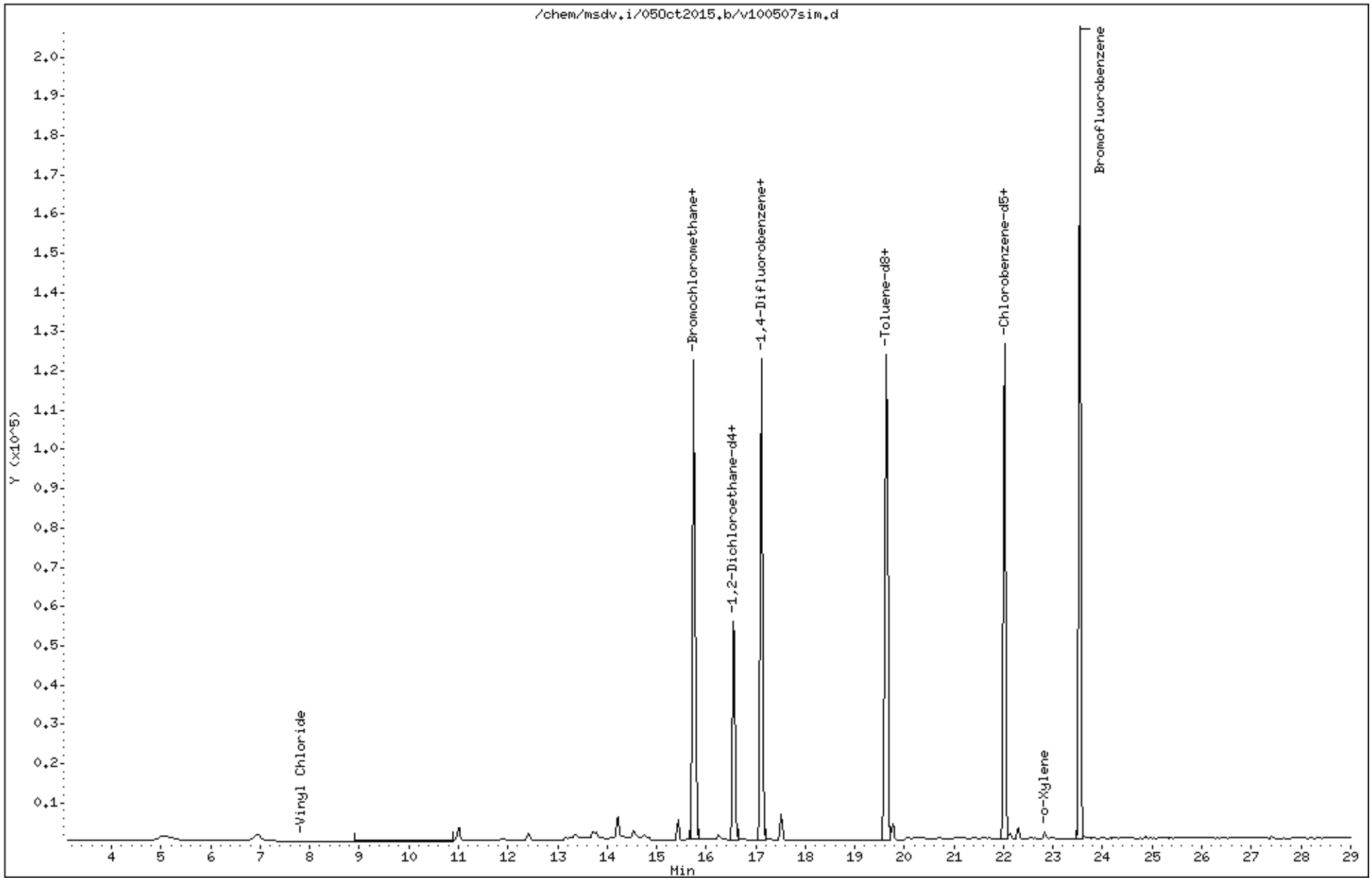
Instrument: msdv.i

Sample Info: 250mL #6L1237

Operator: mjs

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/05Oct2015.b/v100507sim.d

Date : 05-OCT-2015 13:51

Client ID:

Instrument: msdv.i

Sample Info: 250mL #6L1237

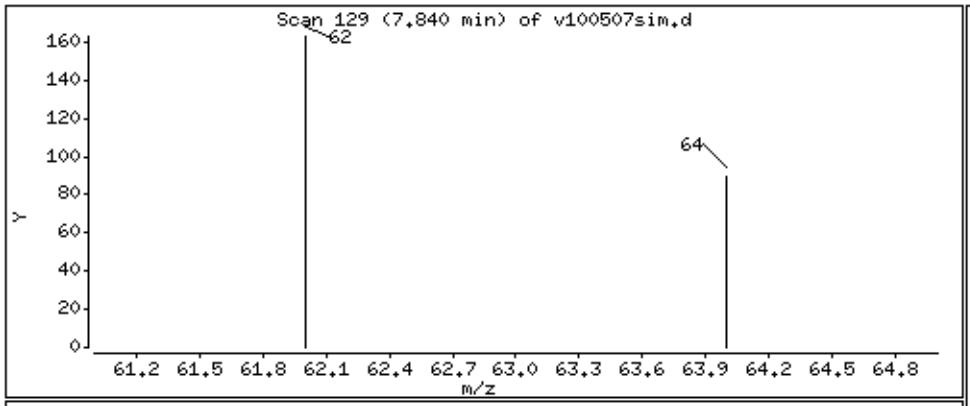
Operator: mjs

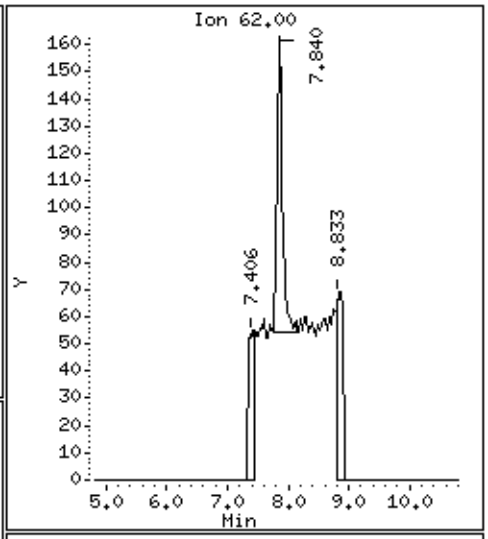
Column phase: RTx-624

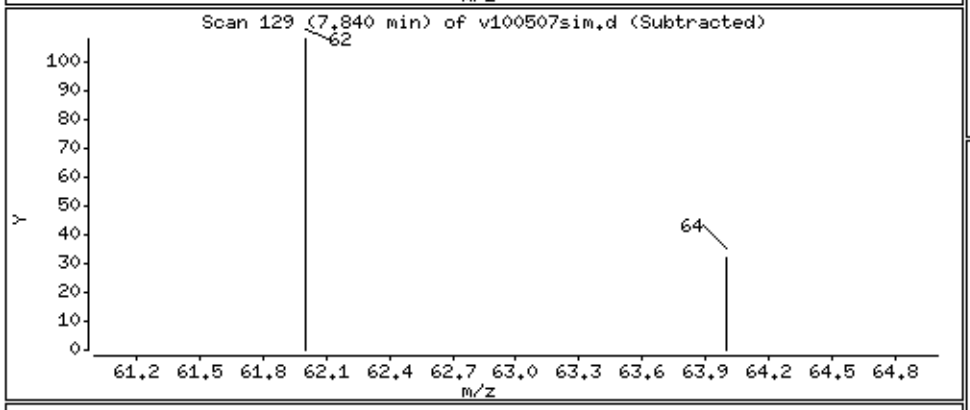
Column diameter: 0.32

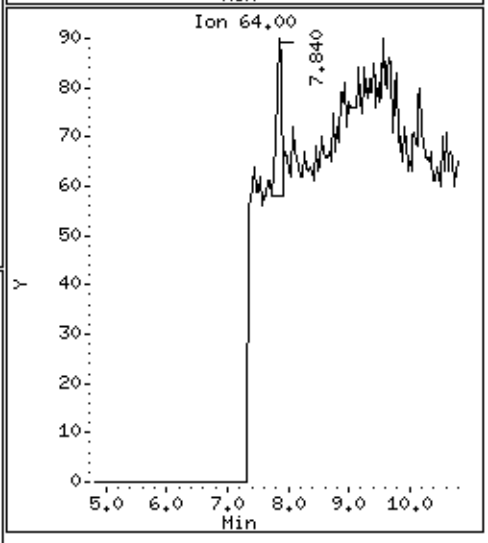
5 Vinyl Chloride

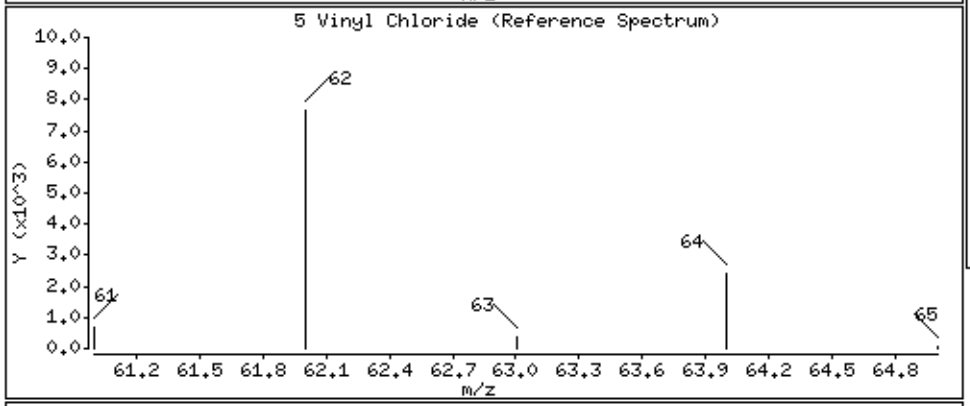
Concentration: 0.04054 PPBV

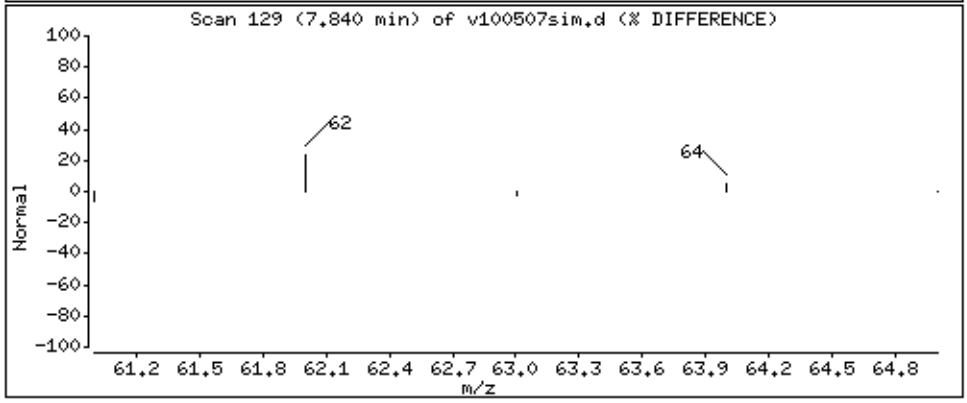












Data File: /chem/msdv.i/05Oct2015.b/v100507sim.d

Date : 05-OCT-2015 13:51

Client ID:

Instrument: msdv.i

Sample Info: 250mL #6L1237

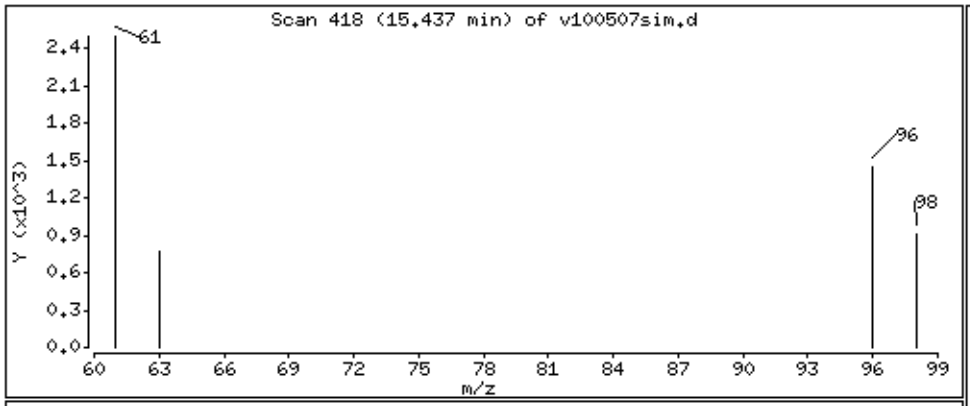
Operator: mjs

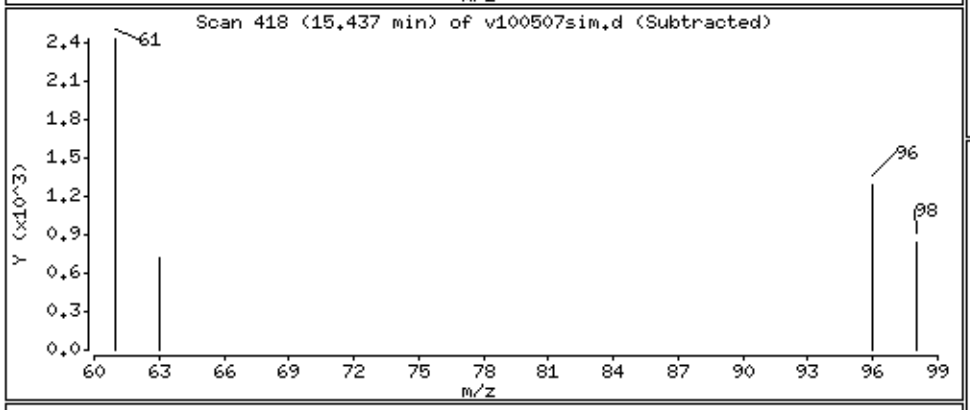
Column phase: RTx-624

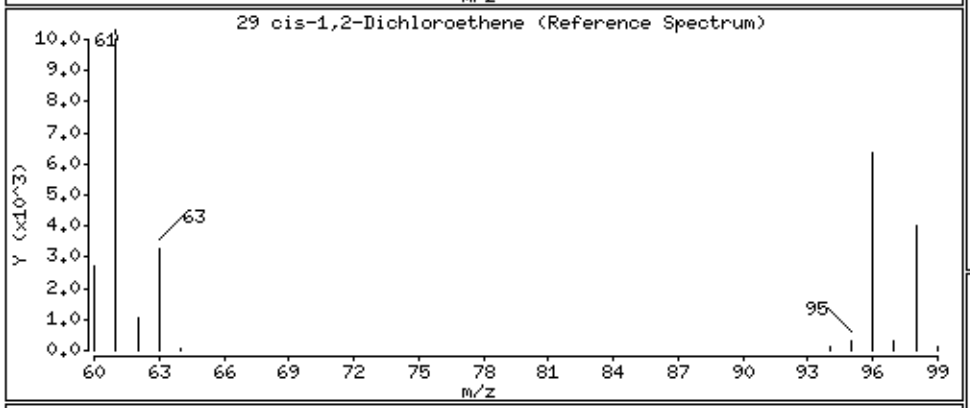
Column diameter: 0.32

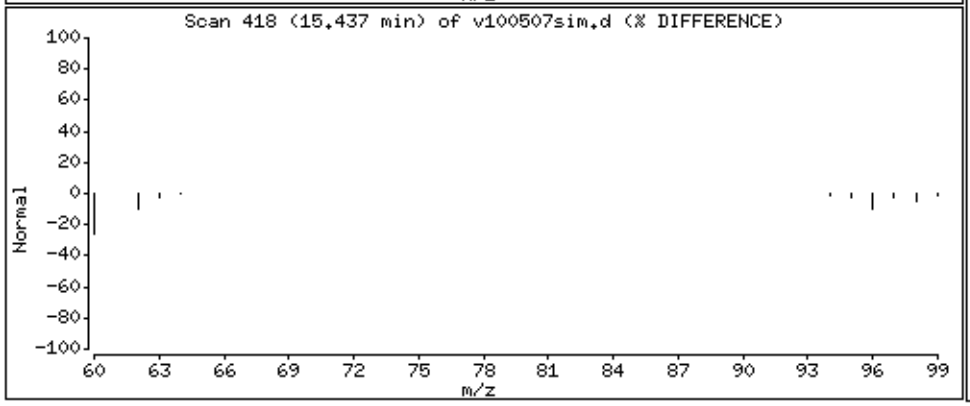
29 cis-1,2-Dichloroethene

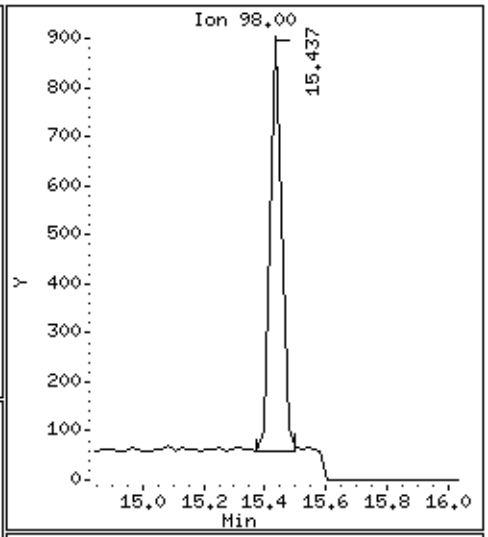
Concentration: 0.2134 PPBV

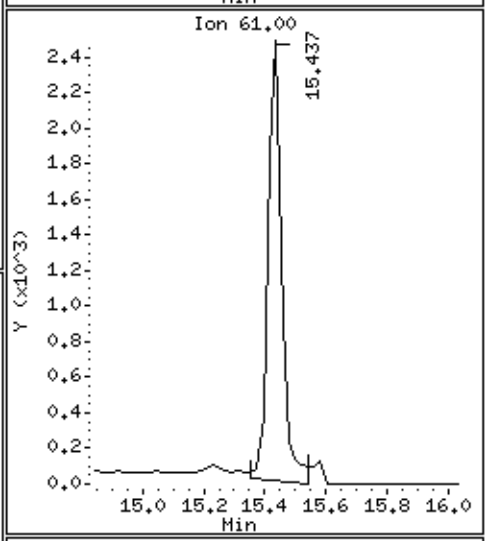


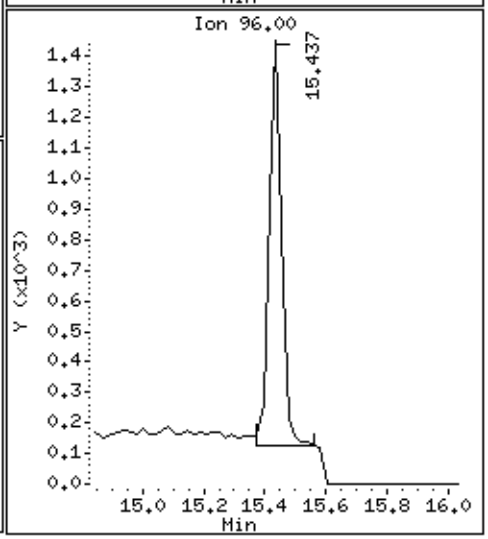












Data File: /chem/msdv.i/05Oct2015.b/v100507sim.d

Date : 05-OCT-2015 13:51

Client ID:

Instrument: msdv.i

Sample Info: 250mL #6L1237

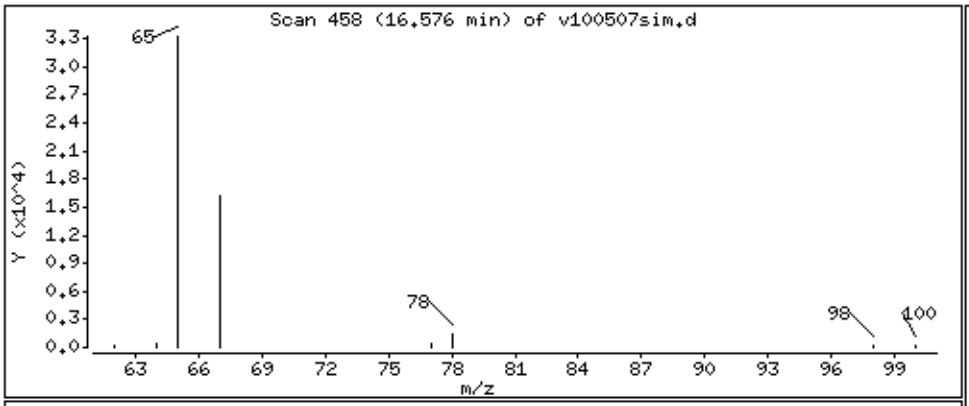
Operator: mjs

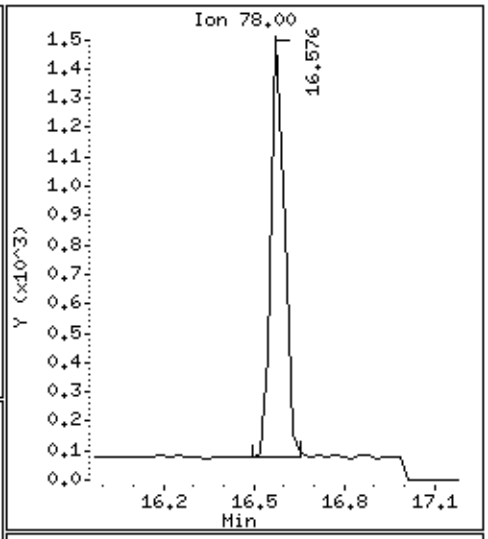
Column phase: RTx-624

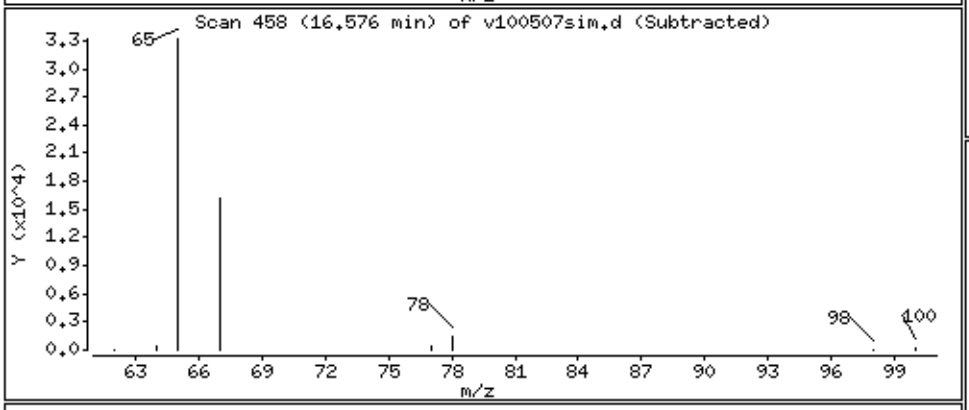
Column diameter: 0.32

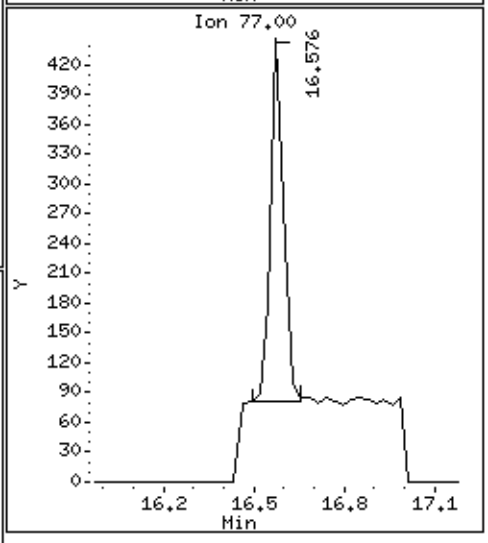
36 Benzene

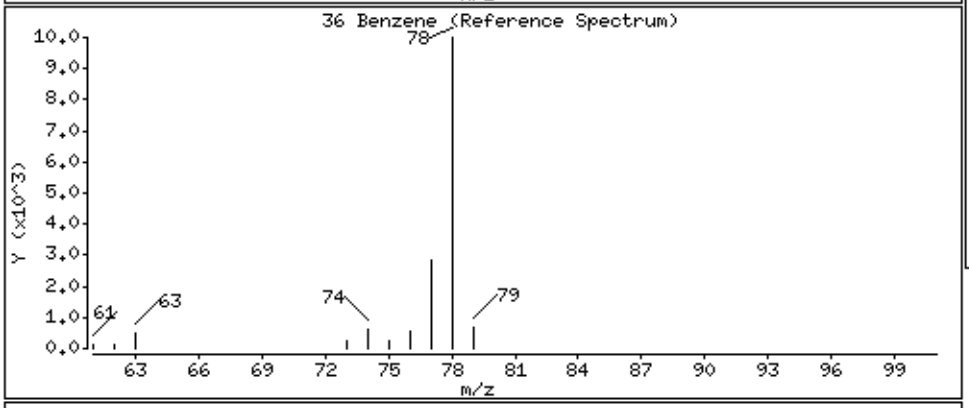
Concentration: 0.09485 PPBV

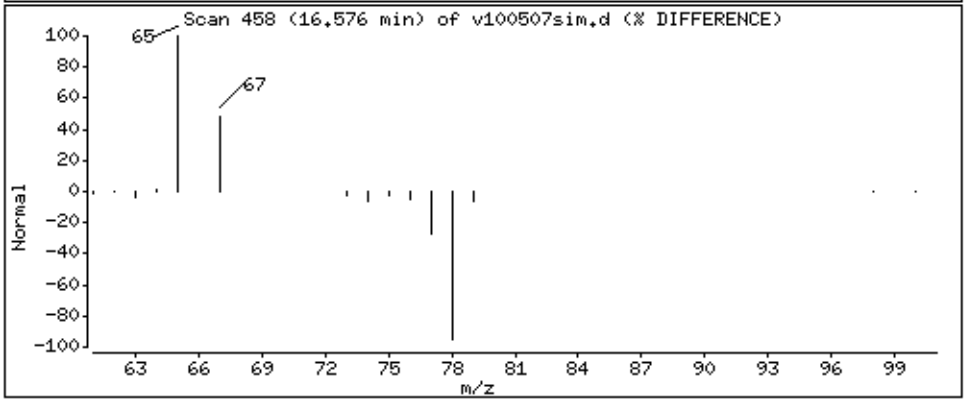












Data File: /chem/msdv.i/05Oct2015.b/v100507sim.d

Date : 05-OCT-2015 13:51

Client ID:

Instrument: msdv.i

Sample Info: 250mL #6L1237

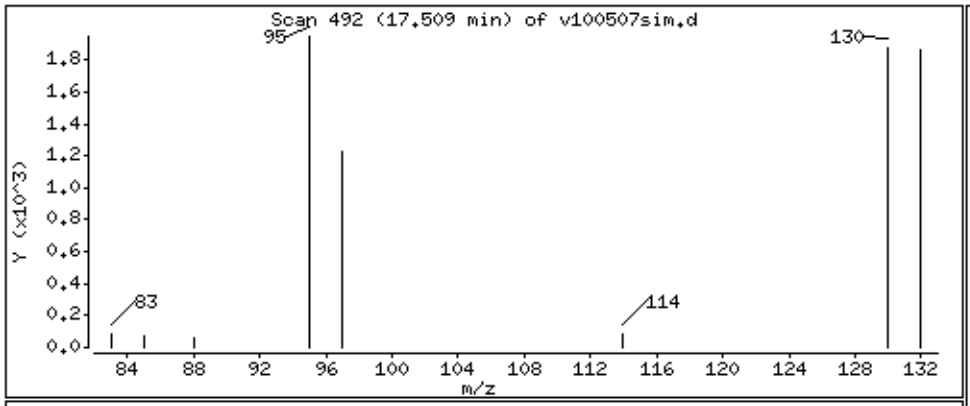
Operator: mjs

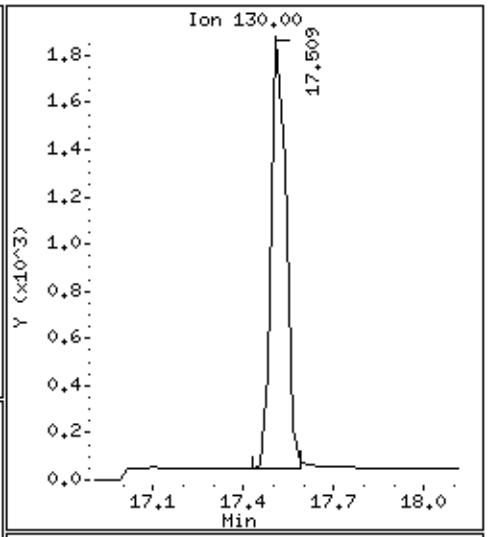
Column phase: RTx-624

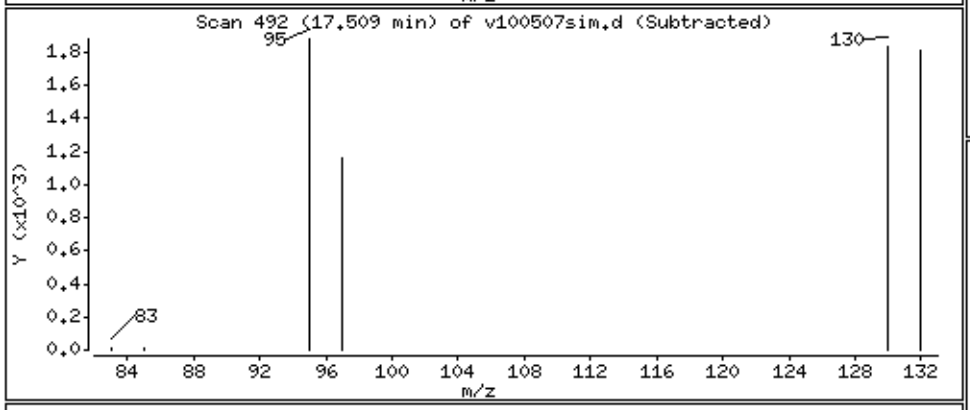
Column diameter: 0.32

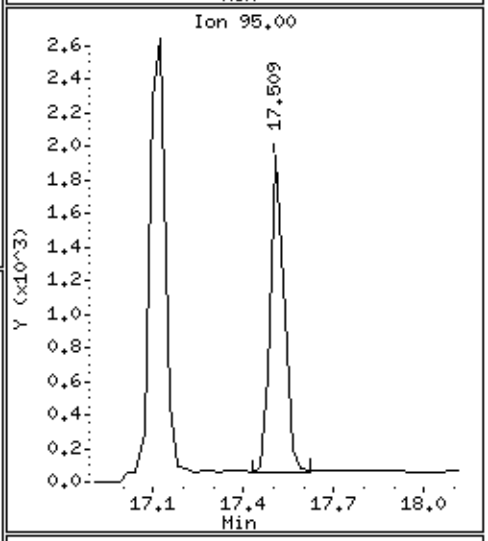
41 Trichloroethene

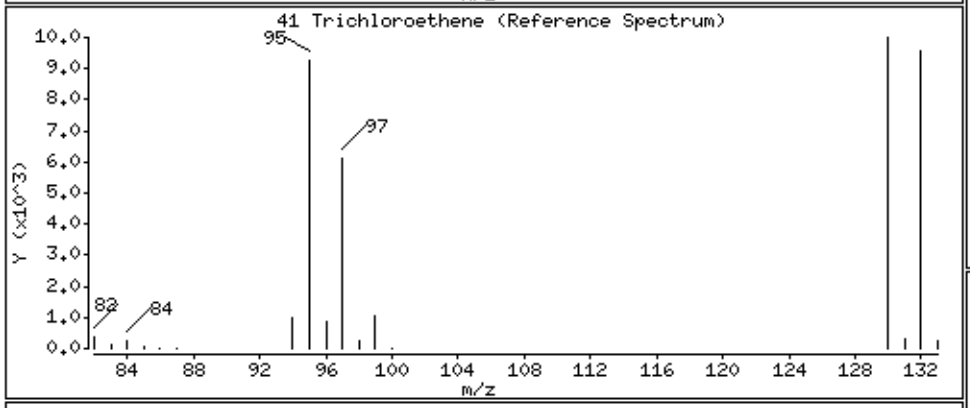
Concentration: 0.2243 PPBV

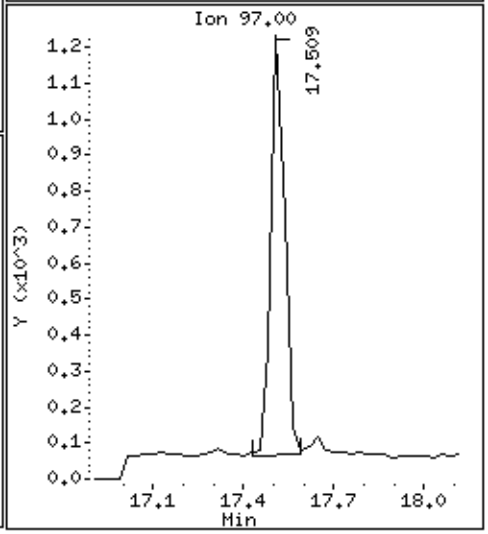


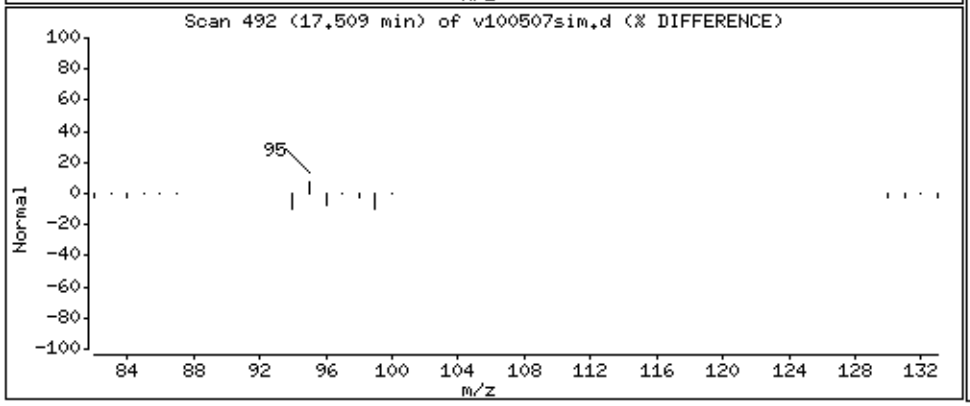












Data File: /chem/msdv.i/05Oct2015.b/v100507sim.d

Date : 05-OCT-2015 13:51

Client ID:

Instrument: msdv.i

Sample Info: 250mL #6L1237

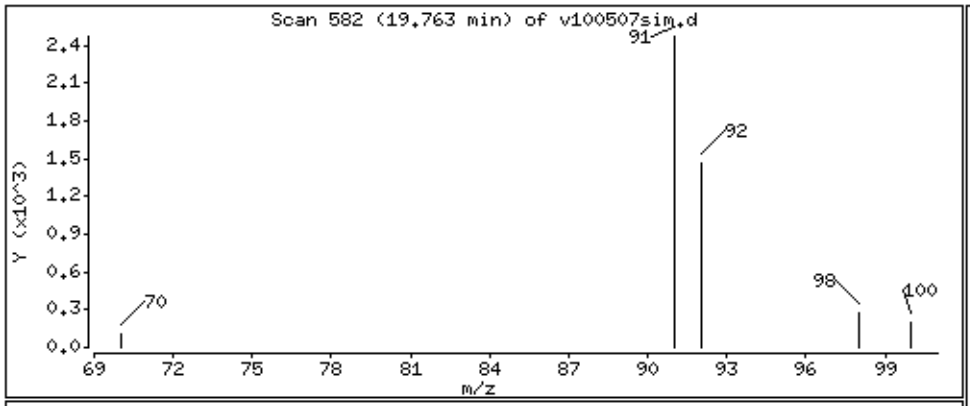
Operator: mjs

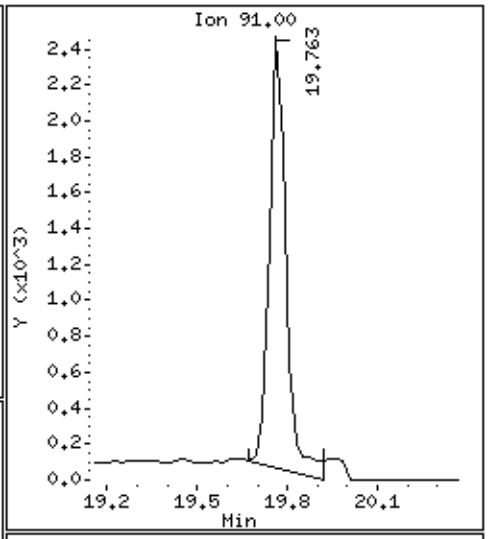
Column phase: RTx-624

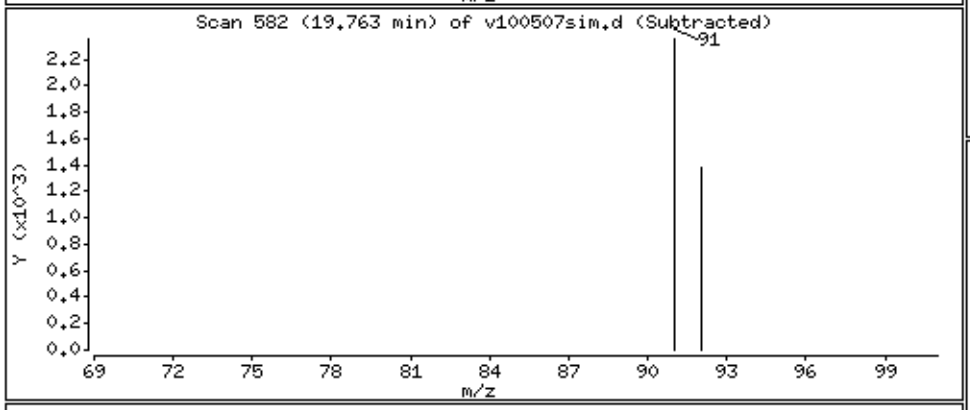
Column diameter: 0.32

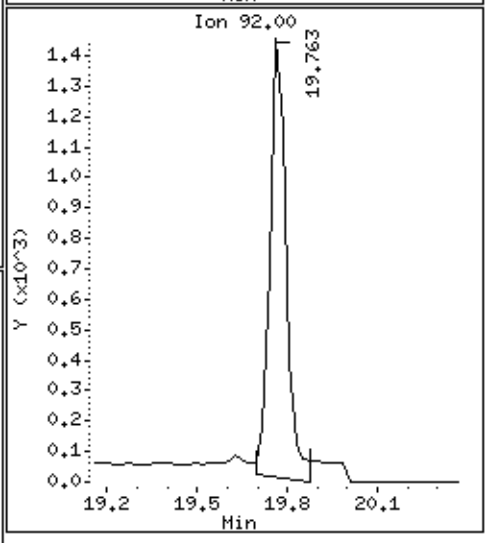
48 Toluene

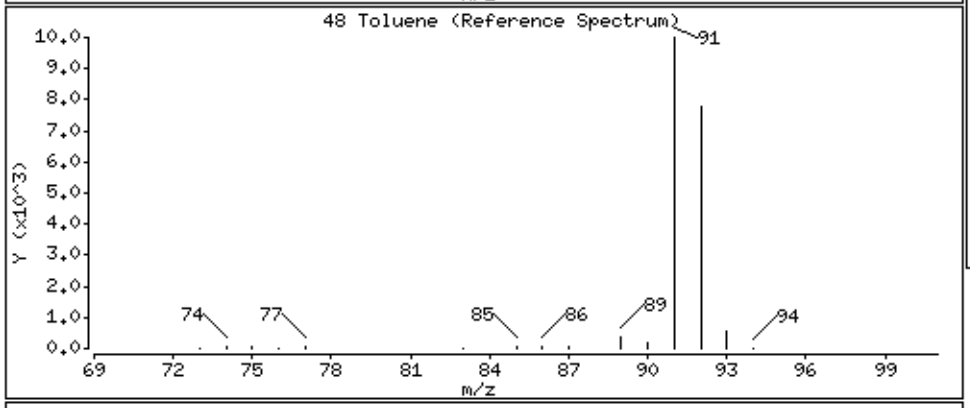
Concentration: 0.1760 PPBV

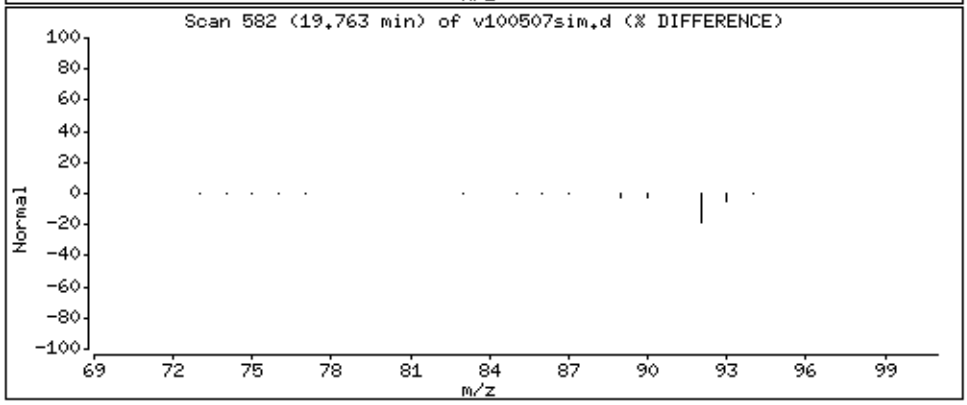












Data File: /chem/msdv.i/05Oct2015.b/v100507sim.d

Date : 05-OCT-2015 13:51

Client ID:

Instrument: msdv.i

Sample Info: 250mL #6L1237

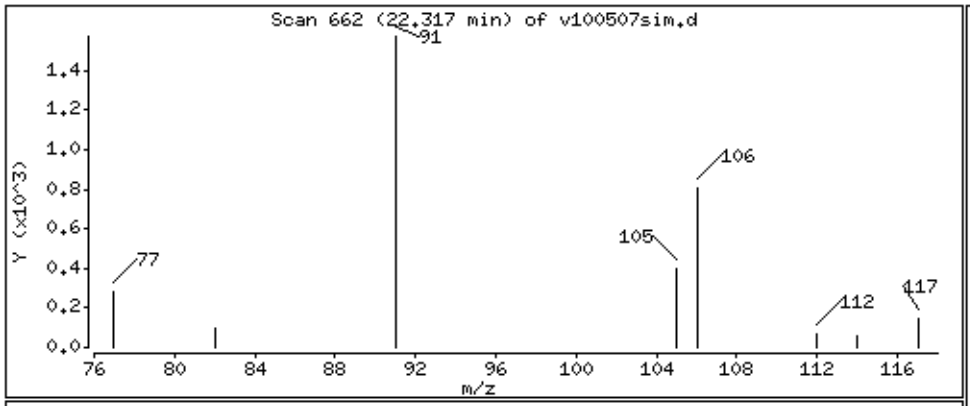
Operator: mjs

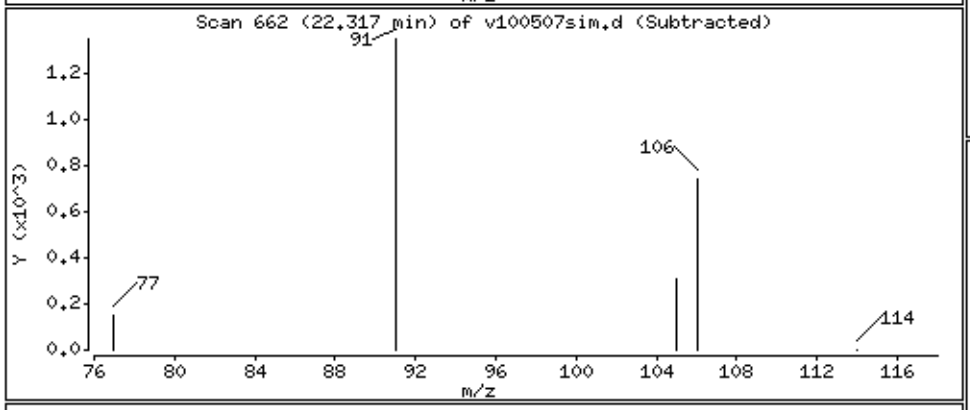
Column phase: RTx-624

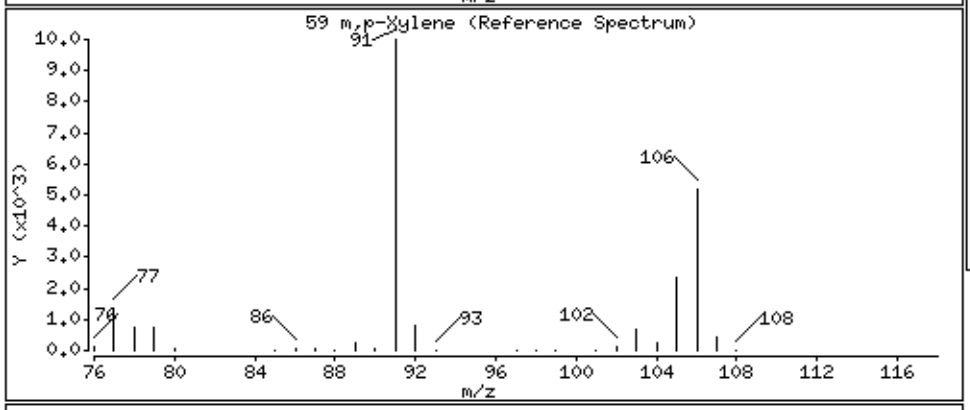
Column diameter: 0.32

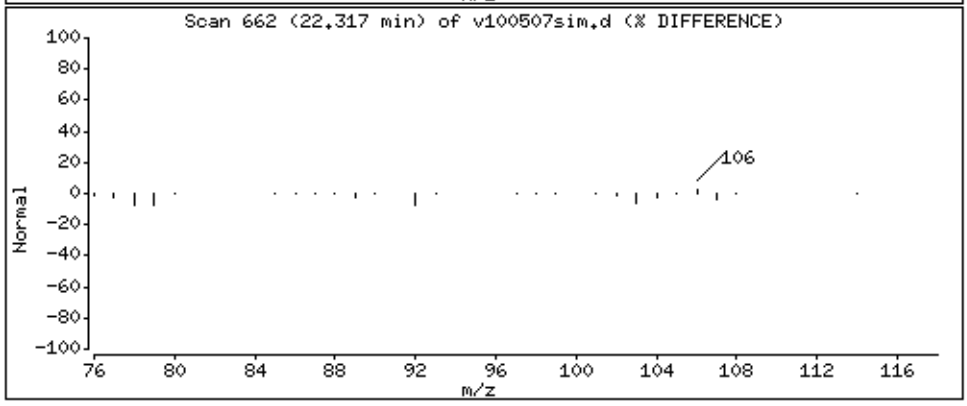
59 m,p-Xylene

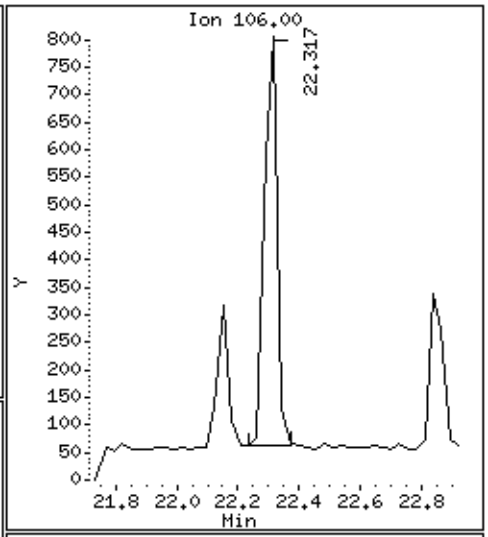
Concentration: 0.1202 PPBV

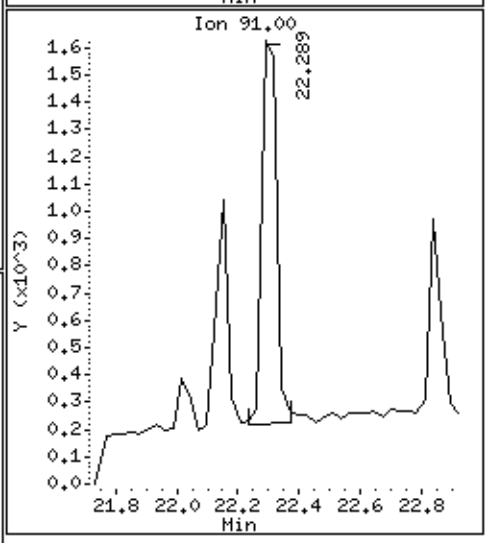












Data File: /chem/msdv.i/05Oct2015.b/v100507sim.d

Date : 05-OCT-2015 13:51

Client ID:

Instrument: msdv.i

Sample Info: 250mL #6L1237

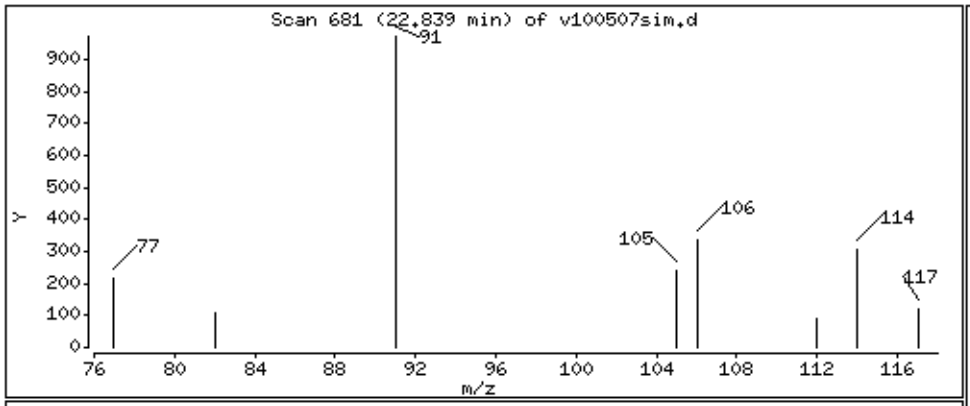
Operator: mjs

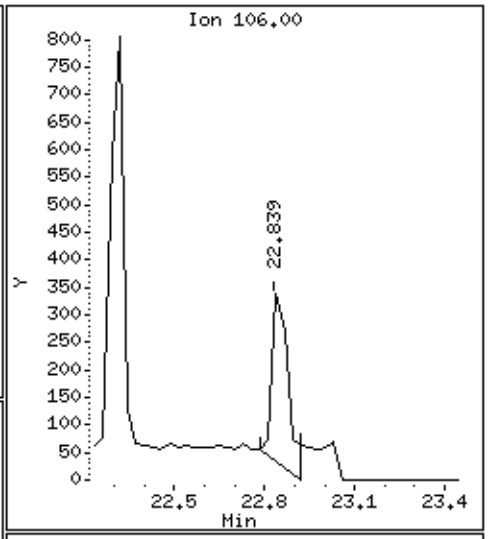
Column phase: RTx-624

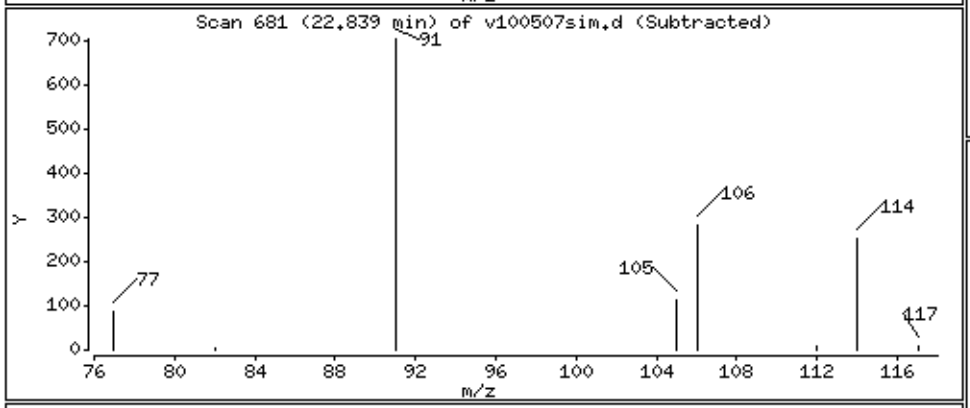
Column diameter: 0.32

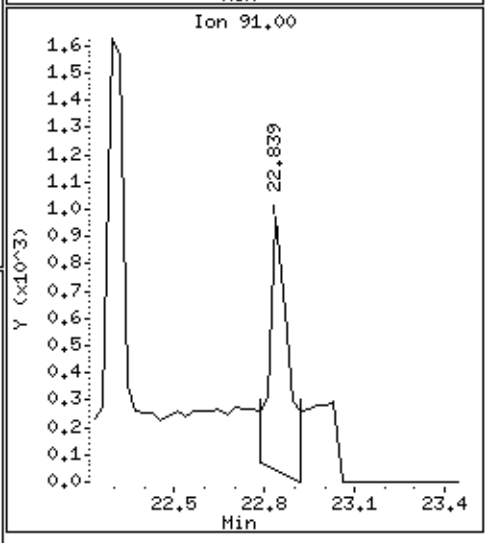
61 o-Xylene

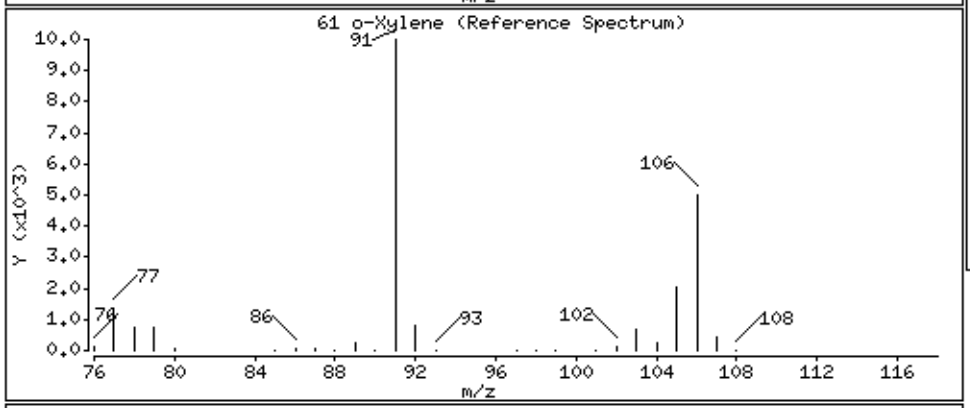
Concentration: 0.06656 PPBV

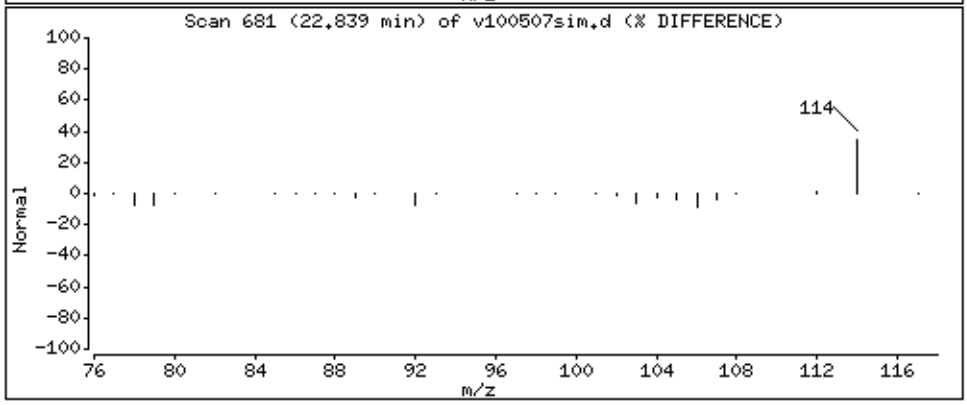












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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: 2-AA(092215)

Lab ID#: 1509512-02A

No Detections Were Found.

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Client Sample ID: 2-AA(092215)

Lab ID#: 1509512-02A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100508**	**Date of Collection: 9/23/15 4:17:00 PM**	
Dil. Factor:	**1.83**	**Date of Analysis: 10/5/15 02:46 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.37	Not Detected	1.3	Not Detected
1,2,4-Trimethylbenzene	0.18	Not Detected	0.90	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	93	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/05Oct2015.b/v100508.d
Lab Smp Id: 1509512-02A
Inj Date : 05-OCT-2015 14:46
Operator : mjs Inst ID: msdv.i
Smp Info : 250mL #34235
Misc Info : 8.0"Hg ->5.0psi
Comment : Low Level GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m
Meth Date : 05-Oct-2015 11:52 mskidmor Quant Type: ISTD
Cal Date : 29-SEP-2015 21:58 Cal File: v092913.d
Als bottle: 1
Dil Factor: 1.83000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 54 Bromochloromethane					CAS #: 74-97-5		
15.743	15.743 (1.000)	130	67373	5.00000		80.00- 120.00	100.00
15.743	15.743 (1.000)	128	54192			48.04- 108.04	80.44
15.743	15.743 (1.000)	49	186143			284.77- 344.77	276.29
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.111	17.111 (1.000)	114	322308	5.00000		80.00- 120.00	100.00
17.111	17.111 (1.000)	88	43617			0.00- 44.16	13.53
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.029	22.029 (1.000)	117	281133	5.00000		80.00- 120.00	100.00
22.029	22.029 (1.000)	82	138513			18.70- 78.70	49.27
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.562	16.562 (1.052)	65	126071	5.30591	5.306	80.00- 120.00	100.00
16.562	16.562 (1.052)	67	56258			19.41- 79.41	44.62
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.638	19.615 (1.148)	98	308489	5.07747	5.077	80.00- 120.00	100.00
19.615	19.615 (1.146)	70	31054			0.00- 40.74	10.07

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.638	19.615 (1.148)	100	198295			34.93- 94.93	64.28
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.534	23.535 (1.068)	174	134790	4.66679	4.667	80.00- 120.00	100.00
23.534	23.535 (1.068)	95	172029			94.06- 154.06	127.63
23.534	23.535 (1.068)	176	131887			68.95- 128.95	97.85

Report Date: 12-Oct-2015 12:22

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100508.d
Lab Smp Id: 1509512-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: mjs
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: 8.0"Hg ->5.0psi

Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	78102	46861	109343	67373	-13.74
71 1,4-Difluorobenze	340477	204286	476668	322308	-5.34
92 Chlorobenzene-d5	294231	176539	411923	281133	-4.45

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.74	15.41	16.07	15.74	0.00
71 1,4-Difluorobenze	17.11	16.78	17.44	17.11	0.00
92 Chlorobenzene-d5	22.03	21.70	22.36	22.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Oct-2015 12:22

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509512-02A
Level: LOW Operator: mjs
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: 8.0"Hg ->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	5.306	106.12	70-130
$ 80 Toluene-d8	5.000	5.077	101.55	70-130
$ 106 Bromofluorobenzene	5.000	4.667	93.34	70-130

Data File: /chem/msdv.i/05Oct2015.b/v100508.d

Date : 05-OCT-2015 14:46

Client ID:

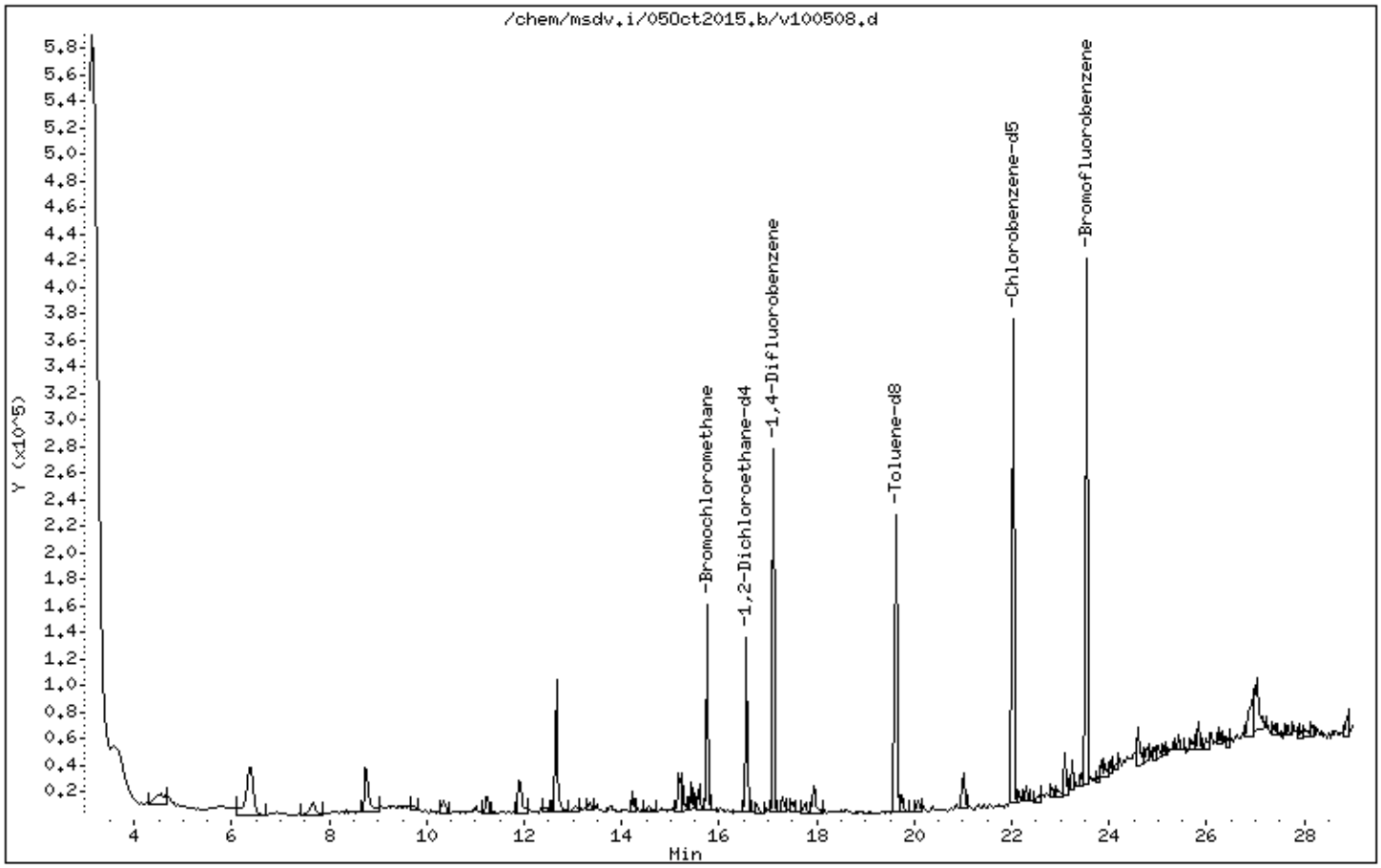
Instrument: msdv.i

Sample Info: 250mL #34235

Operator: mjs

Column phase: RTx-624

Column diameter: 0.32



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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: 2-AA(092215)

Lab ID#: 1509512-02B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	0.018 J	0.047	0.046 J
cis-1,2-Dichloroethene	0.037	0.17	0.14	0.67
Benzene	0.092	0.099	0.29	0.32
Trichloroethene	0.037	0.19	0.20	1.0
Toluene	0.037	0.24	0.14	0.89
Ethyl Benzene	0.037	0.054	0.16	0.24
m,p-Xylene	0.073	0.19	0.32	0.83
o-Xylene	0.037	0.083	0.16	0.36

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Client Sample ID: 2-AA(092215)

Lab ID#: 1509512-02B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100508sim**	**Date of Collection: 9/23/15 4:17:00 PM**	
Dil. Factor:	**1.83**	**Date of Analysis: 10/5/15 02:46 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	0.018 J	0.047	0.046 J
1,1-Dichloroethene	0.018	Not Detected	0.072	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.72	Not Detected
cis-1,2-Dichloroethene	0.037	0.17	0.14	0.67
Chloroform	0.037	Not Detected	0.18	Not Detected
Benzene	0.092	0.099	0.29	0.32
1,2-Dichloroethane	0.037	Not Detected	0.15	Not Detected
Trichloroethene	0.037	0.19	0.20	1.0
Toluene	0.037	0.24	0.14	0.89
1,1,2-Trichloroethane	0.037	Not Detected	0.20	Not Detected
Tetrachloroethene	0.037	Not Detected	0.25	Not Detected
Ethyl Benzene	0.037	0.054	0.16	0.24
m,p-Xylene	0.073	0.19	0.32	0.83
o-Xylene	0.037	0.083	0.16	0.36

J = Estimated value.

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	94	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/05Oct2015.b/v100508sim.d
Lab Smp Id: 1509512-02B
Inj Date : 05-OCT-2015 14:46
Operator : mjs Inst ID: msdv.i
Smp Info : 250mL #34235
Misc Info : 8.0"Hg ->5.0psi
Comment : SIM GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 05-Oct-2015 12:58 mskidmor Quant Type: ISTD
Cal Date : 29-SEP-2015 14:34 Cal File: v092903sim.d
Als bottle: 1
Dil Factor: 1.83000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
RT	EXP RT (REL RT)	MASS	RESPONSE				
* 31 Bromochloromethane					CAS #: 74-97-5		
15.757	15.757 (1.000)	130	75588	5.00000		80.00- 120.00	100.00
15.757	15.757 (1.000)	128	58807			48.13- 108.13	77.80
15.757	15.757 (1.000)	49	209309			238.09- 298.09	276.91
* 40 1,4-Difluorobenzene					CAS #: 540-36-3		
17.125	17.125 (1.000)	114	329616	5.00000		80.00- 120.00	100.00
17.125	17.125 (1.000)	88	47110			0.00- 44.50	14.29
* 56 Chlorobenzene-d5					CAS #: 3114-55-4		
22.042	22.042 (1.000)	117	274560	5.00000		80.00- 120.00	100.00
22.015	22.042 (1.000)	82	128748			16.61- 76.61	46.89
$ 37 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.548	16.548 (1.050)	65	132287	5.30287	5.303	80.00- 120.00	100.00
16.576	16.548 (1.052)	67	59139			19.91- 79.91	44.71
$ 47 Toluene-d8					CAS #: 2037-26-5		
19.629	19.629 (1.146)	98	261279	4.90596	4.906	80.00- 120.00	100.00
19.629	19.629 (1.146)	70	29039			0.00- 41.04	11.11

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.629	19.629 (1.146)	100	164065			32.99- 92.99	62.79
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	144282	4.71711	4.717	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	162240			84.02- 144.02	112.45
23.548	23.548 (1.068)	176	140527			67.56- 127.56	97.40
5 Vinyl Chloride					CAS #: 75-01-4		
7.840	7.809 (0.498)	62	359	0.00995	0.01821	80.00- 120.00	100.00(a)
7.809	7.809 (0.496)	64	117			0.00- 57.67	32.64
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.437	15.437 (0.980)	98	1766	0.09198	0.1683	80.00- 120.00	100.00
15.437	15.437 (0.980)	61	5502			264.63- 324.63	311.57
15.437	15.437 (0.980)	96	3482			126.49- 186.49	197.19
36 Benzene					CAS #: 71-43-2		
16.576	16.576 (0.968)	78	4724	0.05410	0.09901	80.00- 120.00	100.00
16.576	16.576 (0.968)	77	1334			0.00- 52.79	28.24
41 Trichloroethene					CAS #: 79-01-6		
17.509	17.509 (1.022)	130	5410	0.10494	0.1920	80.00- 120.00	100.00
17.509	17.509 (1.022)	95	5290			64.71- 124.71	97.78
17.509	17.509 (1.022)	97	3492			31.19- 91.19	64.56
48 Toluene					CAS #: 108-88-3		
19.763	19.764 (1.154)	91	12888	0.12900	0.2361	80.00- 120.00	100.00
19.763	19.764 (1.154)	92	8390			28.99- 88.99	65.10
58 Ethyl Benzene					CAS #: 100-41-4		
22.152	22.152 (1.005)	106	996	0.02958	0.05414	80.00- 120.00	100.00
22.152	22.152 (1.005)	91	3284			301.49- 361.49	329.59
59 m,p-Xylene					CAS #: 108-38-3		
22.317	22.317 (1.012)	106	3680	0.10408	0.1905	80.00- 120.00	100.00
22.289	22.317 (1.011)	91	7810			185.00- 245.00	212.22
61 o-Xylene					CAS #: 95-47-6		
22.838	22.839 (1.036)	106	1514	0.04533	0.08296	80.00- 120.00	100.00
22.838	22.839 (1.036)	91	5212			198.20- 258.20	344.13

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Report Date: 12-Oct-2015 12:28

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100508sim.d
Lab Smp Id: 1509512-02B
Analysis Type: VOA
Quant Type: ISTD
Operator: mjs
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 8.0"Hg ->5.0psi

Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	81342	48805	113879	75588	-7.07
40 1,4-Difluorobenze	339188	203513	474863	329616	-2.82
56 Chlorobenzene-d5	289088	173453	404723	274560	-5.03

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509512-02B
Level: LOW Operator: mjs
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 8.0"Hg ->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 37 1,2-Dichloroethane	5.000	5.303	106.06	70-130
$ 47 Toluene-d8	5.000	4.906	98.12	70-130
$ 66 Bromofluorobenzene	5.000	4.717	94.34	70-130

Data File: /chem/msdv.i/05Oct2015.b/v100508sim.d

Date : 05-OCT-2015 14:46

Client ID:

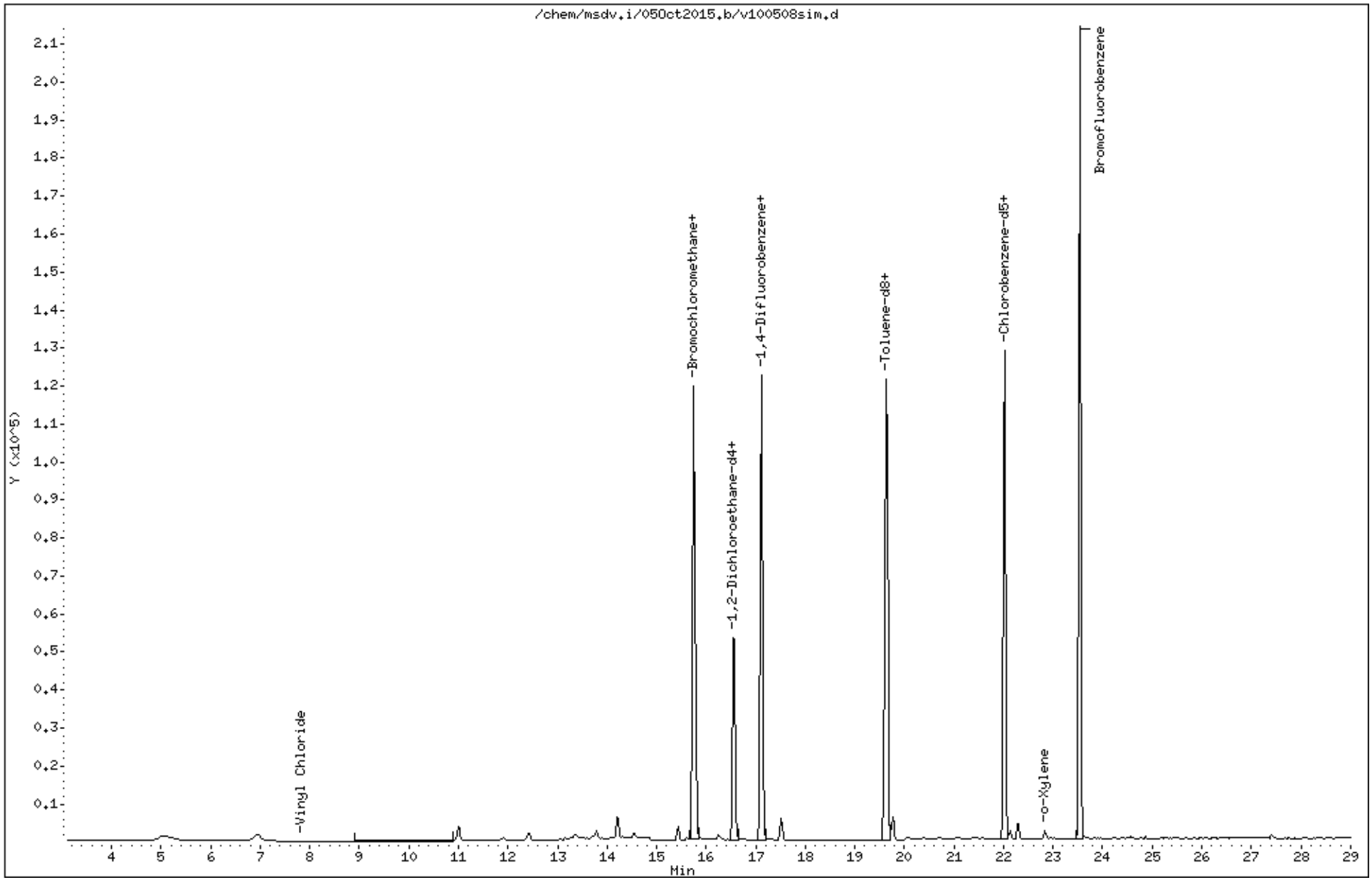
Instrument: msdv.i

Sample Info: 250mL #34235

Operator: mjs

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/05Oct2015.b/v100508sim.d

Date : 05-OCT-2015 14:46

Client ID:

Instrument: msdv.i

Sample Info: 250mL #34235

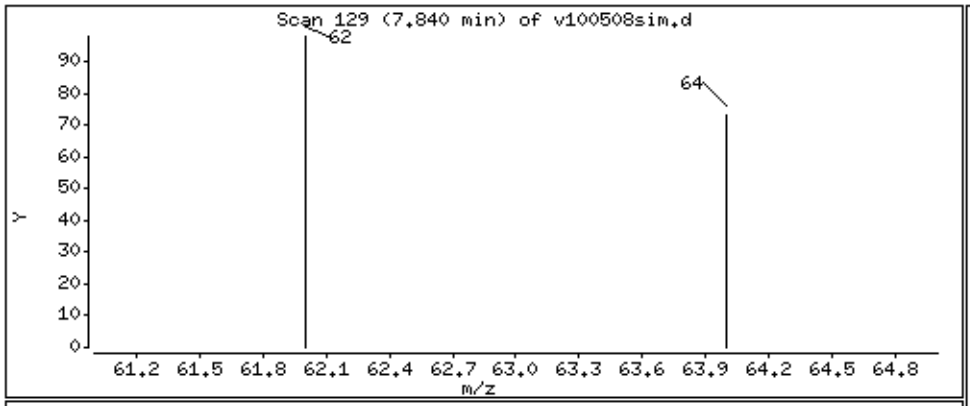
Operator: mjs

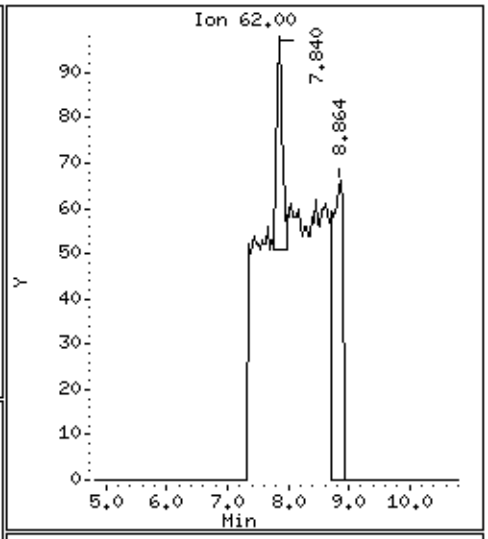
Column phase: RTx-624

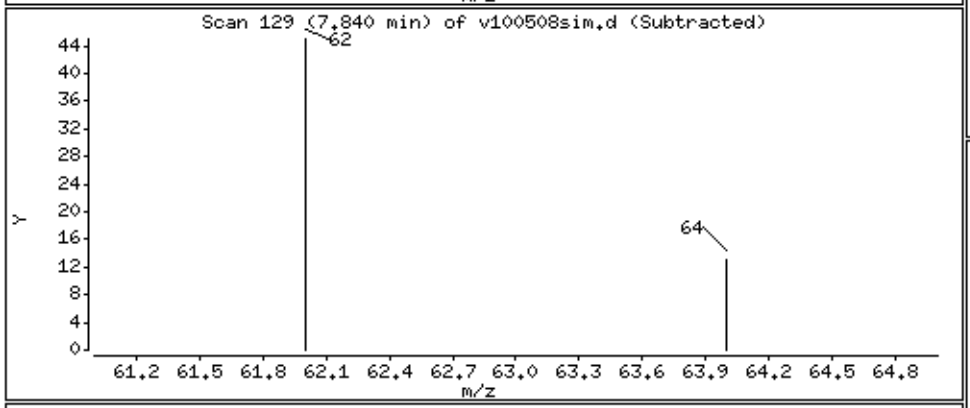
Column diameter: 0.32

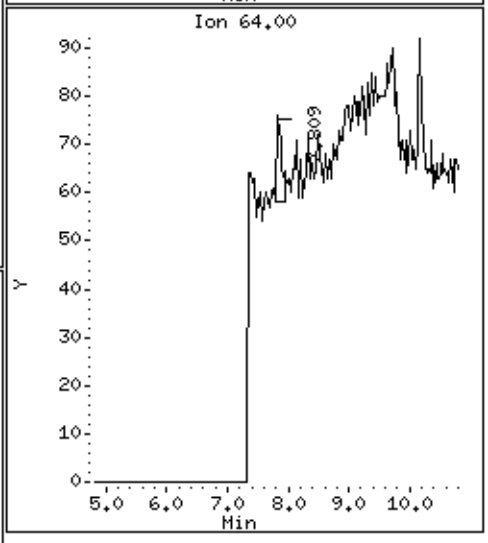
5 Vinyl Chloride

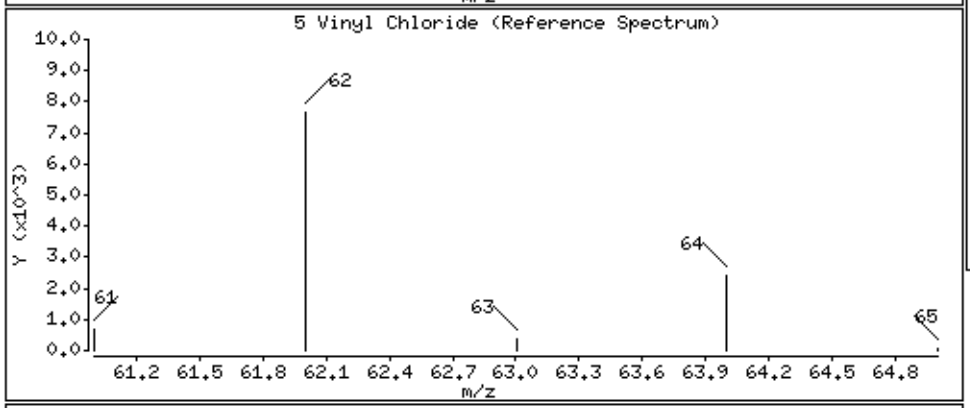
Concentration: 0.01821 PPBV

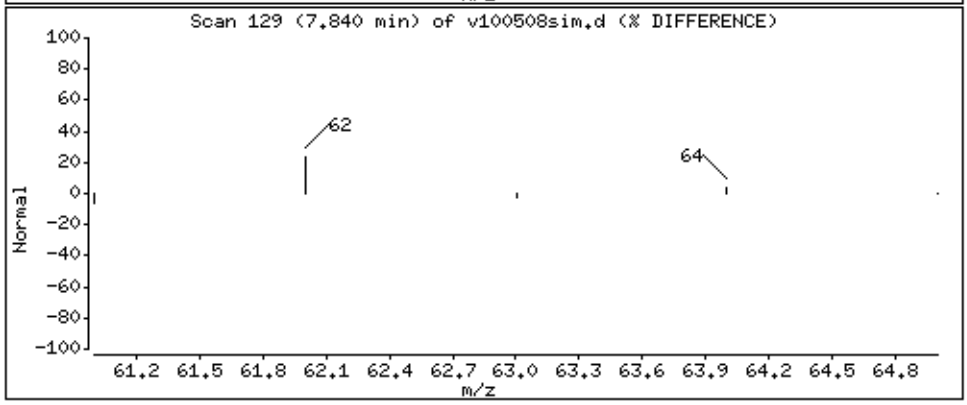












Data File: /chem/msdv.i/05Oct2015.b/v100508sim.d

Date : 05-OCT-2015 14:46

Client ID:

Instrument: msdv.i

Sample Info: 250mL #34235

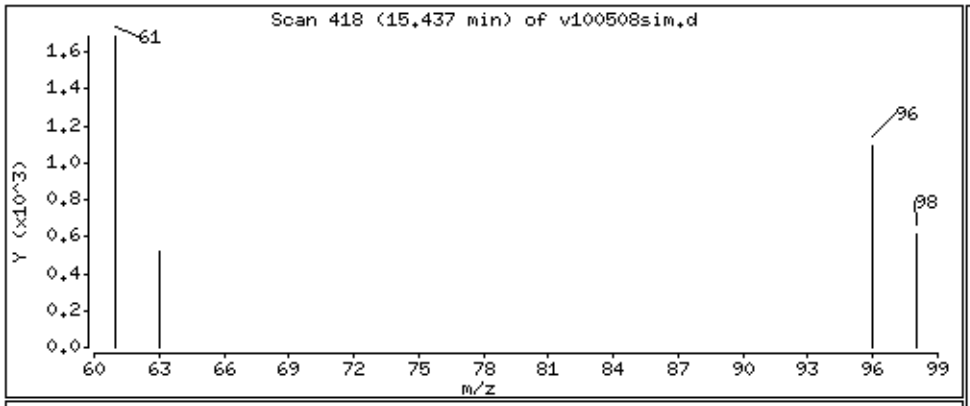
Operator: mjs

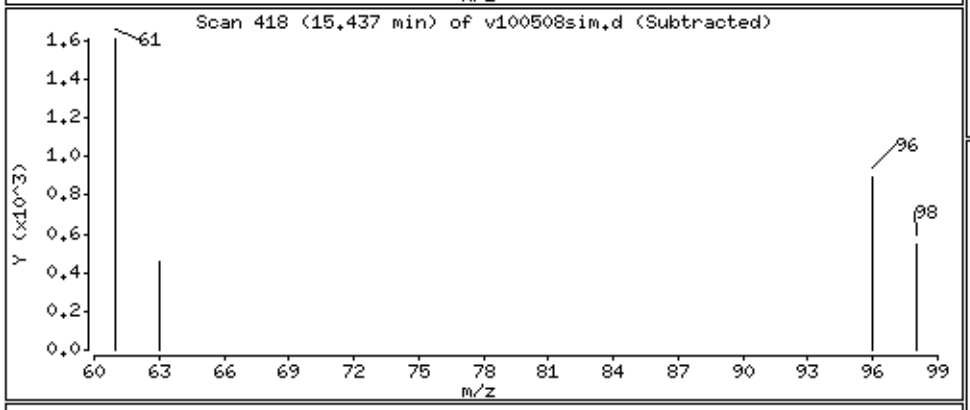
Column phase: RTx-624

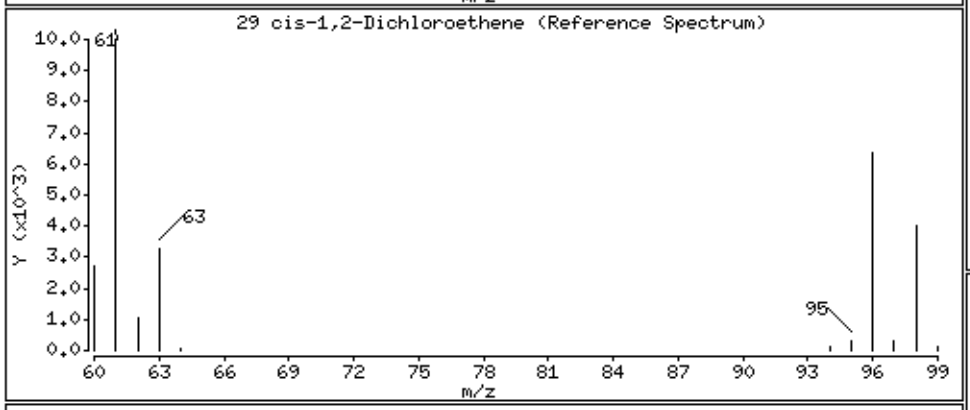
Column diameter: 0.32

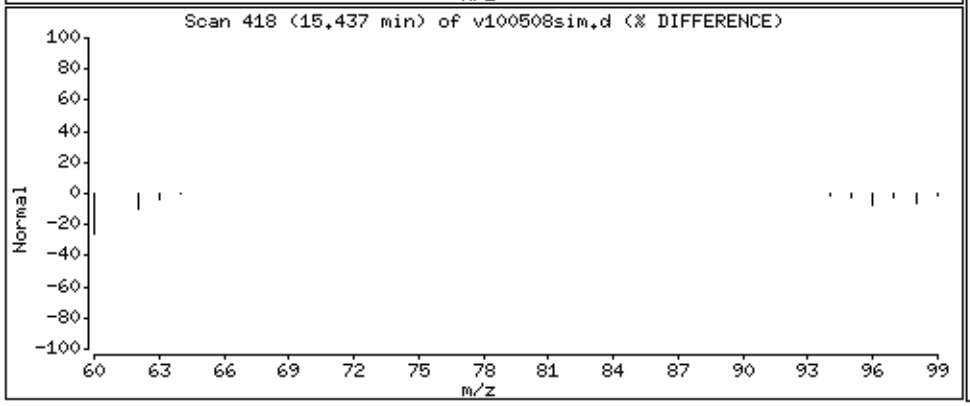
29 cis-1,2-Dichloroethene

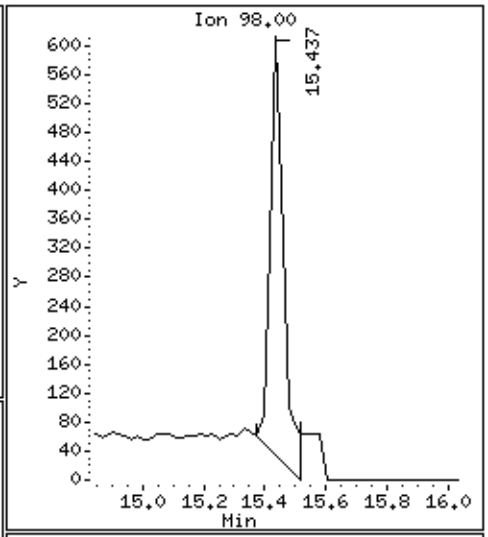
Concentration: 0.1683 PPBV

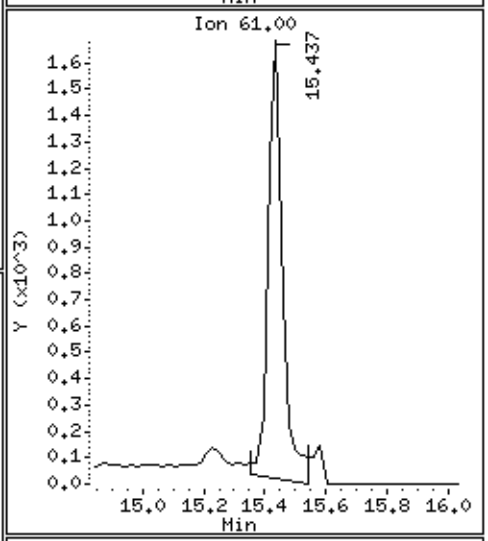


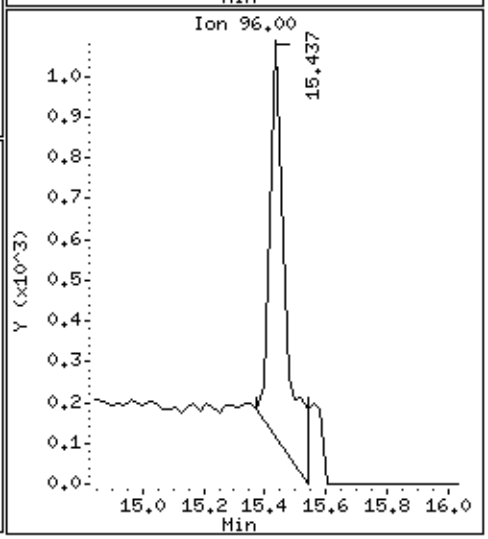












Data File: /chem/msdv.i/05Oct2015.b/v100508sim.d

Date : 05-OCT-2015 14:46

Client ID:

Instrument: msdv.i

Sample Info: 250mL #34235

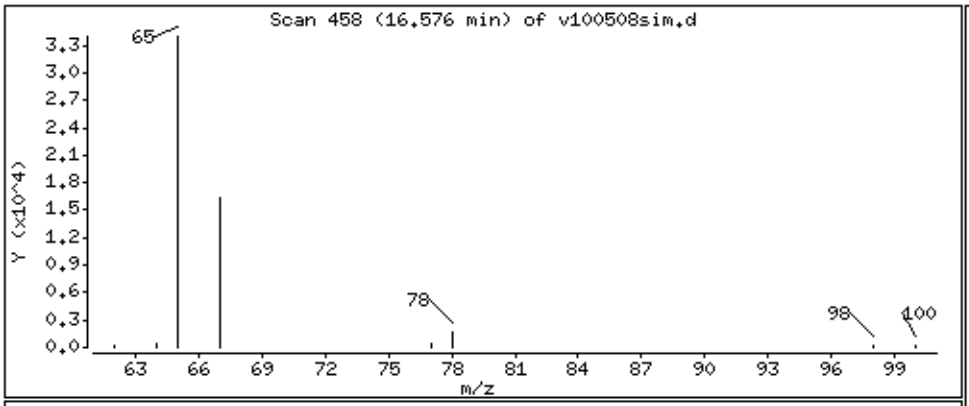
Operator: mjs

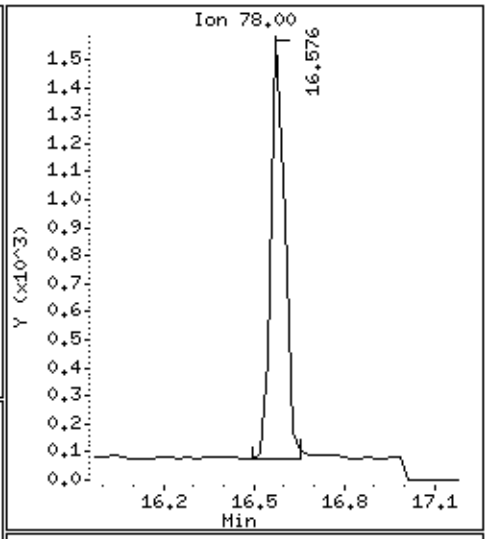
Column phase: RTx-624

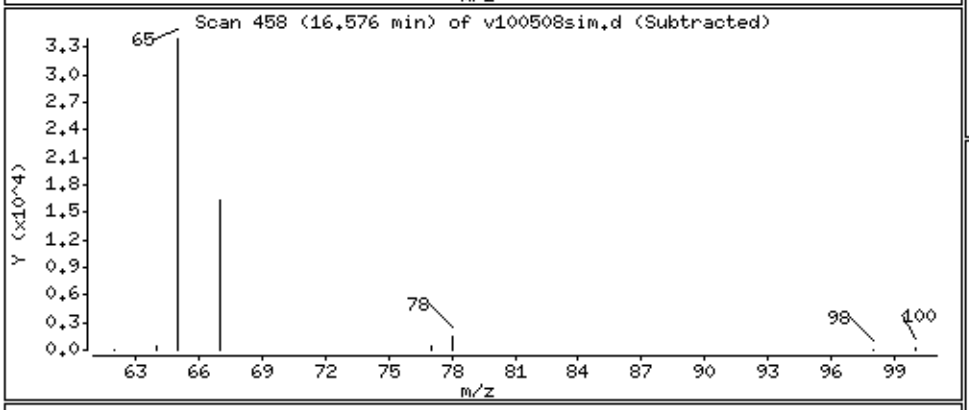
Column diameter: 0.32

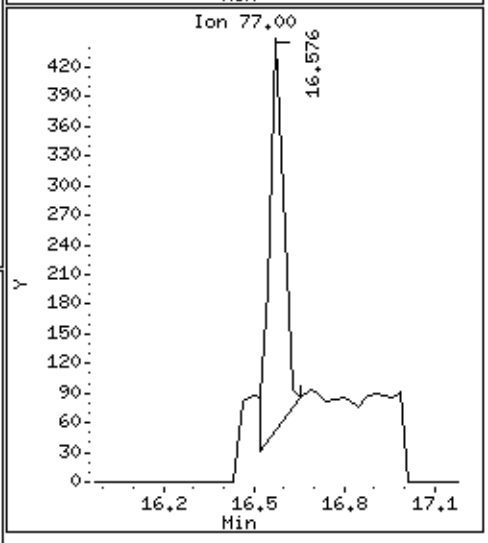
36 Benzene

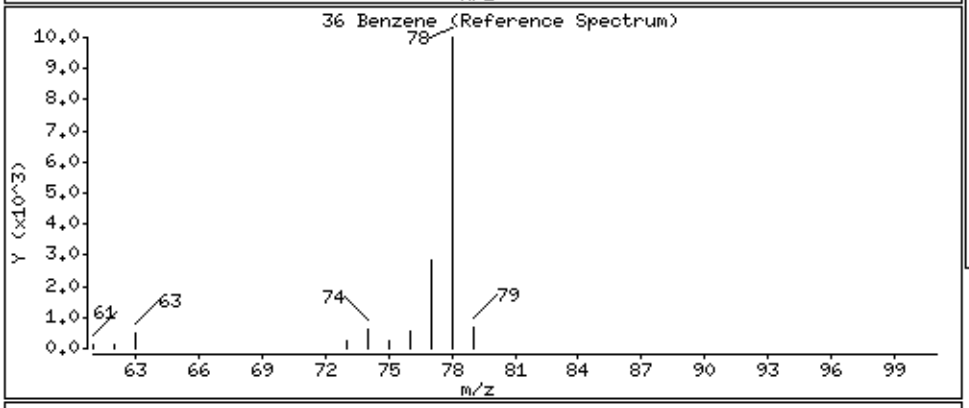
Concentration: 0.09901 PPBV

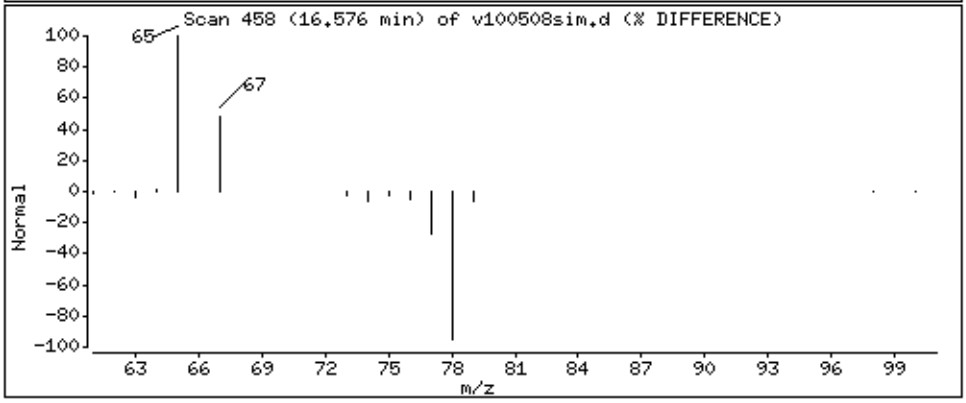












Data File: /chem/msdv.i/05Oct2015.b/v100508sim.d

Date : 05-OCT-2015 14:46

Client ID:

Instrument: msdv.i

Sample Info: 250mL #34235

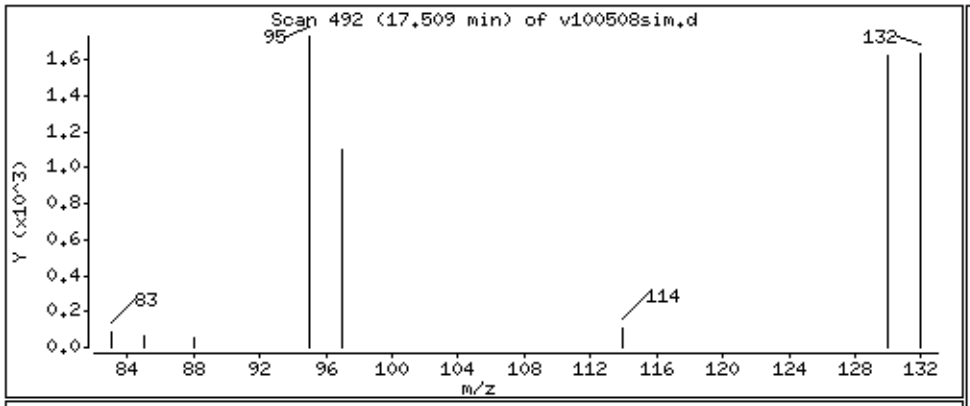
Operator: mjs

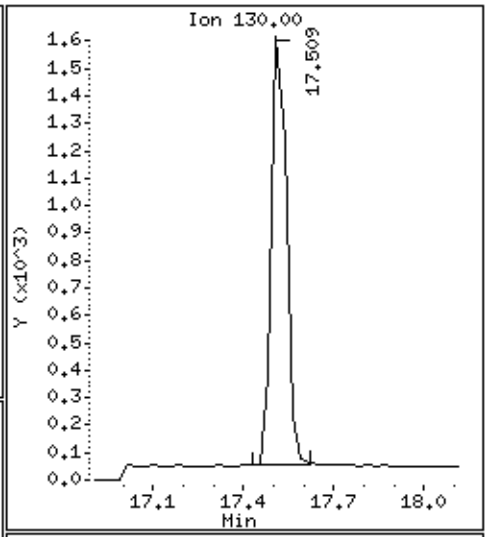
Column phase: RTx-624

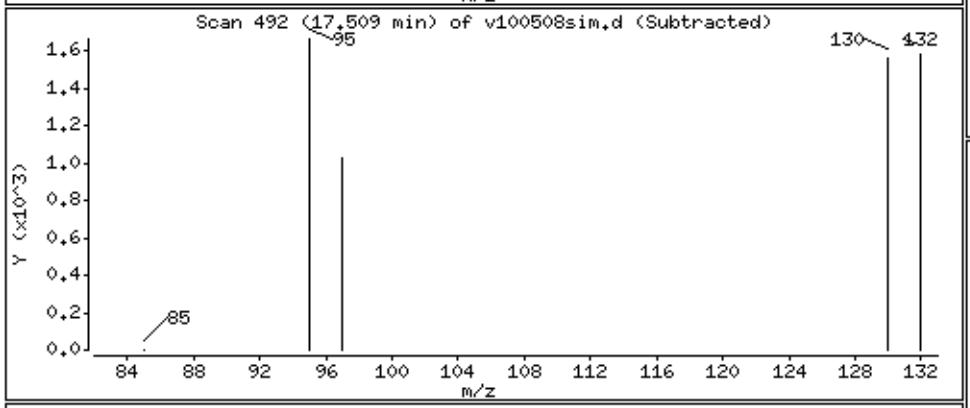
Column diameter: 0.32

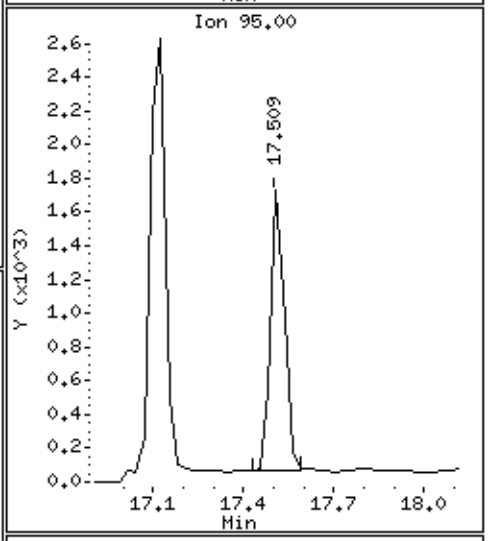
41 Trichloroethene

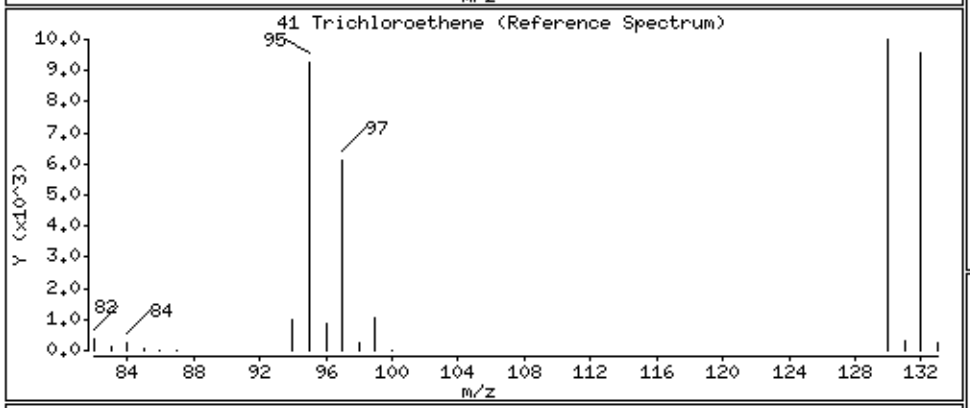
Concentration: 0.1920 PPBV

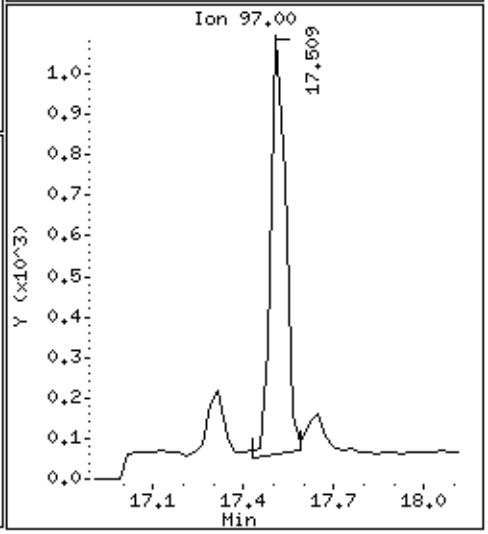


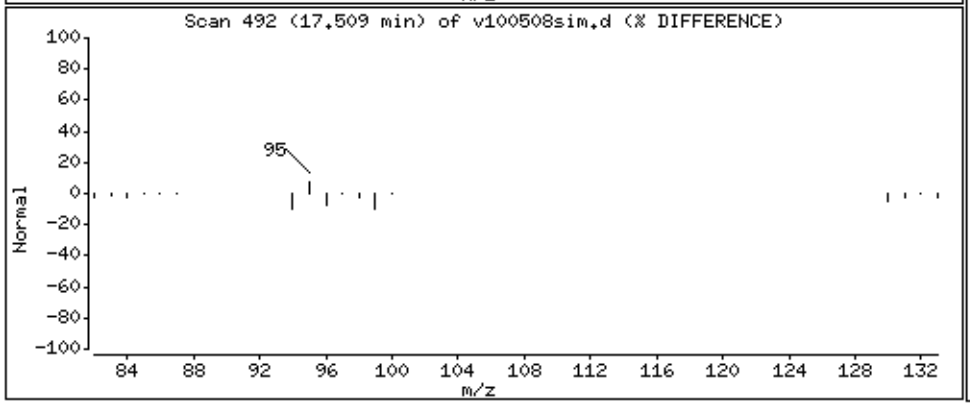












Data File: /chem/msdv.i/05Oct2015.b/v100508sim.d

Date : 05-OCT-2015 14:46

Client ID:

Instrument: msdv.i

Sample Info: 250mL #34235

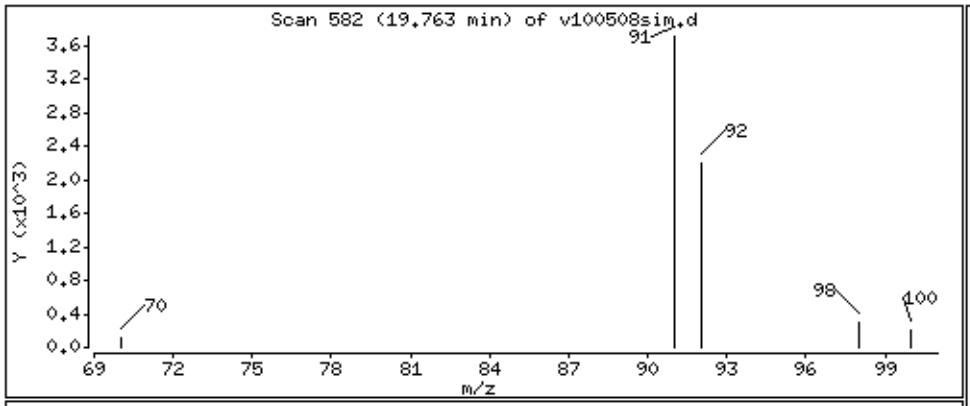
Operator: mjs

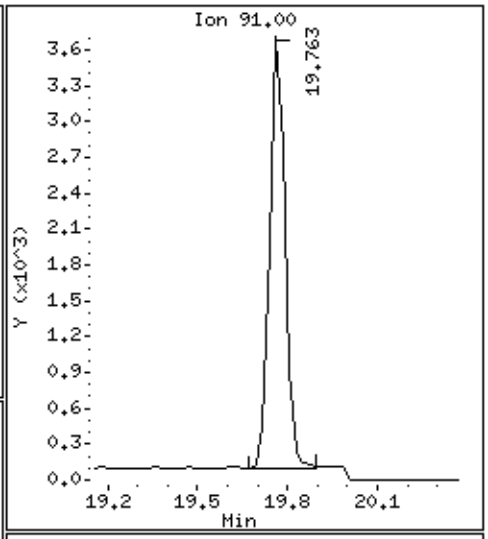
Column phase: RTx-624

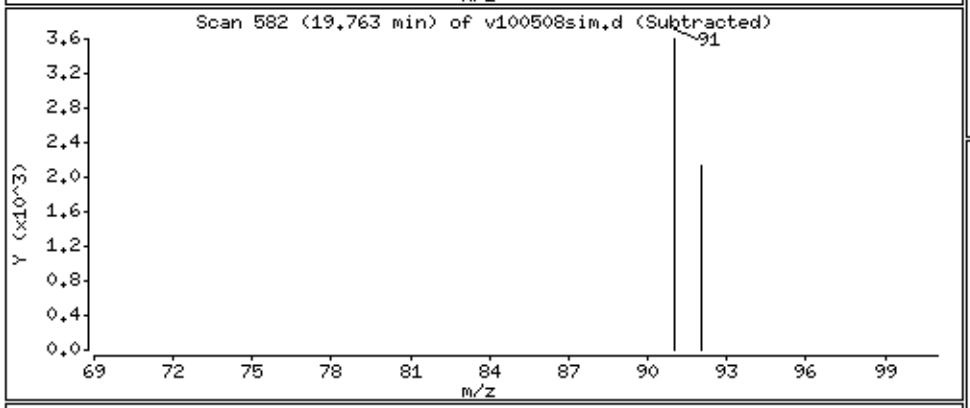
Column diameter: 0.32

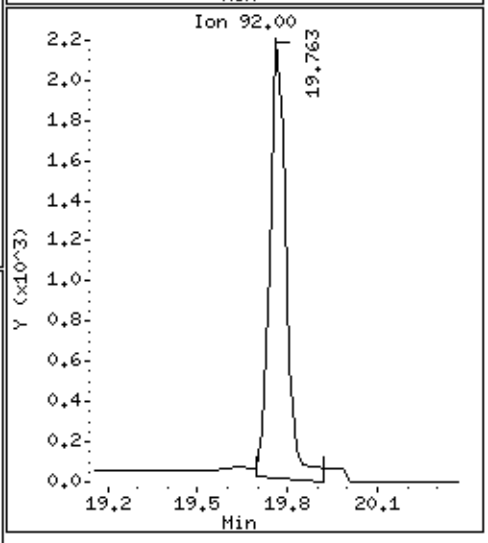
48 Toluene

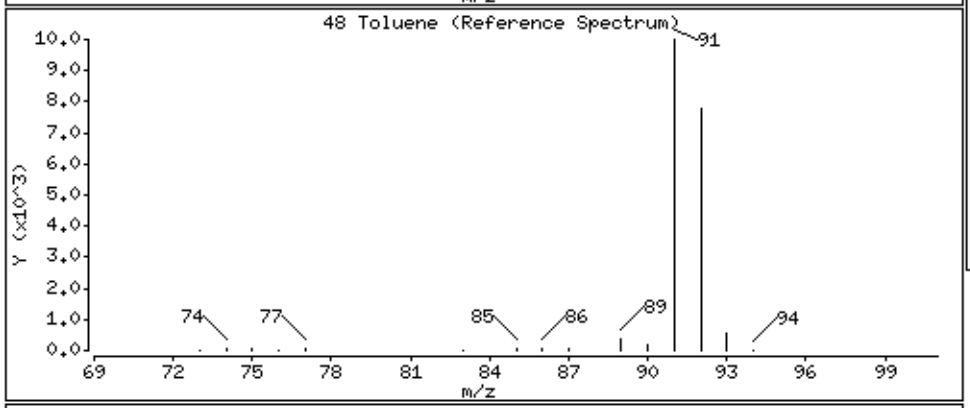
Concentration: 0.2361 PPBV

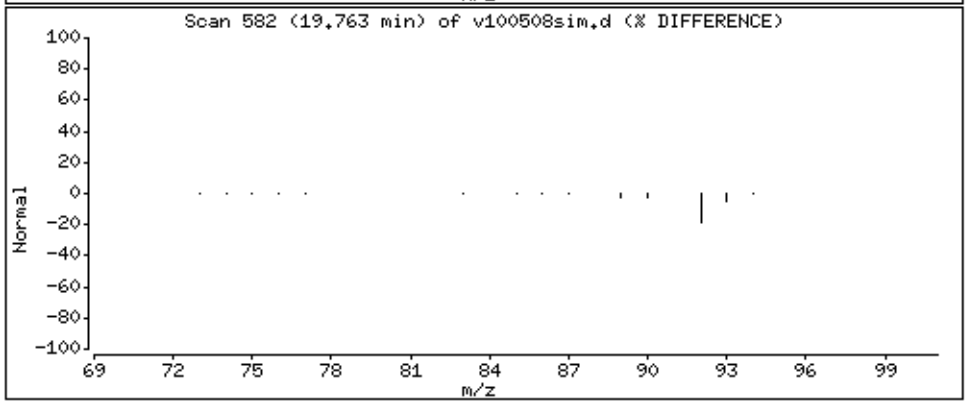












Data File: /chem/msdv.i/05Oct2015.b/v100508sim.d

Date : 05-OCT-2015 14:46

Client ID:

Instrument: msdv.i

Sample Info: 250mL #34235

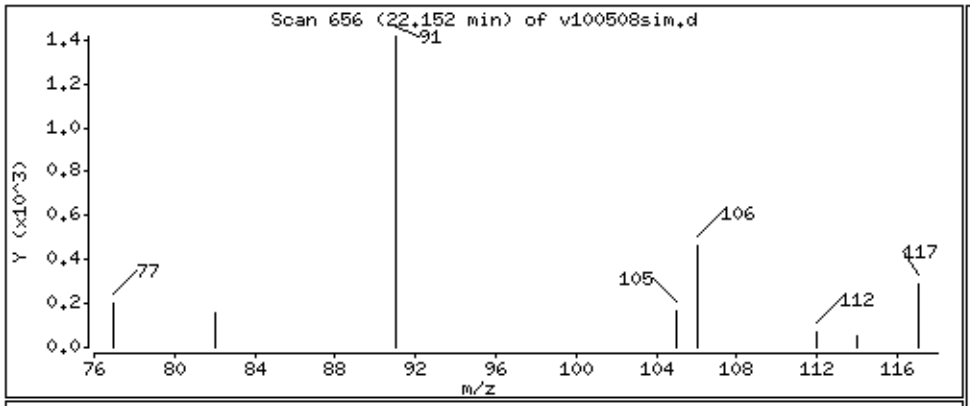
Operator: mjs

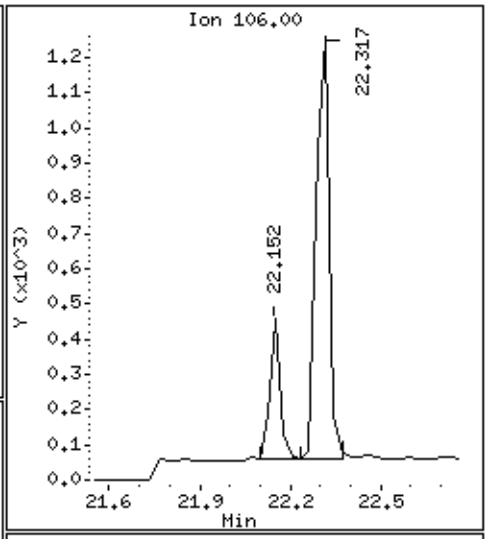
Column phase: RTx-624

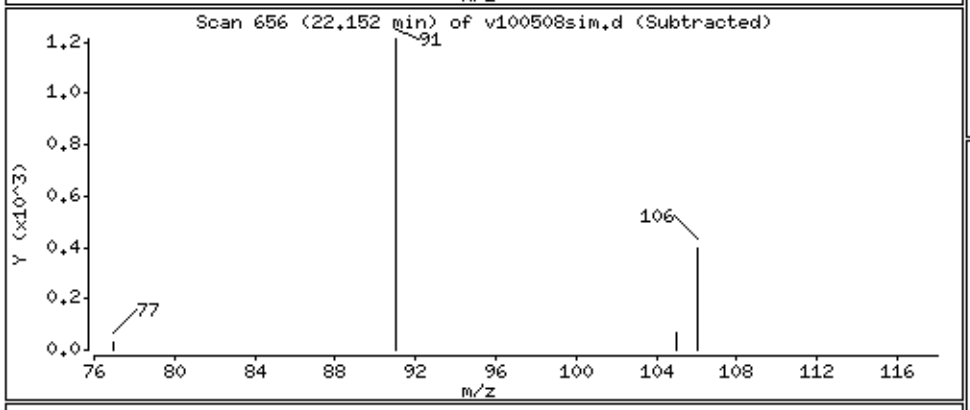
Column diameter: 0.32

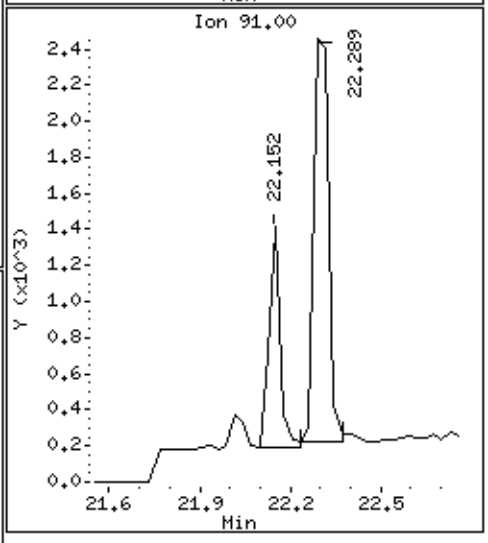
58 Ethyl Benzene

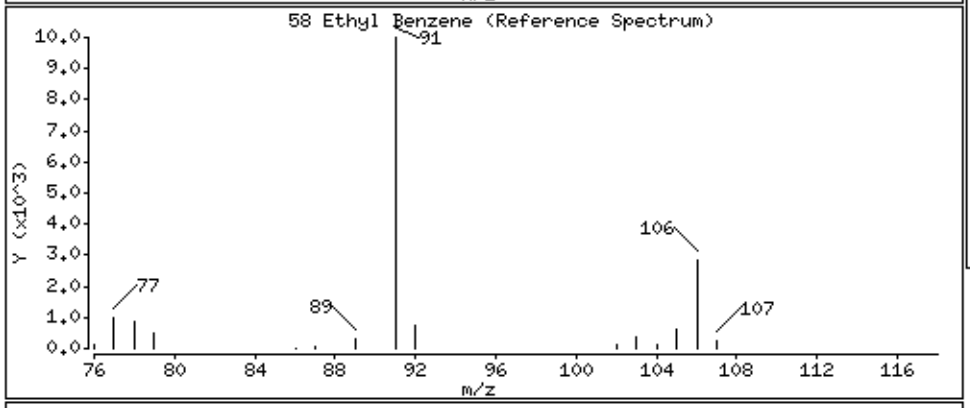
Concentration: 0.05414 PPBV

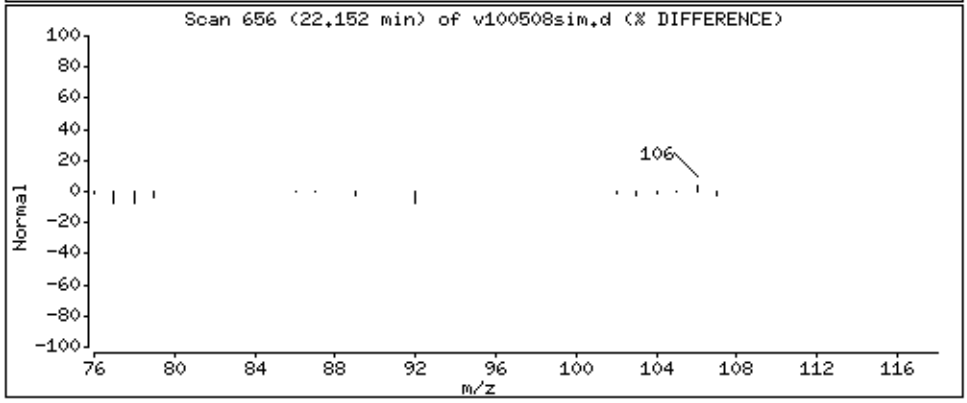












Data File: /chem/msdv.i/05Oct2015.b/v100508sim.d

Date : 05-OCT-2015 14:46

Client ID:

Instrument: msdv.i

Sample Info: 250mL #34235

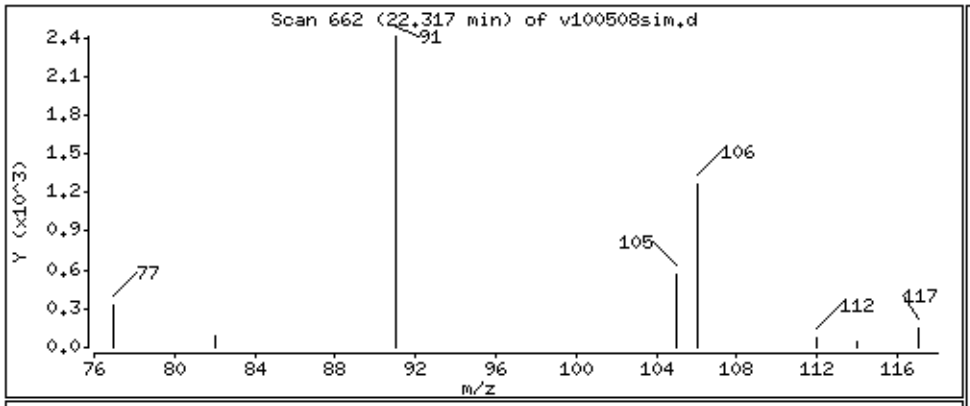
Operator: mjs

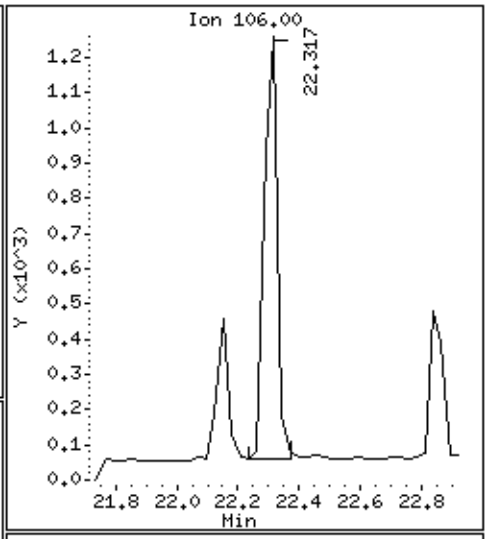
Column phase: RTx-624

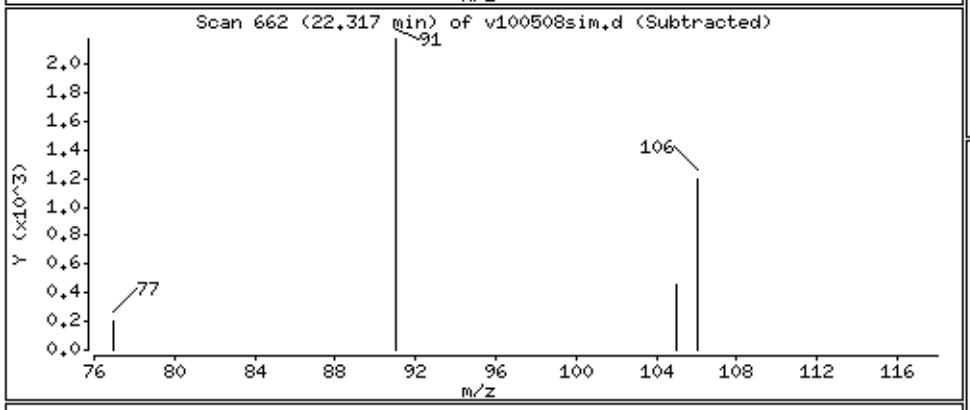
Column diameter: 0.32

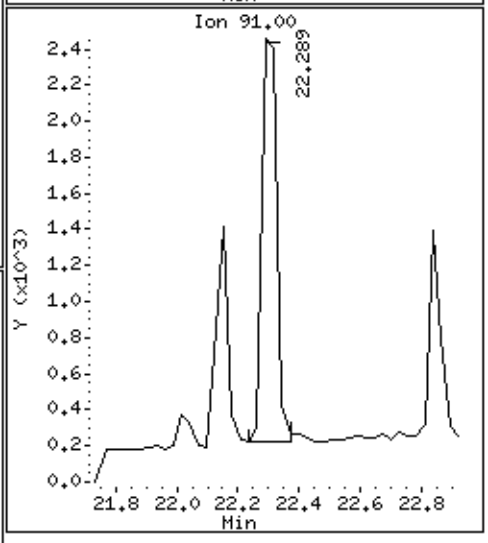
59 m,p-Xylene

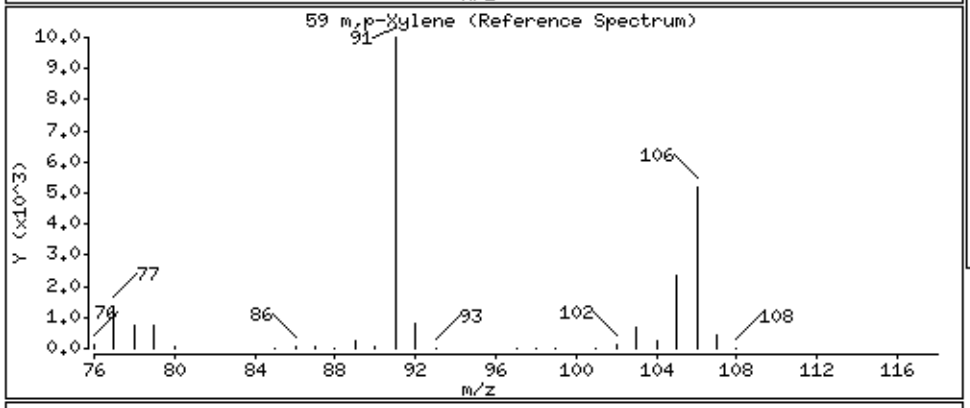
Concentration: 0.1905 PPBV

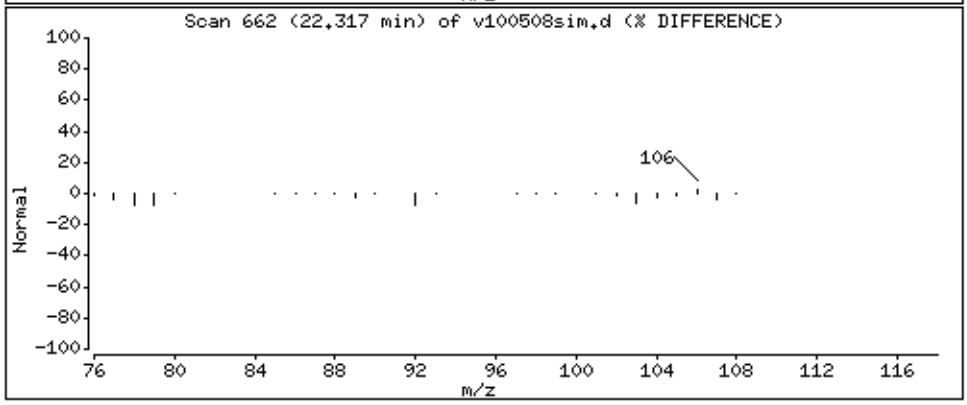












Data File: /chem/msdv.i/05Oct2015.b/v100508sim.d

Date : 05-OCT-2015 14:46

Client ID:

Instrument: msdv.i

Sample Info: 250mL #34235

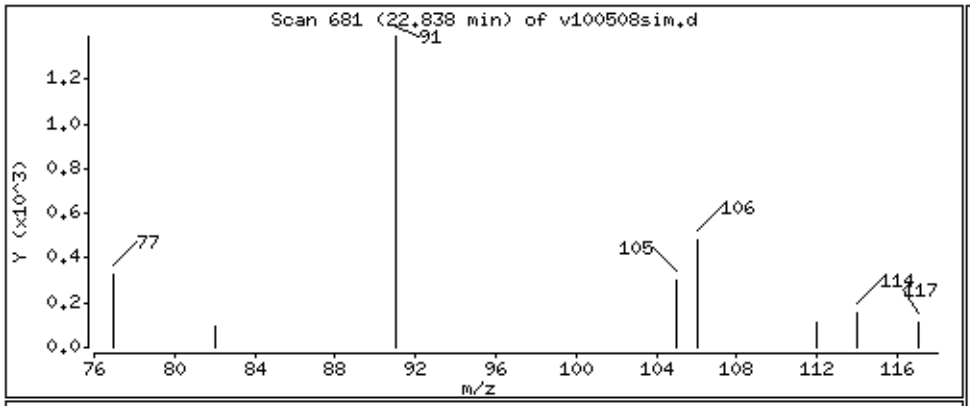
Operator: mjs

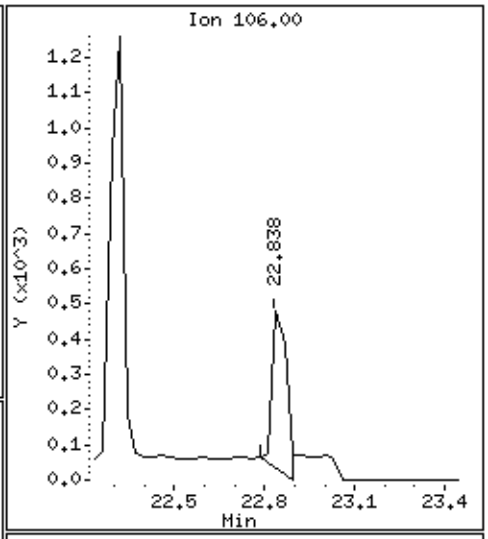
Column phase: RTx-624

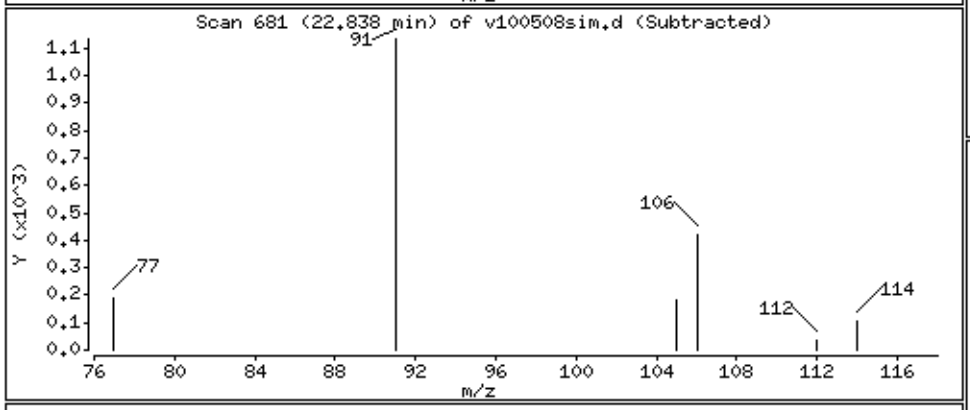
Column diameter: 0.32

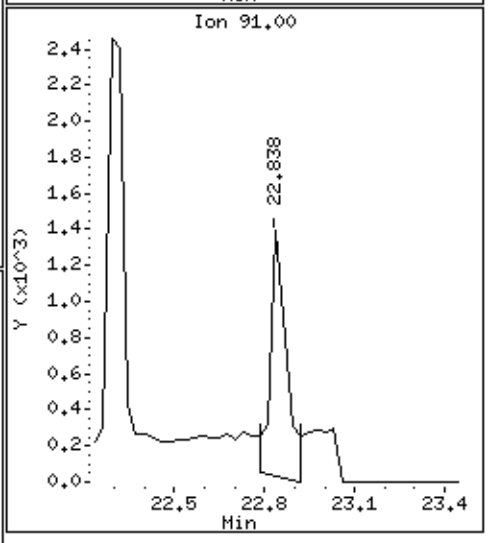
61 o-Xylene

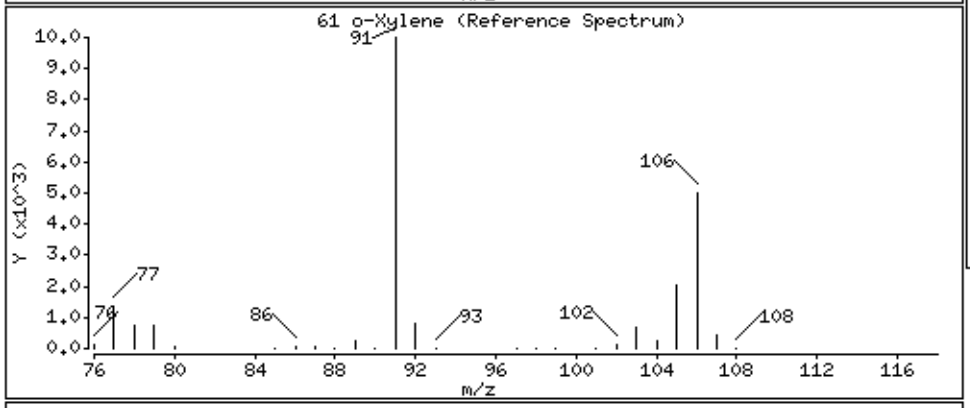
Concentration: 0.08296 PPBV

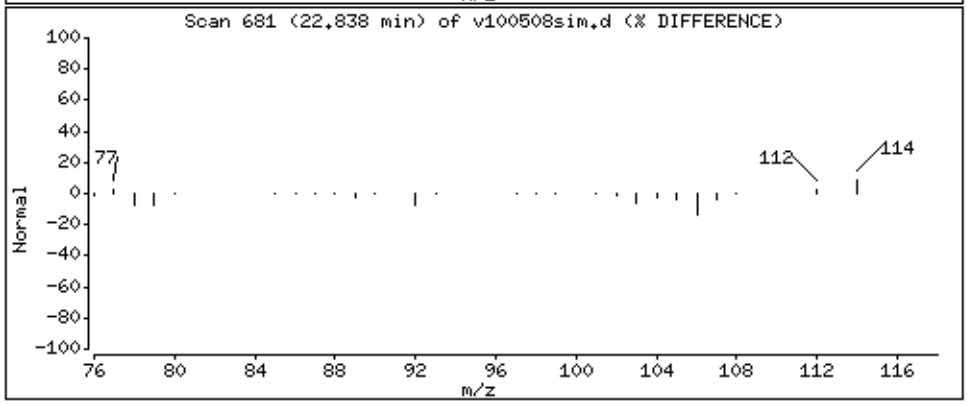












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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: 6-IA(092215)

Lab ID#: 1509512-03A

No Detections Were Found.

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Client Sample ID: 6-IA(092215)

Lab ID#: 1509512-03A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100509**	**Date of Collection: 9/23/15 10:58:00 AM**	
Dil. Factor:	**4.38**	**Date of Analysis: 10/5/15 03:37 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.88	Not Detected	3.0	Not Detected
1,2,4-Trimethylbenzene	0.44	Not Detected	2.2	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	101	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/05Oct2015.b/v100509.d
Lab Smp Id: 1509512-03A
Inj Date : 05-OCT-2015 15:37
Operator : gh Inst ID: msdv.i
Smp Info : 100mL #30840
Misc Info : 7.0"Hg ->5.0psi
Comment : Low Level GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m
Meth Date : 05-Oct-2015 11:52 mskidmor Quant Type: ISTD
Cal Date : 29-SEP-2015 21:58 Cal File: v092913.d
Als bottle: 1
Dil Factor: 4.38000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 54 Bromochloromethane					CAS #: 74-97-5		
15.743	15.743 (1.000)	130	72818	5.00000		80.00- 120.00	100.00
15.743	15.743 (1.000)	128	57927			48.04- 108.04	79.55
15.743	15.743 (1.000)	49	204700			284.77- 344.77	281.11
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.111	17.111 (1.000)	114	319649	5.00000		80.00- 120.00	100.00
17.111	17.111 (1.000)	88	47668			0.00- 44.16	14.91
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.029	22.029 (1.000)	117	286474	5.00000		80.00- 120.00	100.00
22.029	22.029 (1.000)	82	144388			18.70- 78.70	50.40
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.562	16.562 (1.052)	65	128024	4.98520	4.985	80.00- 120.00	100.00
16.562	16.562 (1.052)	67	58874			19.41- 79.41	45.99
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.638	19.615 (1.148)	98	289901	4.81122	4.811	80.00- 120.00	100.00
19.638	19.615 (1.148)	70	30740			0.00- 40.74	10.60

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.638	19.615 (1.148)	100	196228			34.93- 94.93	67.69
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.535	23.535 (1.068)	174	149071	5.06497	5.065	80.00- 120.00	100.00
23.535	23.535 (1.068)	95	178042			94.06- 154.06	119.43
23.535	23.535 (1.068)	176	139095			68.95- 128.95	93.31

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100509.d
Lab Smp Id: 1509512-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: 7.0"Hg ->5.0psi

Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	78102	46861	109343	72818	-6.77
71 1,4-Difluorobenze	340477	204286	476668	319649	-6.12
92 Chlorobenzene-d5	294231	176539	411923	286474	-2.64

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.74	15.41	16.07	15.74	0.00
71 1,4-Difluorobenze	17.11	16.78	17.44	17.11	0.00
92 Chlorobenzene-d5	22.03	21.70	22.36	22.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Oct-2015 12:22

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509512-03A
Level: LOW Operator: gh
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: 7.0"Hg ->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	4.985	99.70	70-130
$ 80 Toluene-d8	5.000	4.811	96.22	70-130
$ 106 Bromofluorobenzene	5.000	5.065	101.30	70-130

Data File: /chem/msdv.i/05Oct2015.b/v100509.d

Date : 05-OCT-2015 15:37

Client ID:

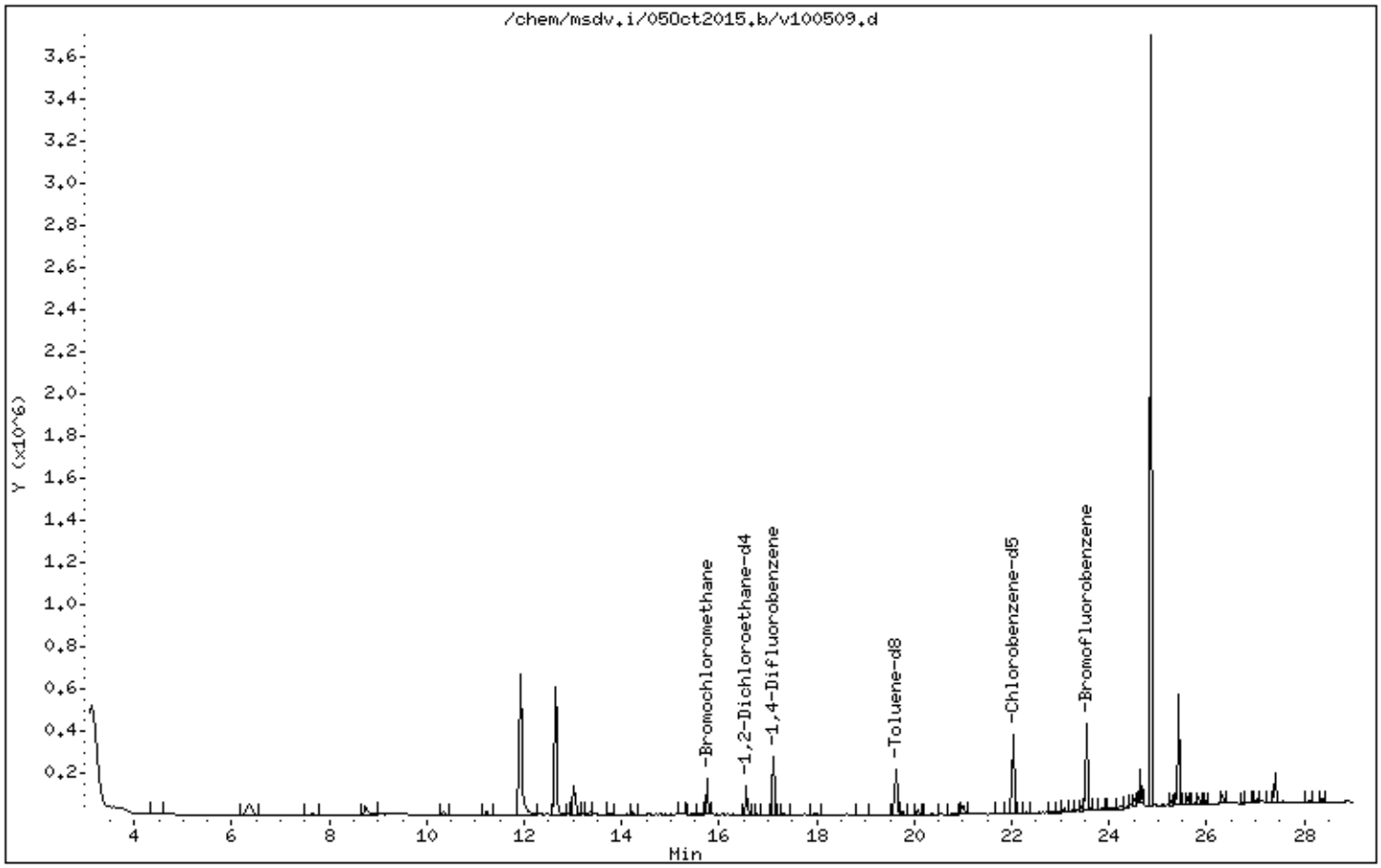
Instrument: msdv.i

Sample Info: 100mL #30840

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: 6-IA(092215)

Lab ID#: 1509512-03B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.088	0.097	0.35	0.38
Chloroform	0.088	0.12	0.43	0.56
Trichloroethene	0.088	0.12	0.47	0.65
Toluene	0.088	1.0	0.33	3.9
Ethyl Benzene	0.088	0.14	0.38	0.63
m,p-Xylene	0.18	0.49	0.76	2.1
o-Xylene	0.088	0.23	0.38	1.0

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Client Sample ID: 6-IA(092215)

Lab ID#: 1509512-03B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100509sim**	**Date of Collection:**	**9/23/15 10:58:00 AM**
Dil. Factor:	**4.38**	**Date of Analysis:**	**10/5/15 03:37 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.044	Not Detected	0.11	Not Detected
1,1-Dichloroethene	0.044	Not Detected	0.17	Not Detected
trans-1,2-Dichloroethene	0.44	Not Detected	1.7	Not Detected
cis-1,2-Dichloroethene	0.088	0.097	0.35	0.38
Chloroform	0.088	0.12	0.43	0.56
Benzene	0.22	Not Detected	0.70	Not Detected
1,2-Dichloroethane	0.088	Not Detected	0.35	Not Detected
Trichloroethene	0.088	0.12	0.47	0.65
Toluene	0.088	1.0	0.33	3.9
1,1,2-Trichloroethane	0.088	Not Detected	0.48	Not Detected
Tetrachloroethene	0.088	Not Detected	0.59	Not Detected
Ethyl Benzene	0.088	0.14	0.38	0.63
m,p-Xylene	0.18	0.49	0.76	2.1
o-Xylene	0.088	0.23	0.38	1.0

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	97	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/05Oct2015.b/v100509sim.d
Lab Smp Id: 1509512-03B
Inj Date : 05-OCT-2015 15:37
Operator : gh Inst ID: msdv.i
Smp Info : 100mL #30840
Misc Info : 7.0"Hg ->5.0psi
Comment : SIM GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 05-Oct-2015 12:58 mskidmor Quant Type: ISTD
Cal Date : 29-SEP-2015 14:34 Cal File: v092903sim.d
Als bottle: 1
Dil Factor: 4.38000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 31 Bromochloromethane						CAS #: 74-97-5	
15.757	15.757 (1.000)	130	78508	5.00000		80.00- 120.00	100.00
15.757	15.757 (1.000)	128	60630			48.13- 108.13	77.23
15.757	15.757 (1.000)	49	216437			238.09- 298.09	275.68
* 40 1,4-Difluorobenzene						CAS #: 540-36-3	
17.125	17.125 (1.000)	114	329470	5.00000		80.00- 120.00	100.00
17.125	17.125 (1.000)	88	46892			0.00- 44.50	14.23
* 56 Chlorobenzene-d5						CAS #: 3114-55-4	
22.042	22.042 (1.000)	117	280621	5.00000		80.00- 120.00	100.00
22.015	22.042 (1.000)	82	131335			16.61- 76.61	46.80
$ 37 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.548	16.548 (1.050)	65	131644	5.08082	5.081	80.00- 120.00	100.00
16.576	16.548 (1.052)	67	58870			19.91- 79.91	44.72
$ 47 Toluene-d8						CAS #: 2037-26-5	
19.629	19.629 (1.146)	98	263655	4.95277	4.953	80.00- 120.00	100.00
19.629	19.629 (1.146)	70	29163			0.00- 41.04	11.06

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.629	19.629 (1.146)	100	166593			32.99- 92.99	63.19
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	151093	4.83309	4.833	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	171212			84.02- 144.02	113.32
23.548	23.548 (1.068)	176	147588			67.56- 127.56	97.68
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.437	15.437 (0.980)	98	442	0.02220	0.09725	80.00- 120.00	100.00(M)
15.437	15.437 (0.980)	61	1924			264.63- 324.63	434.70
15.437	15.437 (0.980)	96	623			126.49- 186.49	140.74
32 Chloroform					CAS #: 67-66-3		
15.819	15.819 (1.004)	83	1511	0.02643	0.1157	80.00- 120.00	100.00
15.819	15.819 (1.004)	85	876			34.82- 94.82	58.01
41 Trichloroethene					CAS #: 79-01-6		
17.509	17.509 (1.022)	130	1421	0.02758	0.1208	80.00- 120.00	100.00
17.509	17.509 (1.022)	95	1406			64.71- 124.71	98.96
17.509	17.509 (1.022)	97	858			31.19- 91.19	60.37
48 Toluene					CAS #: 108-88-3		
19.764	19.764 (1.154)	91	23647	0.23679	1.037	80.00- 120.00	100.00
19.764	19.764 (1.154)	92	13984			28.99- 88.99	59.14
58 Ethyl Benzene					CAS #: 100-41-4		
22.152	22.152 (1.005)	106	1139	0.03310	0.1450	80.00- 120.00	100.00
22.152	22.152 (1.005)	91	4318			301.49- 361.49	378.86
59 m,p-Xylene					CAS #: 108-38-3		
22.317	22.317 (1.012)	106	4070	0.11263	0.4933	80.00- 120.00	100.00
22.290	22.317 (1.011)	91	8924			185.00- 245.00	219.26
61 o-Xylene					CAS #: 95-47-6		
22.839	22.839 (1.036)	106	1826	0.05349	0.2343	80.00- 120.00	100.00
22.839	22.839 (1.036)	91	5643			198.20- 258.20	308.93

QC Flag Legend

M - Compound response manually integrated.

Report Date: 12-Oct-2015 12:31

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100509sim.d
Lab Smp Id: 1509512-03B
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 7.0"Hg ->5.0psi

Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	81342	48805	113879	78508	-3.48
40 1,4-Difluorobenze	339188	203513	474863	329470	-2.87
56 Chlorobenzene-d5	289088	173453	404723	280621	-2.93

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Oct-2015 12:31

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509512-03B
Level: LOW Operator: gh
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 7.0"Hg ->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 37 1,2-Dichloroethane	5.000	5.081	101.62	70-130
$ 47 Toluene-d8	5.000	4.953	99.06	70-130
$ 66 Bromofluorobenzene	5.000	4.833	96.66	70-130

Data File: /chem/msdv.i/05Oct2015.b/v100509sim.d

Date : 05-OCT-2015 15:37

Client ID:

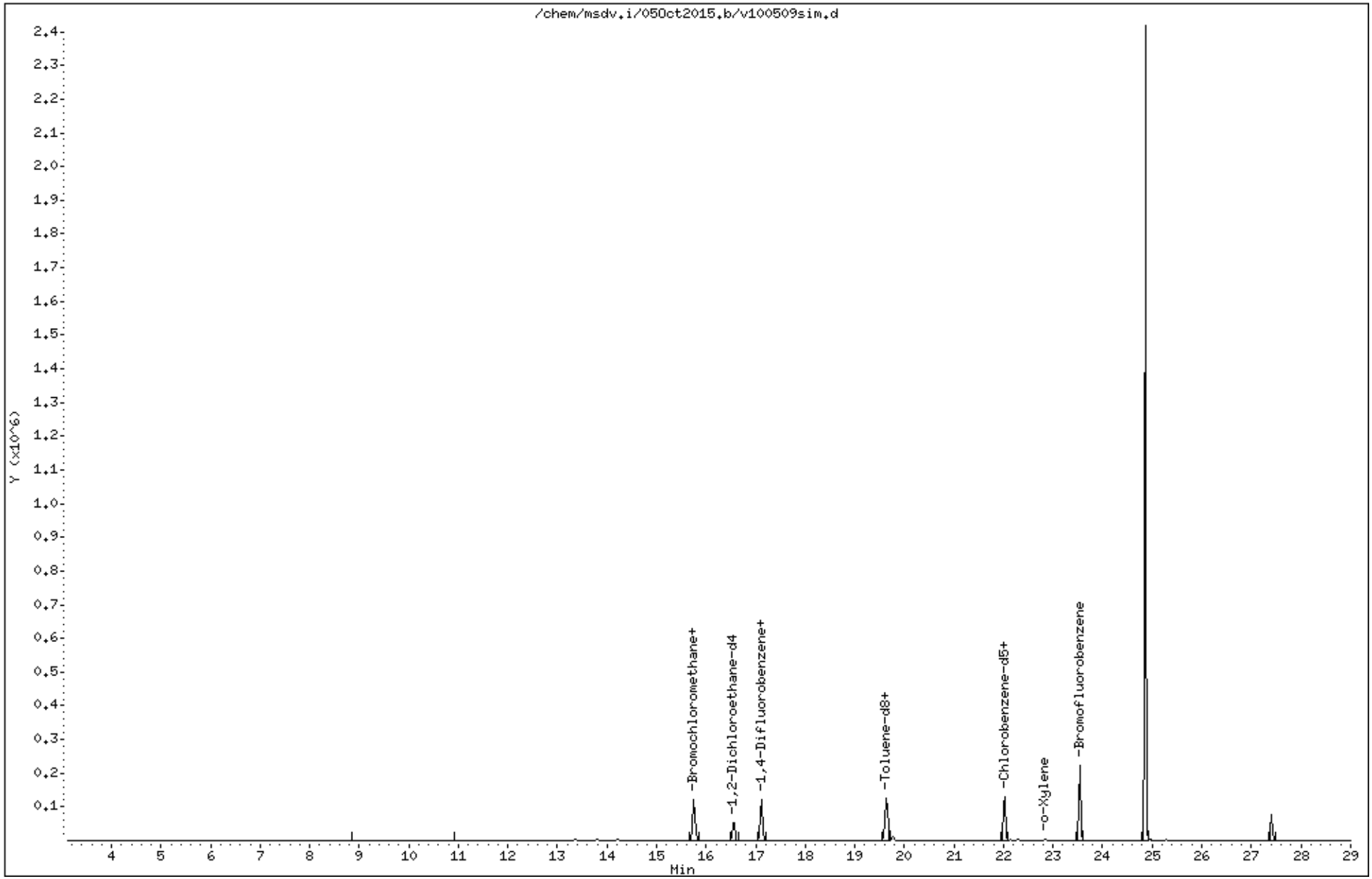
Instrument: msdv.i

Sample Info: 100mL #30840

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/05Oct2015.b/v100509sim.d

Date : 05-OCT-2015 15:37

Client ID:

Instrument: msdv.i

Sample Info: 100mL #30840

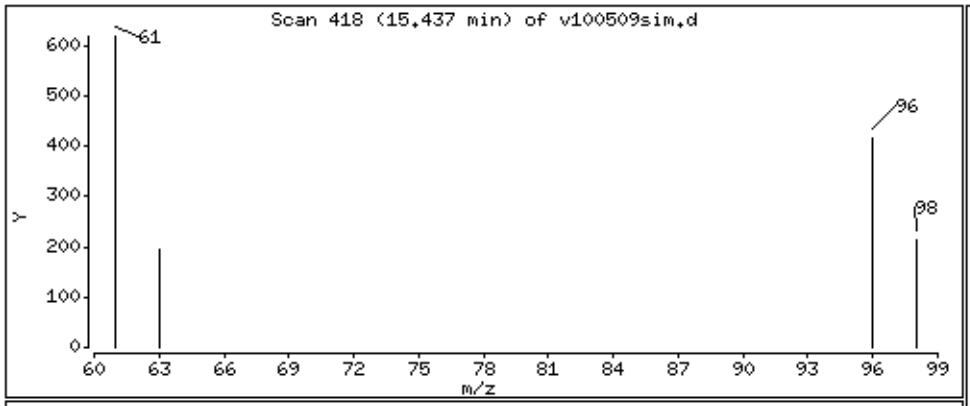
Operator: gh

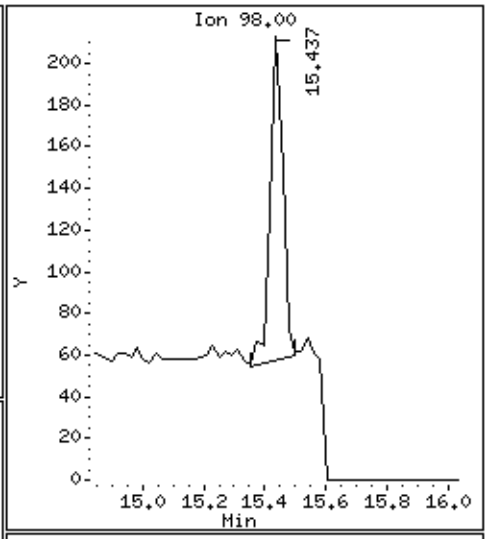
Column phase: RTx-624

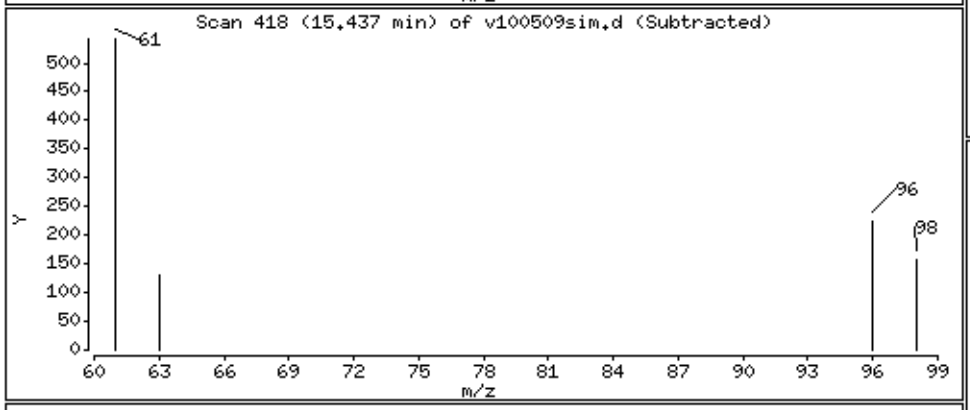
Column diameter: 0.32

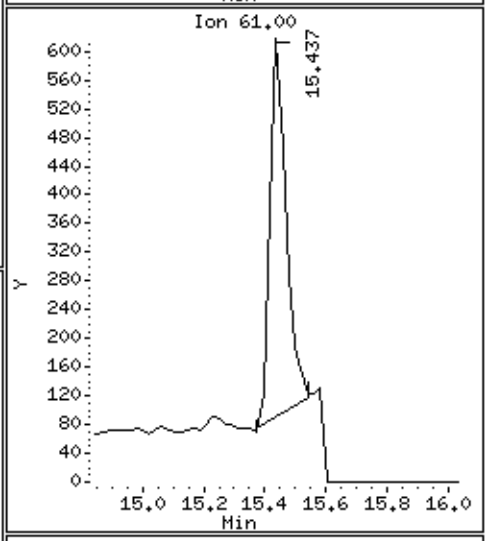
29 cis-1,2-Dichloroethene

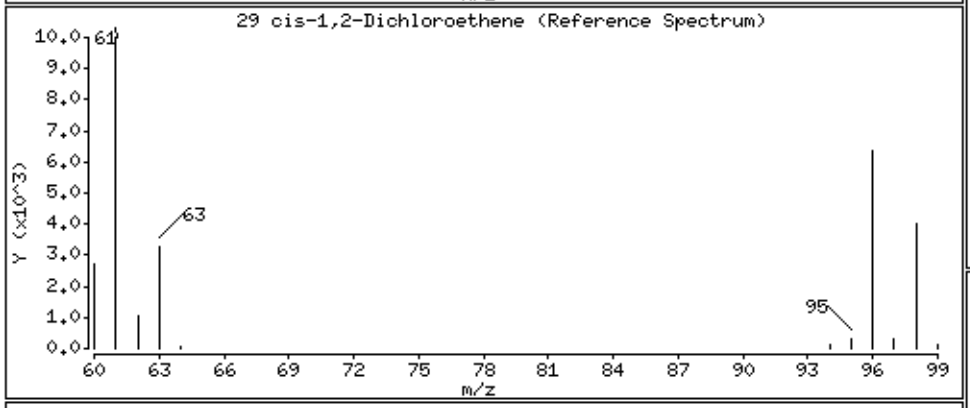
Concentration: 0.09725 PPBV

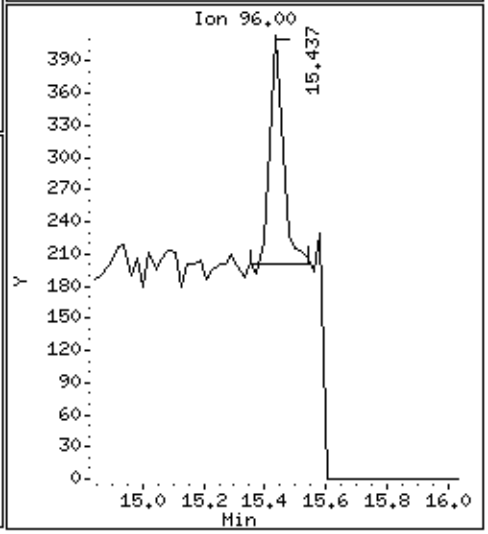


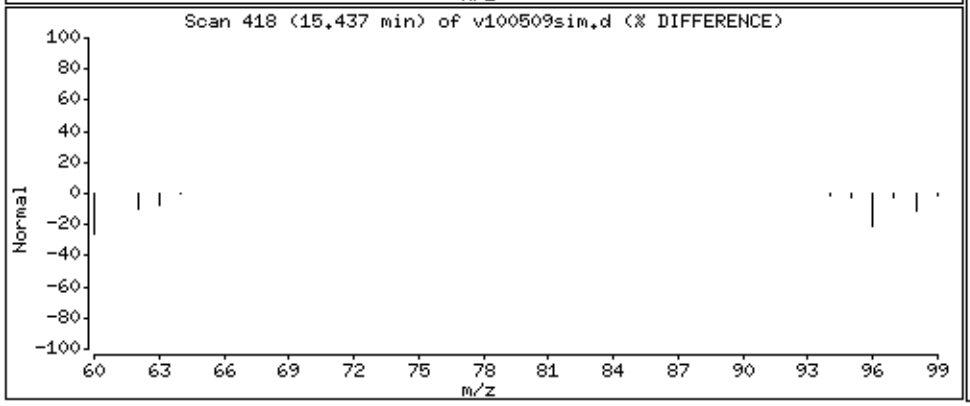












Data File: /chem/msdv.i/05Oct2015.b/v100509sim.d

Date : 05-OCT-2015 15:37

Client ID:

Instrument: msdv.i

Sample Info: 100mL #30840

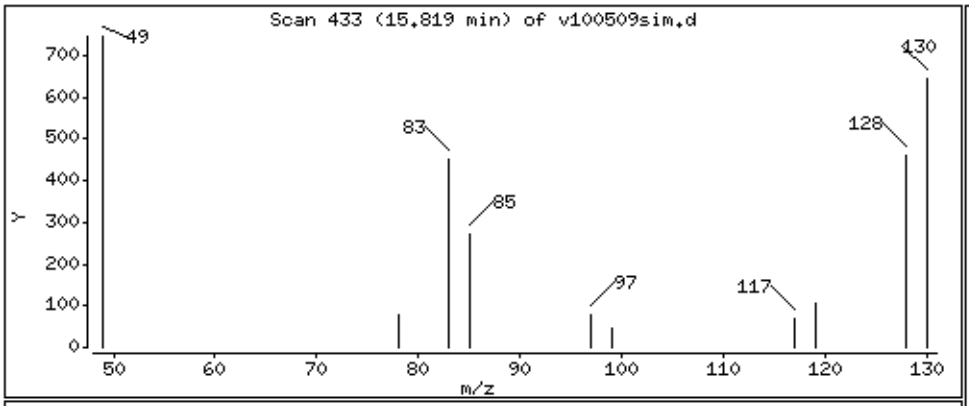
Operator: gh

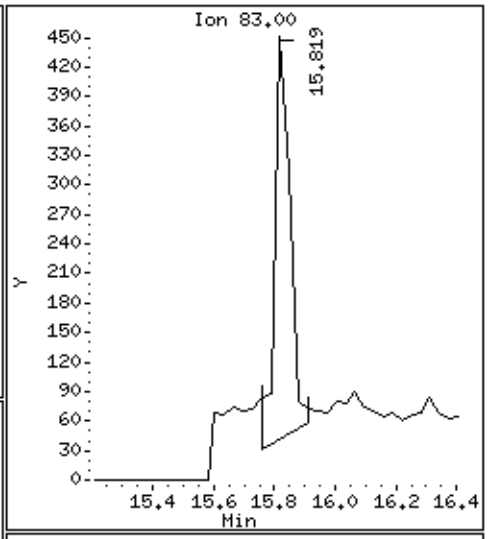
Column phase: RTx-624

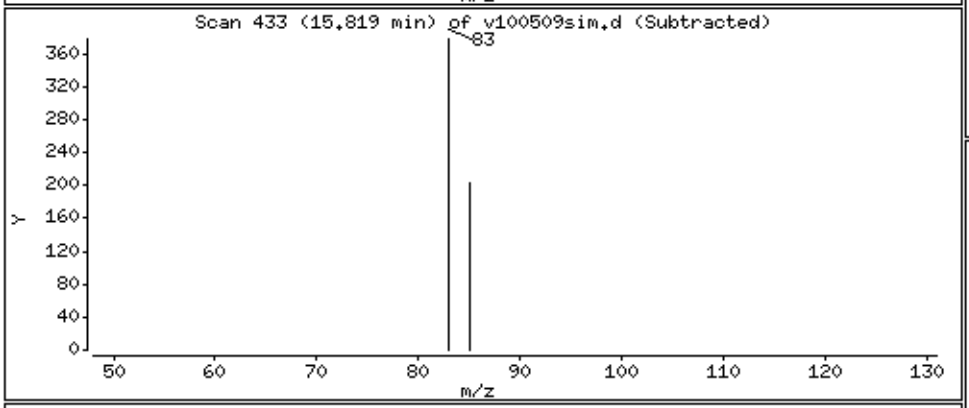
Column diameter: 0.32

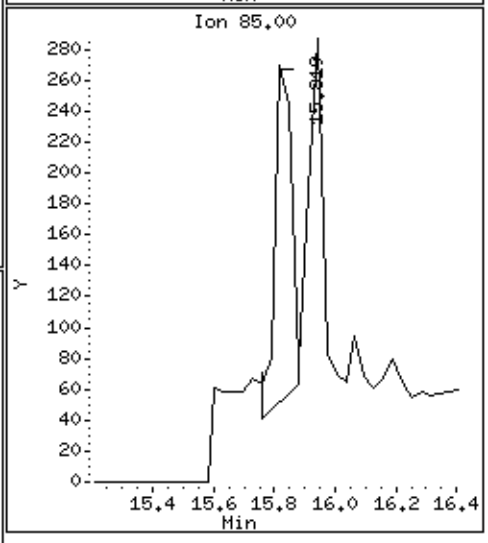
32 Chloroform

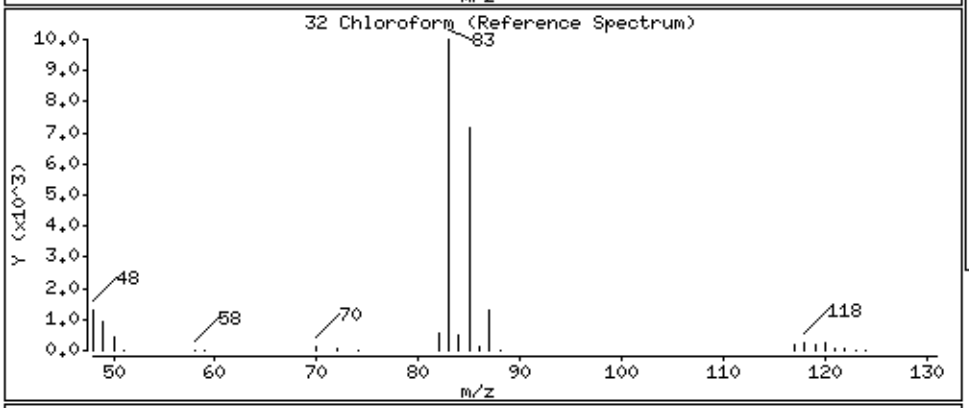
Concentration: 0.1157 PPBV

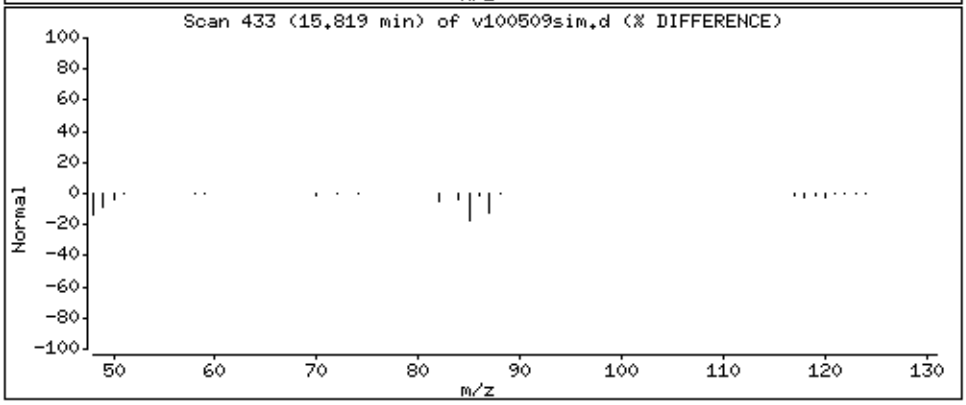












Data File: /chem/msdv.i/05Oct2015.b/v100509sim.d

Date : 05-OCT-2015 15:37

Client ID:

Instrument: msdv.i

Sample Info: 100mL #30840

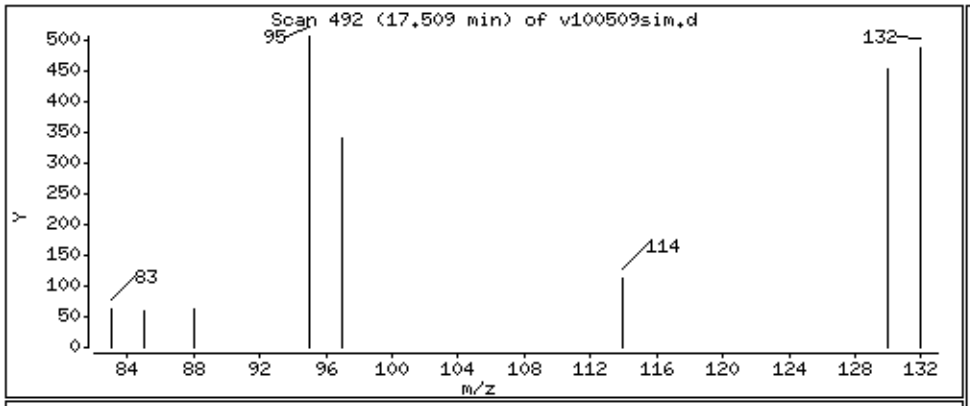
Operator: gh

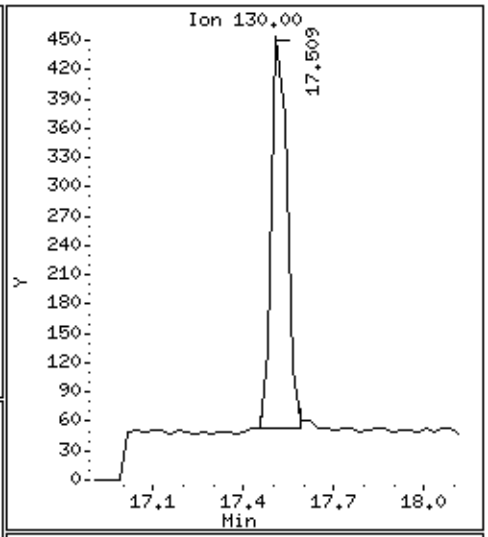
Column phase: RTx-624

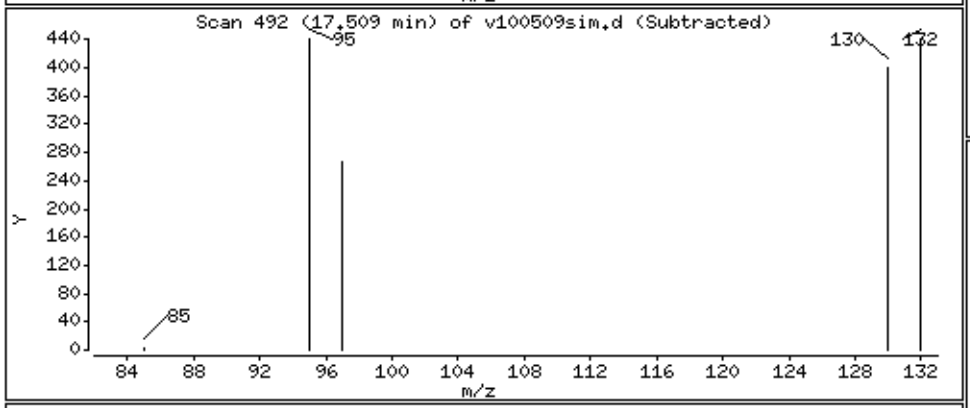
Column diameter: 0.32

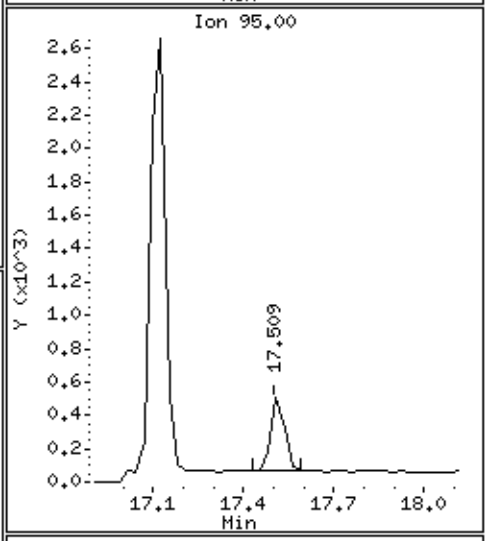
41 Trichloroethene

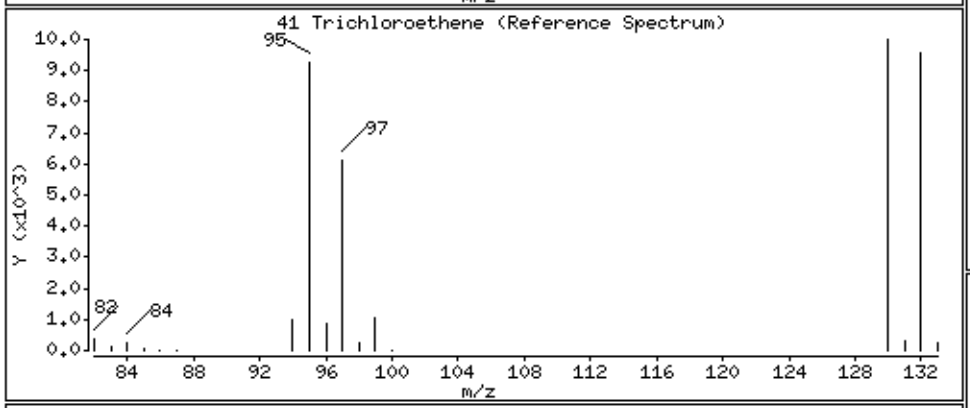
Concentration: 0.1208 PPBV

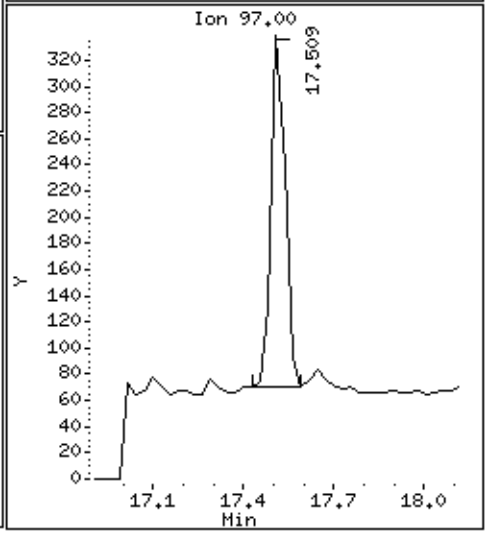


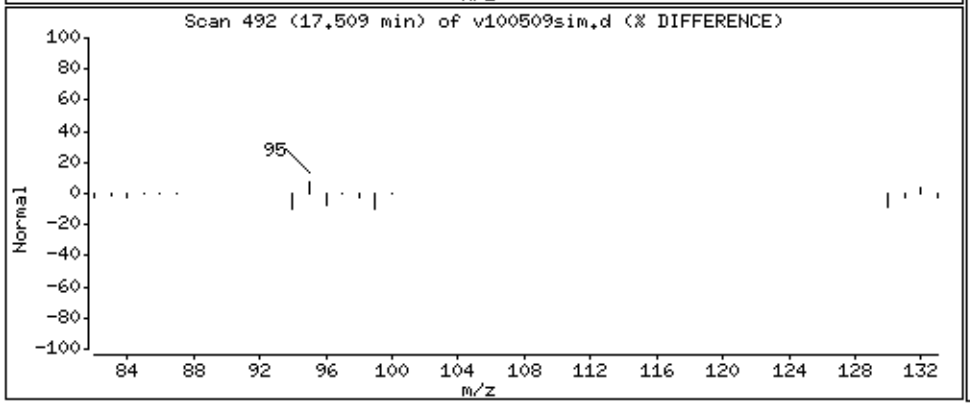












Data File: /chem/msdv.i/05Oct2015.b/v100509sim.d

Date : 05-OCT-2015 15:37

Client ID:

Instrument: msdv.i

Sample Info: 100mL #30840

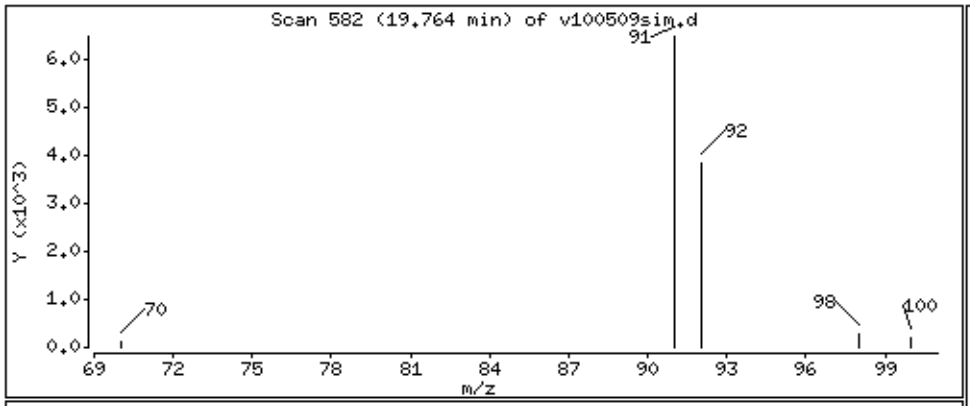
Operator: gh

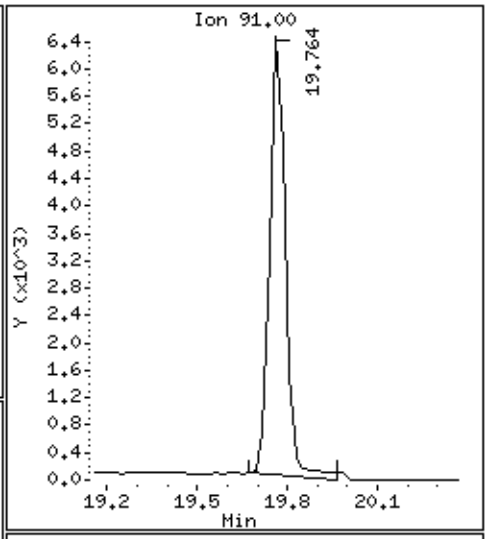
Column phase: RTx-624

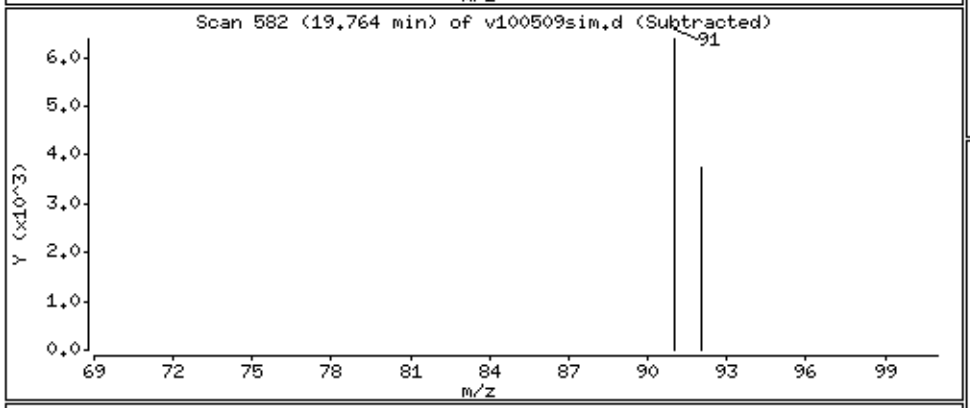
Column diameter: 0.32

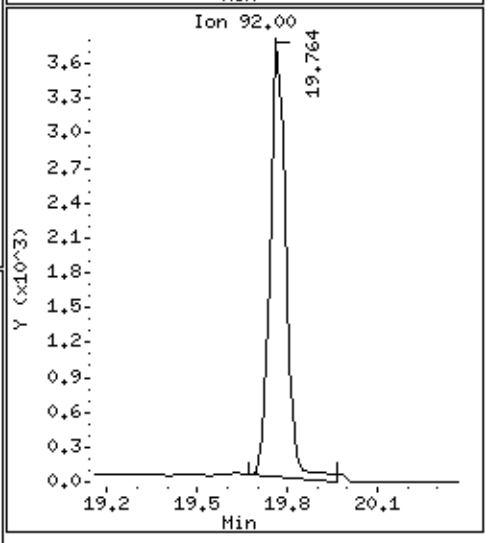
48 Toluene

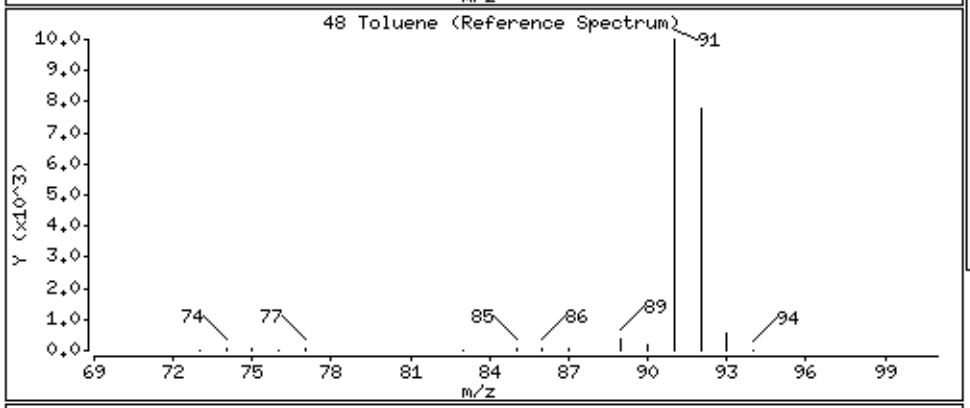
Concentration: 1.037 PPBV

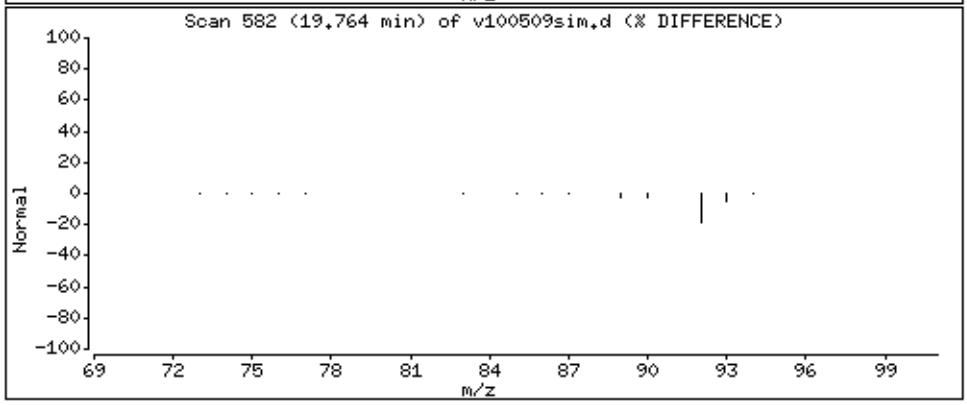












Data File: /chem/msdv.i/05Oct2015.b/v100509sim.d

Date : 05-OCT-2015 15:37

Client ID:

Instrument: msdv.i

Sample Info: 100mL #30840

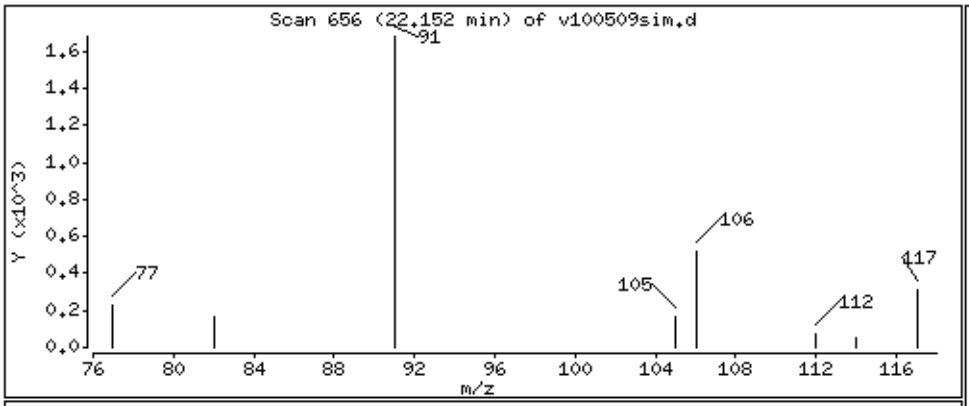
Operator: gh

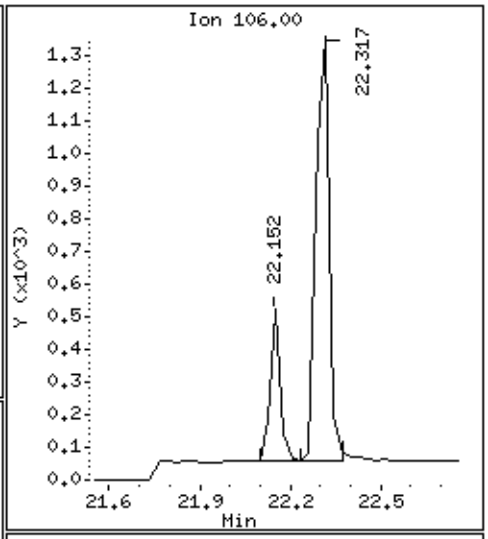
Column phase: RTx-624

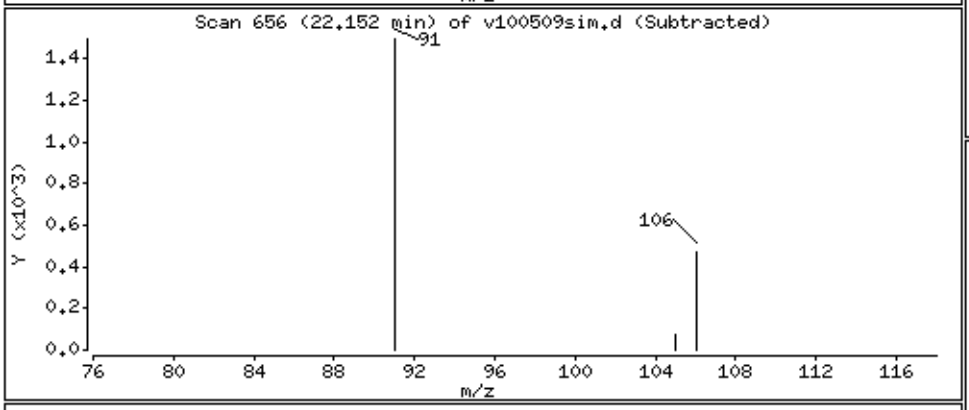
Column diameter: 0.32

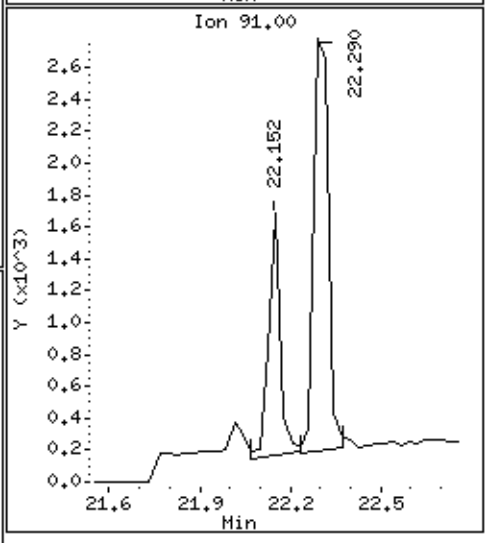
58 Ethyl Benzene

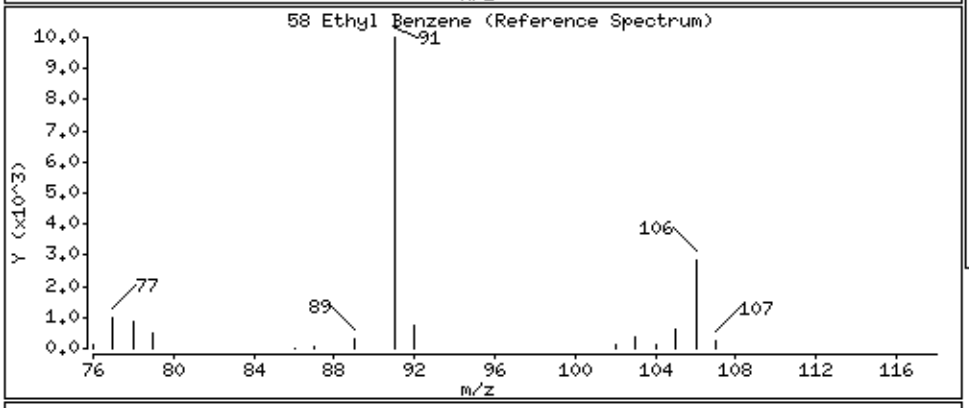
Concentration: 0.1450 PPBV

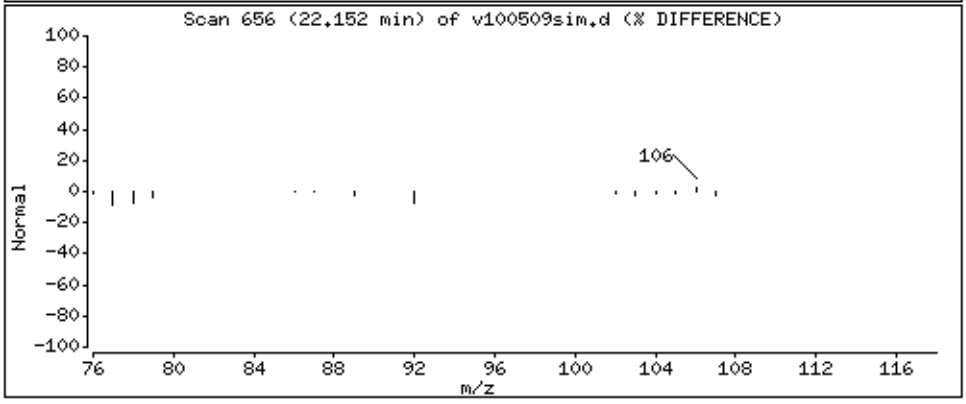












Data File: /chem/msdv.i/05Oct2015.b/v100509sim.d

Date : 05-OCT-2015 15:37

Client ID:

Instrument: msdv.i

Sample Info: 100mL #30840

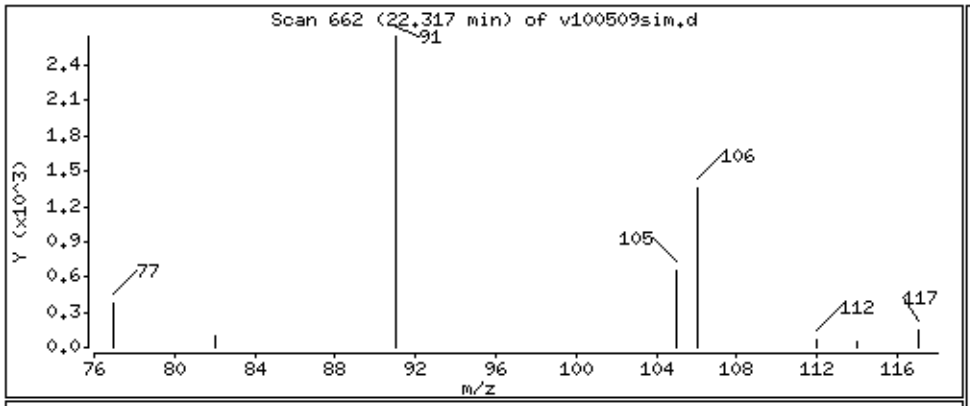
Operator: gh

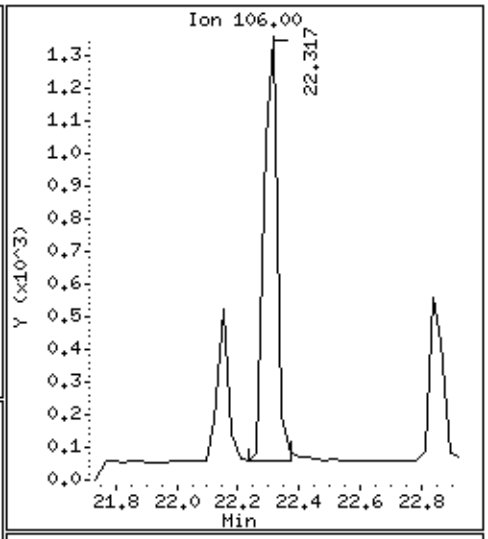
Column phase: RTx-624

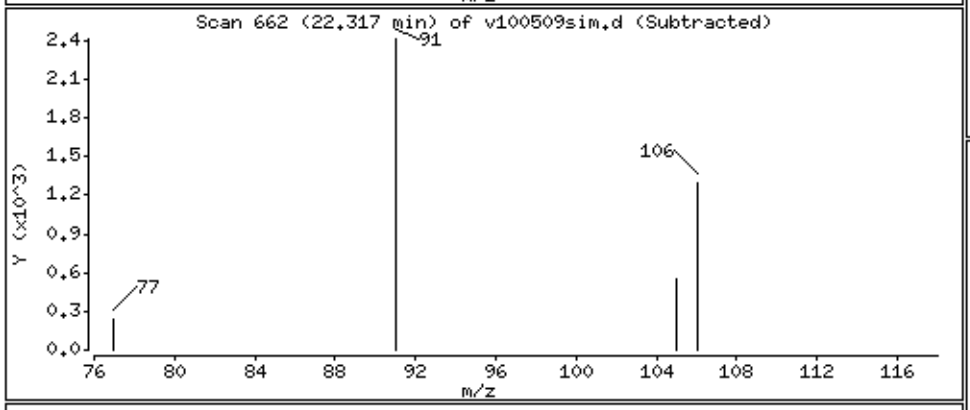
Column diameter: 0.32

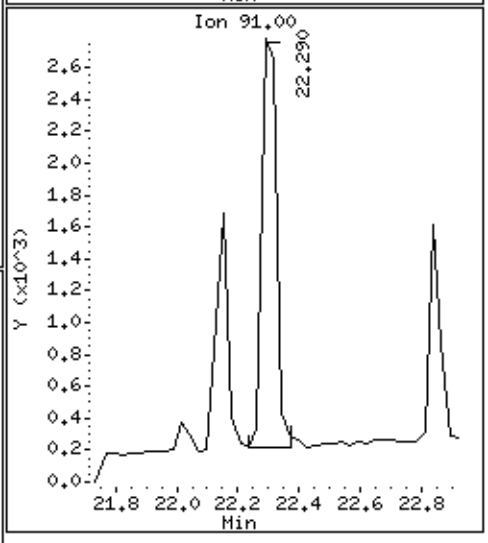
59 m,p-Xylene

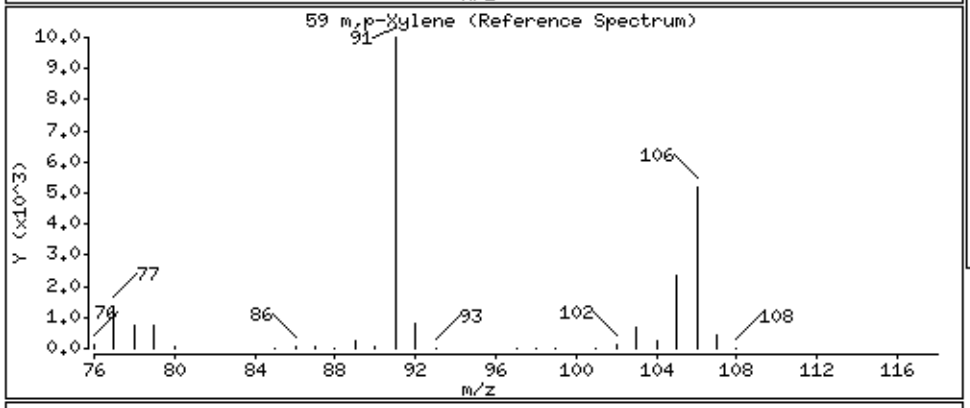
Concentration: 0.4933 PPBV

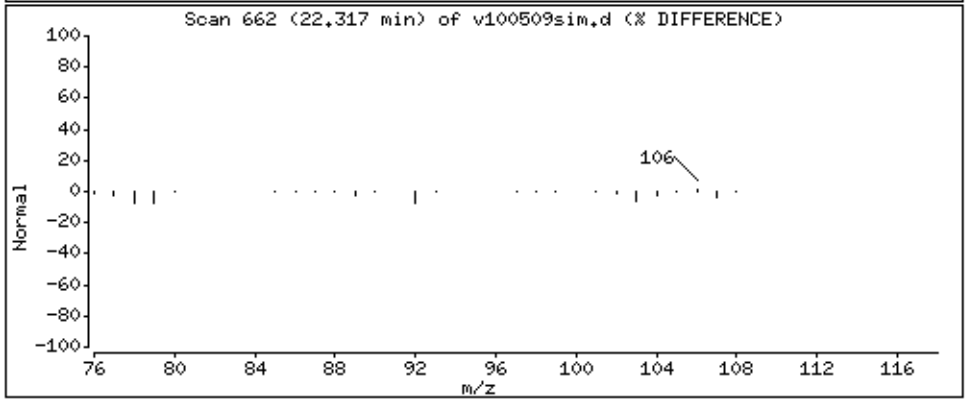












Data File: /chem/msdv.i/05Oct2015.b/v100509sim.d

Date : 05-OCT-2015 15:37

Client ID:

Instrument: msdv.i

Sample Info: 100mL #30840

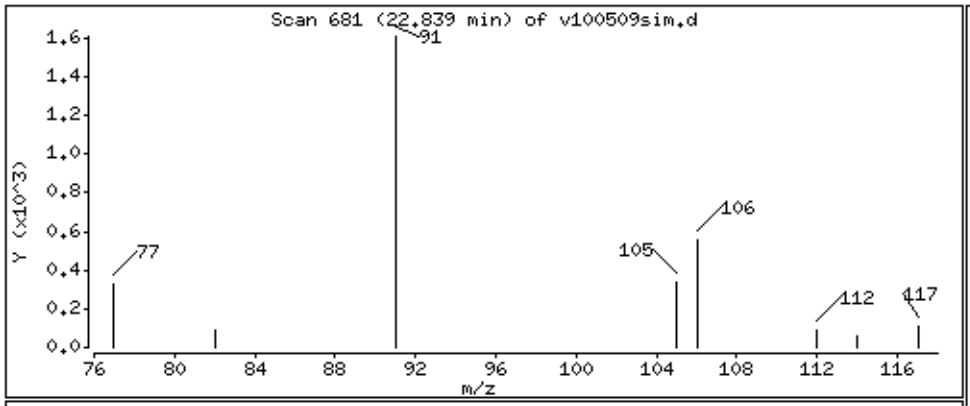
Operator: gh

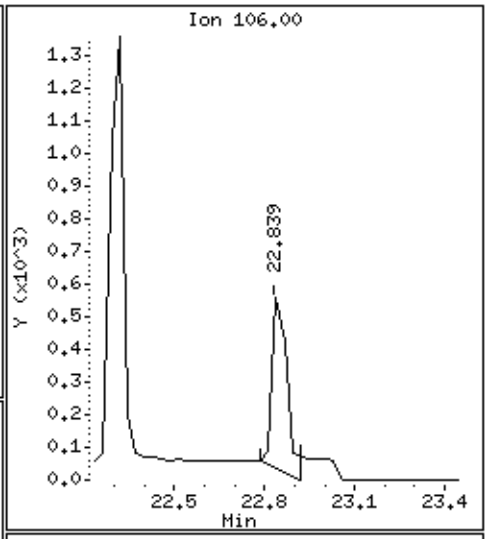
Column phase: RTx-624

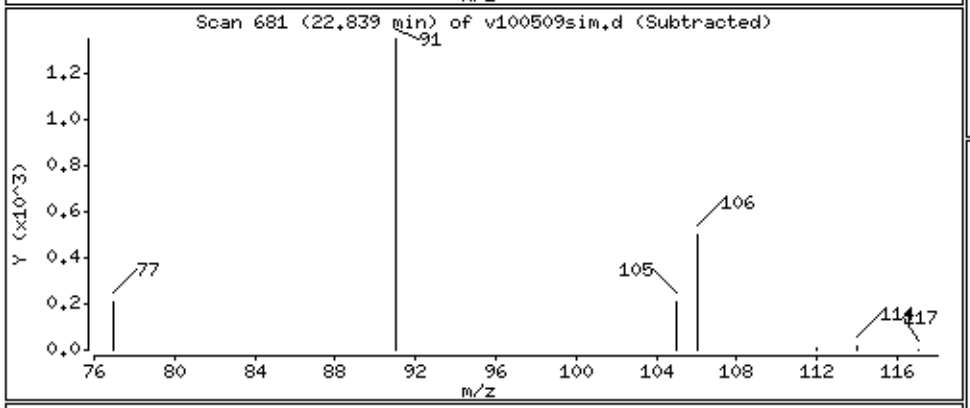
Column diameter: 0.32

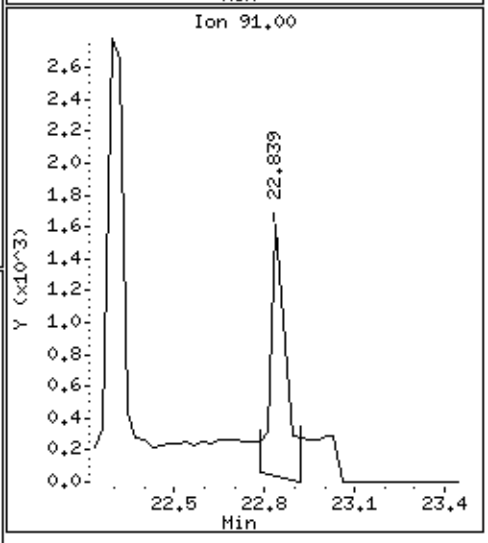
61 o-Xylene

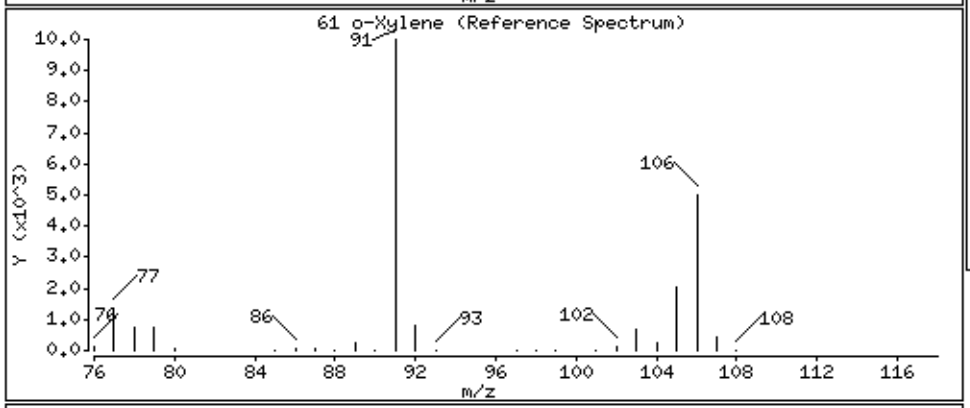
Concentration: 0.2343 PPBV

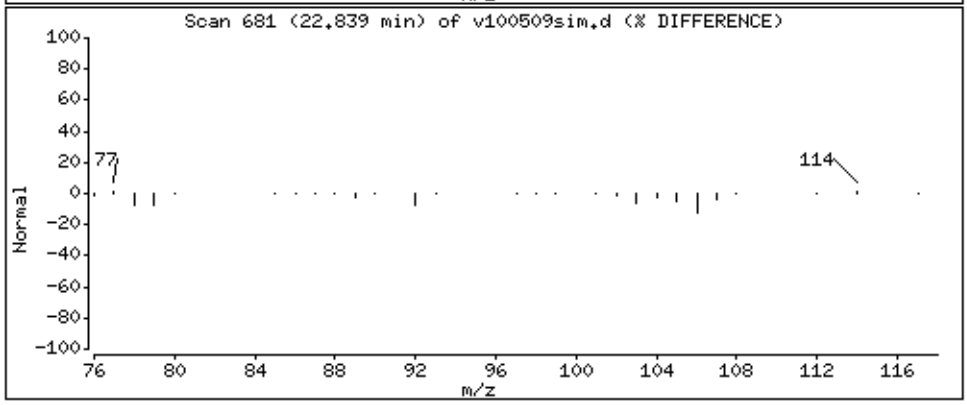












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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: 1-IA(092215)

Lab ID#: 1509512-04A

No Detections Were Found.

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Client Sample ID: 1-IA(092215)

Lab ID#: 1509512-04A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100510**	**Date of Collection: 9/23/15 12:02:00 PM**	
Dil. Factor:	**4.58**	**Date of Analysis: 10/5/15 04:24 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.92	Not Detected	3.2	Not Detected
1,2,4-Trimethylbenzene	0.46	Not Detected	2.2	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	95	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/05Oct2015.b/v100510.d
Lab Smp Id: 1509512-04A
Inj Date : 05-OCT-2015 16:24
Operator : gh Inst ID: msdv.i
Smp Info : 100mL #34481
Misc Info : 8.0"Hg ->5.0psi
Comment : Low Level GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m
Meth Date : 05-Oct-2015 11:52 mskidmor Quant Type: ISTD
Cal Date : 29-SEP-2015 21:58 Cal File: v092913.d
Als bottle: 1
Dil Factor: 4.58000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 54 Bromochloromethane						CAS #: 74-97-5	
15.743	15.743 (1.000)	130	70745	5.00000		80.00- 120.00	100.00
15.743	15.743 (1.000)	128	54964			48.04- 108.04	77.69
15.743	15.743 (1.000)	49	194684			284.77- 344.77	275.19
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.111	17.111 (1.000)	114	327437	5.00000		80.00- 120.00	100.00
17.111	17.111 (1.000)	88	51342			0.00- 44.16	15.68
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.029	22.029 (1.000)	117	294034	5.00000		80.00- 120.00	100.00
22.029	22.029 (1.000)	82	139217			18.70- 78.70	47.35
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.562	16.562 (1.052)	65	121867	4.88455	4.884	80.00- 120.00	100.00
16.562	16.562 (1.052)	67	54386			19.41- 79.41	44.63
$ 80 Toluene-d8						CAS #: 2037-26-5	
19.638	19.615 (1.148)	98	292577	4.74016	4.740	80.00- 120.00	100.00
19.638	19.615 (1.148)	70	31969			0.00- 40.74	10.93

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.638	19.615 (1.148)	100	193559			34.93- 94.93	66.16
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.535	23.535 (1.068)	174	143078	4.73639	4.736	80.00- 120.00	100.00
23.535	23.535 (1.068)	95	174925			94.06- 154.06	122.26
23.535	23.535 (1.068)	176	130893			68.95- 128.95	91.48

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100510.d
Lab Smp Id: 1509512-04A
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: 8.0"Hg ->5.0psi

Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	78102	46861	109343	70745	-9.42
71 1,4-Difluorobenze	340477	204286	476668	327437	-3.83
92 Chlorobenzene-d5	294231	176539	411923	294034	-0.07

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.74	15.41	16.07	15.74	0.00
71 1,4-Difluorobenze	17.11	16.78	17.44	17.11	0.00
92 Chlorobenzene-d5	22.03	21.70	22.36	22.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509512-04A
Level: LOW Operator: gh
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: 8.0"Hg ->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	4.884	97.69	70-130
$ 80 Toluene-d8	5.000	4.740	94.80	70-130
$ 106 Bromofluorobenzene	5.000	4.736	94.73	70-130

Data File: /chem/msdv.i/05Oct2015.b/v100510.d

Date : 05-OCT-2015 16:24

Client ID:

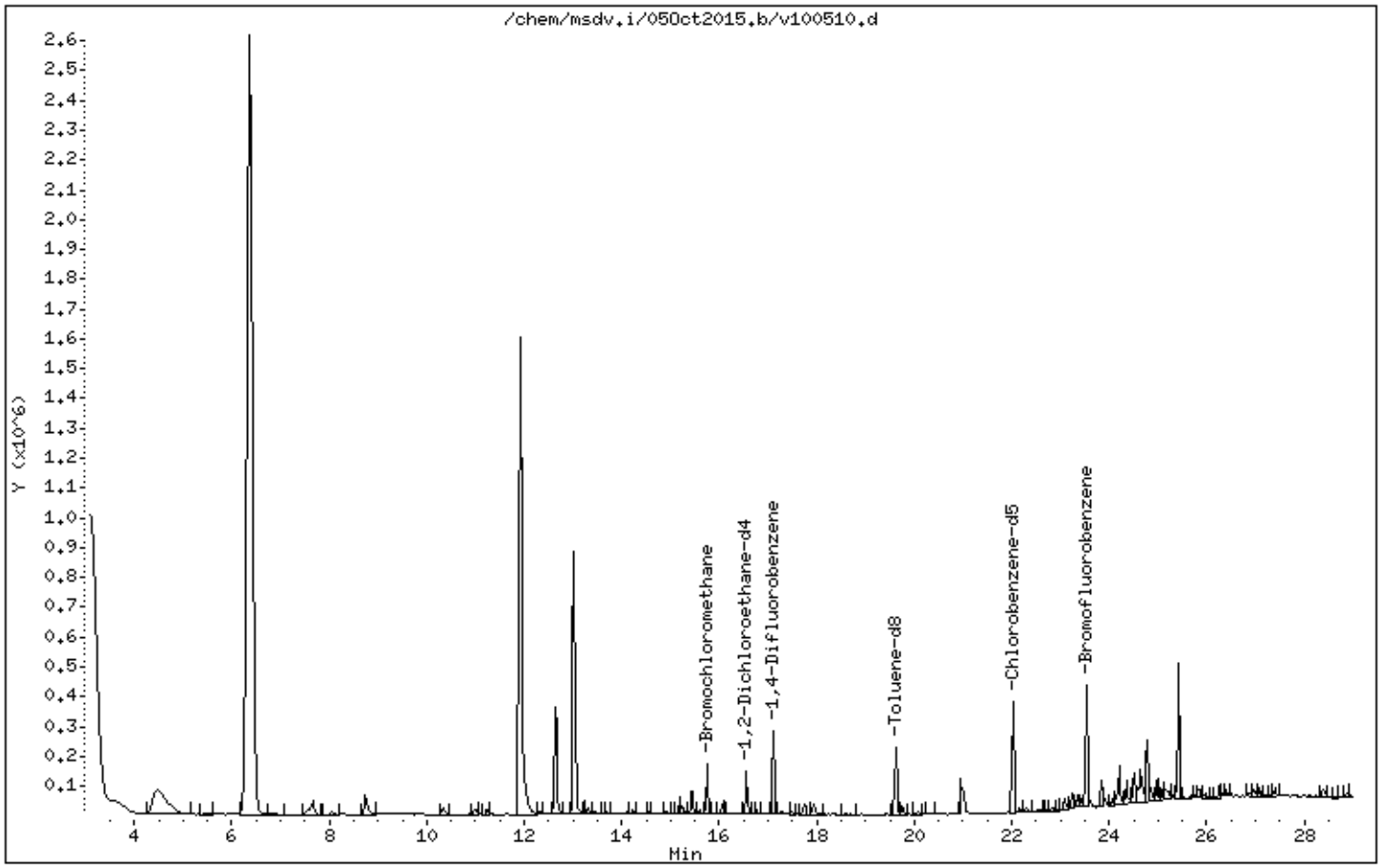
Instrument: msdv.i

Sample Info: 100mL #34481

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: 1-IA(092215)

Lab ID#: 1509512-04B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.092	0.15	0.36	0.61
Chloroform	0.092	0.15	0.45	0.75
Benzene	0.23	1.2	0.73	3.8
1,2-Dichloroethane	0.092	0.21	0.37	0.84
Trichloroethene	0.092	0.20	0.49	1.1
Toluene	0.092	1.4	0.34	5.4
Ethyl Benzene	0.092	0.23	0.40	1.0
m,p-Xylene	0.18	0.59	0.80	2.6
o-Xylene	0.092	0.22	0.40	0.95

eurofins | Air Toxics

Client Sample ID: 1-IA(092215)

Lab ID#: 1509512-04B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100510sim**	**Date of Collection: 9/23/15 12:02:00 PM**	
Dil. Factor:	**4.58**	**Date of Analysis: 10/5/15 04:24 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.046	Not Detected	0.12	Not Detected
1,1-Dichloroethene	0.046	Not Detected	0.18	Not Detected
trans-1,2-Dichloroethene	0.46	Not Detected	1.8	Not Detected
cis-1,2-Dichloroethene	0.092	0.15	0.36	0.61
Chloroform	0.092	0.15	0.45	0.75
Benzene	0.23	1.2	0.73	3.8
1,2-Dichloroethane	0.092	0.21	0.37	0.84
Trichloroethene	0.092	0.20	0.49	1.1
Toluene	0.092	1.4	0.34	5.4
1,1,2-Trichloroethane	0.092	Not Detected	0.50	Not Detected
Tetrachloroethene	0.092	Not Detected	0.62	Not Detected
Ethyl Benzene	0.092	0.23	0.40	1.0
m,p-Xylene	0.18	0.59	0.80	2.6
o-Xylene	0.092	0.22	0.40	0.95

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	103	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	97	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/05Oct2015.b/v100510sim.d
Lab Smp Id: 1509512-04B
Inj Date : 05-OCT-2015 16:24
Operator : gh Inst ID: msdv.i
Smp Info : 100mL #34481
Misc Info : 8.0"Hg ->5.0psi
Comment : SIM GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 05-Oct-2015 12:58 mskidmor Quant Type: ISTD
Cal Date : 29-SEP-2015 14:34 Cal File: v092903sim.d
Als bottle: 1
Dil Factor: 4.58000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 31 Bromochloromethane						CAS #: 74-97-5	
15.757	15.757 (1.000)	130	76750	5.00000		80.00- 120.00	100.00
15.757	15.757 (1.000)	128	59239			48.13- 108.13	77.19
15.757	15.757 (1.000)	49	215723			238.09- 298.09	281.07
* 40 1,4-Difluorobenzene						CAS #: 540-36-3	
17.125	17.125 (1.000)	114	326870	5.00000		80.00- 120.00	100.00
17.125	17.125 (1.000)	88	46691			0.00- 44.50	14.28
* 56 Chlorobenzene-d5						CAS #: 3114-55-4	
22.042	22.042 (1.000)	117	279337	5.00000		80.00- 120.00	100.00
22.015	22.042 (1.000)	82	131283			16.61- 76.61	47.00
$ 37 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.548	16.548 (1.050)	65	130364	5.14666	5.147	80.00- 120.00	100.00
16.576	16.548 (1.052)	67	59216			19.91- 79.91	45.42
$ 47 Toluene-d8						CAS #: 2037-26-5	
19.629	19.629 (1.146)	98	262961	4.97903	4.979	80.00- 120.00	100.00
19.629	19.629 (1.146)	70	29432			0.00- 41.04	11.19

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.629	19.629 (1.146)	100	166348			32.99- 92.99	63.26
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	150420	4.83368	4.834	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	169756			84.02- 144.02	112.85
23.548	23.548 (1.068)	176	146441			67.56- 127.56	97.35
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.437	15.437 (0.980)	98	654	0.03356	0.1537	80.00- 120.00	100.00(M)
15.437	15.437 (0.980)	61	23303			264.63- 324.63	3562.23
15.437	15.437 (0.980)	96	999			126.49- 186.49	152.85
32 Chloroform					CAS #: 67-66-3		
15.819	15.819 (1.004)	83	1869	0.03344	0.1531	80.00- 120.00	100.00
15.819	15.819 (1.004)	85	1156			34.82- 94.82	61.87
36 Benzene					CAS #: 71-43-2		
16.576	16.576 (0.968)	78	22719	0.26238	1.202	80.00- 120.00	100.00
16.576	16.576 (0.968)	77	5575			0.00- 52.79	24.54
38 1,2-Dichloroethane					CAS #: 107-06-2		
16.658	16.658 (0.973)	62	2317	0.04532	0.2076	80.00- 120.00	100.00
16.658	16.658 (0.973)	64	672			0.00- 59.27	29.00
41 Trichloroethene					CAS #: 79-01-6		
17.509	17.509 (1.022)	130	2243	0.04388	0.2009	80.00- 120.00	100.00
17.509	17.509 (1.022)	95	3678			64.71- 124.71	163.94
17.509	17.509 (1.022)	97	1479			31.19- 91.19	65.93
48 Toluene					CAS #: 108-88-3		
19.763	19.764 (1.154)	91	31282	0.31573	1.446	80.00- 120.00	100.00
19.763	19.764 (1.154)	92	18797			28.99- 88.99	60.09
58 Ethyl Benzene					CAS #: 100-41-4		
22.152	22.152 (1.005)	106	1746	0.05098	0.2335	80.00- 120.00	100.00
22.152	22.152 (1.005)	91	5755			301.49- 361.49	329.61
59 m,p-Xylene					CAS #: 108-38-3		
22.317	22.317 (1.012)	106	4645	0.12913	0.5914	80.00- 120.00	100.00
22.289	22.317 (1.011)	91	10336			185.00- 245.00	222.52
61 o-Xylene					CAS #: 95-47-6		
22.839	22.839 (1.036)	106	1629	0.04794	0.2196	80.00- 120.00	100.00
22.839	22.839 (1.036)	91	5154			198.20- 258.20	316.38

QC Flag Legend

M - Compound response manually integrated.

Report Date: 12-Oct-2015 12:34

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100510sim.d
Lab Smp Id: 1509512-04B
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 8.0"Hg ->5.0psi

Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	81342	48805	113879	76750	-5.65
40 1,4-Difluorobenze	339188	203513	474863	326870	-3.63
56 Chlorobenzene-d5	289088	173453	404723	279337	-3.37

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Oct-2015 12:34

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509512-04B
Level: LOW Operator: gh
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 8.0"Hg ->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 37 1,2-Dichloroethane	5.000	5.147	102.93	70-130
$ 47 Toluene-d8	5.000	4.979	99.58	70-130
$ 66 Bromofluorobenzene	5.000	4.834	96.67	70-130

Data File: /chem/msdv.i/05Oct2015.b/v100510sim.d

Date : 05-OCT-2015 16:24

Client ID:

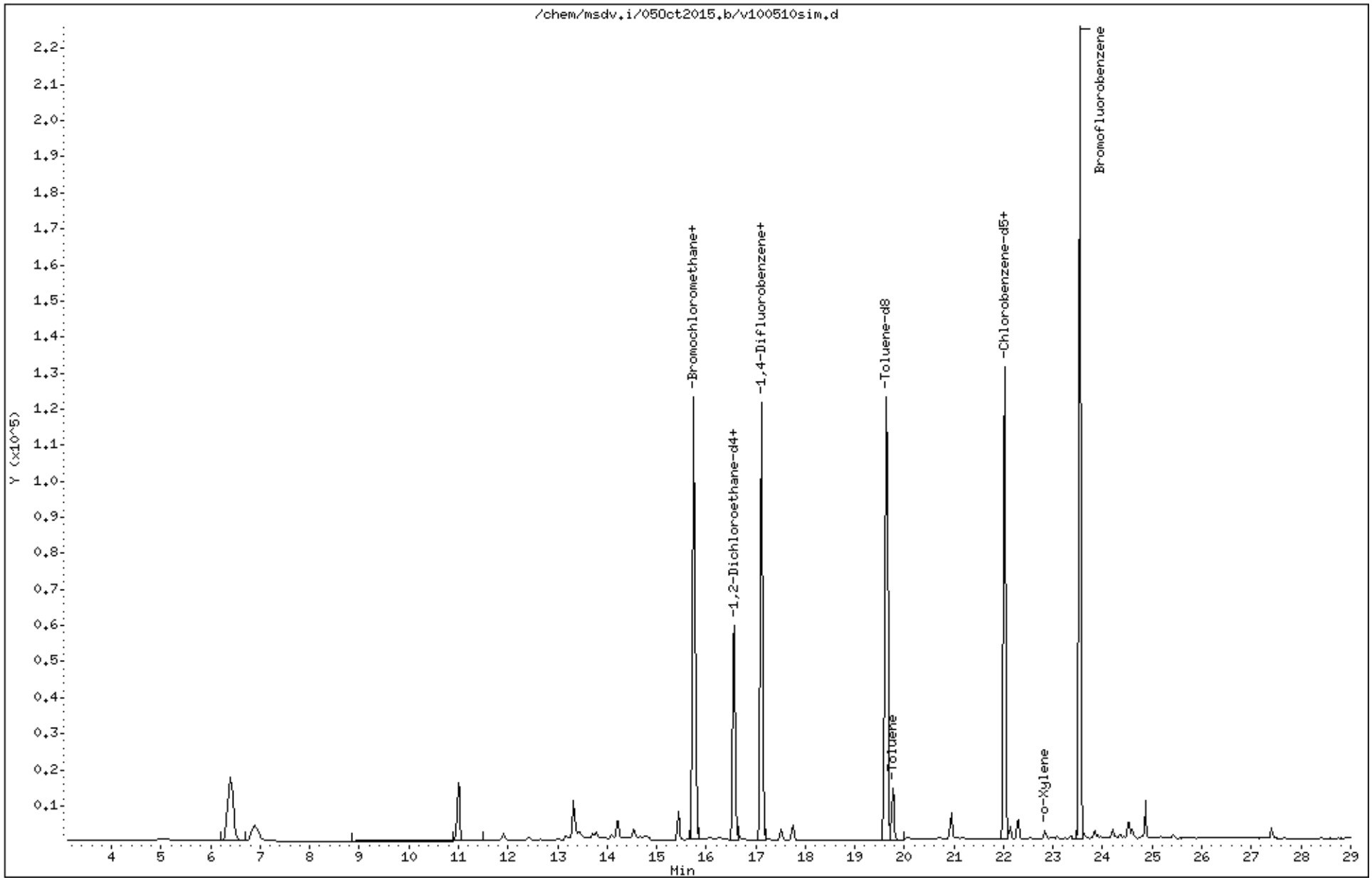
Instrument: msdv.i

Sample Info: 100mL #34481

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/05Oct2015.b/v100510sim.d

Date : 05-OCT-2015 16:24

Client ID:

Instrument: msdv.i

Sample Info: 100mL #34481

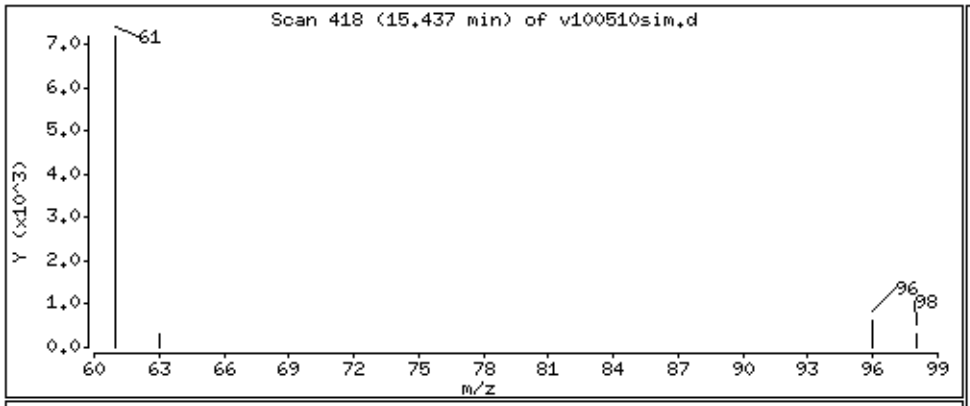
Operator: gh

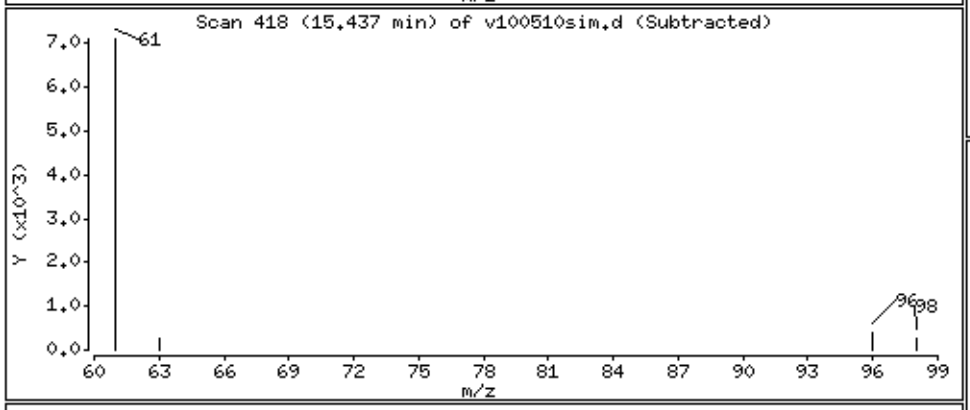
Column phase: RTx-624

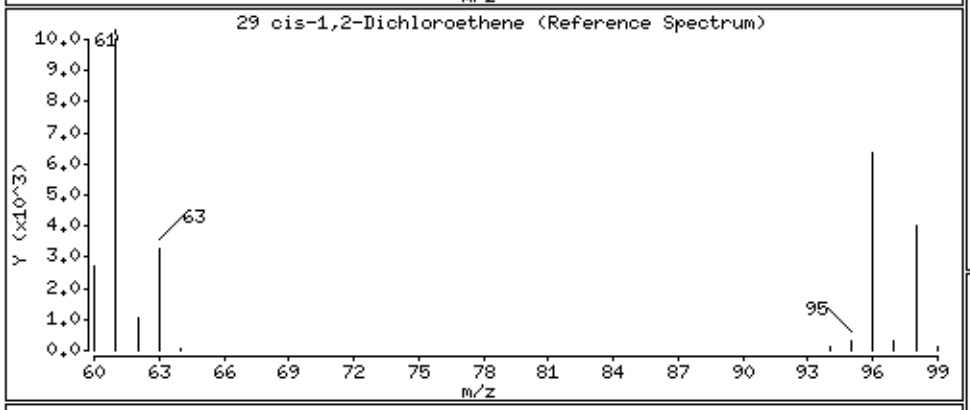
Column diameter: 0.32

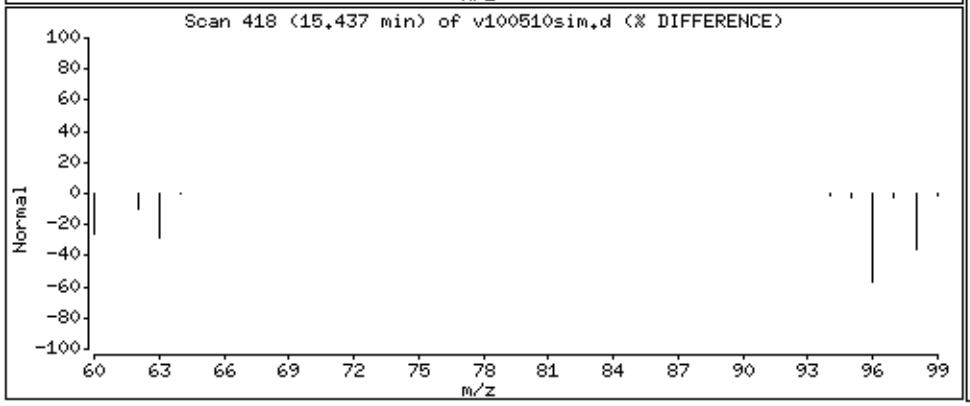
29 cis-1,2-Dichloroethene

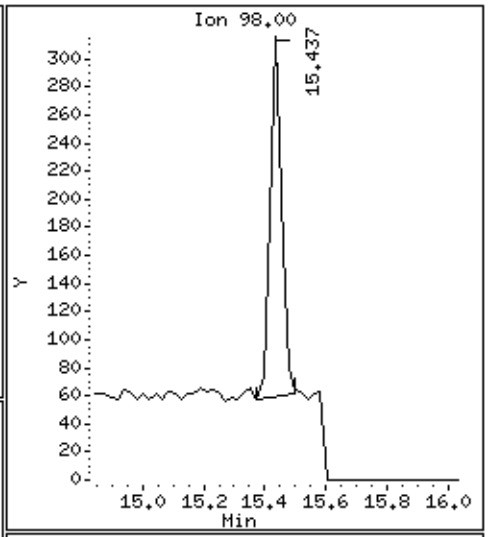
Concentration: 0.1537 PPBV

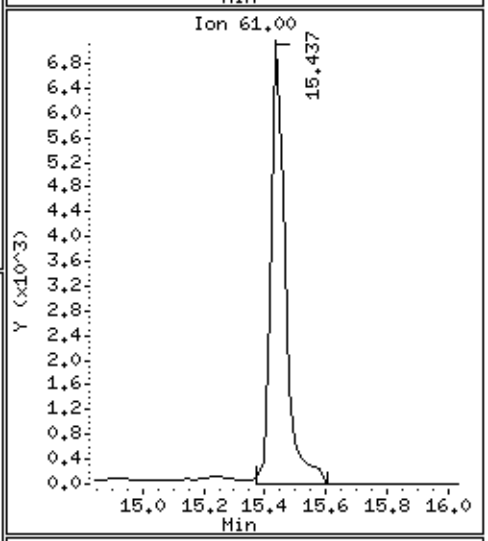


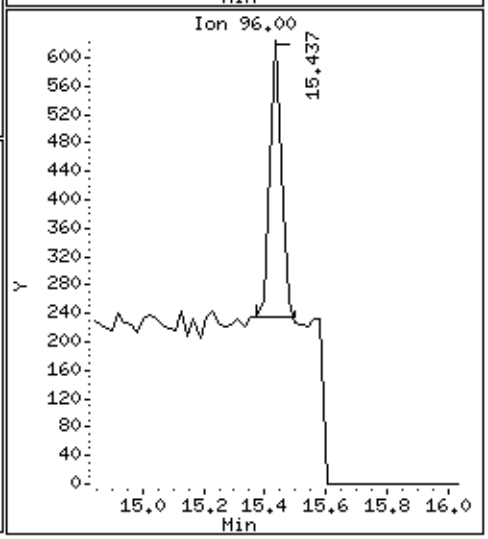












Data File: /chem/msdv.i/05Oct2015.b/v100510sim.d

Date : 05-OCT-2015 16:24

Client ID:

Instrument: msdv.i

Sample Info: 100mL #34481

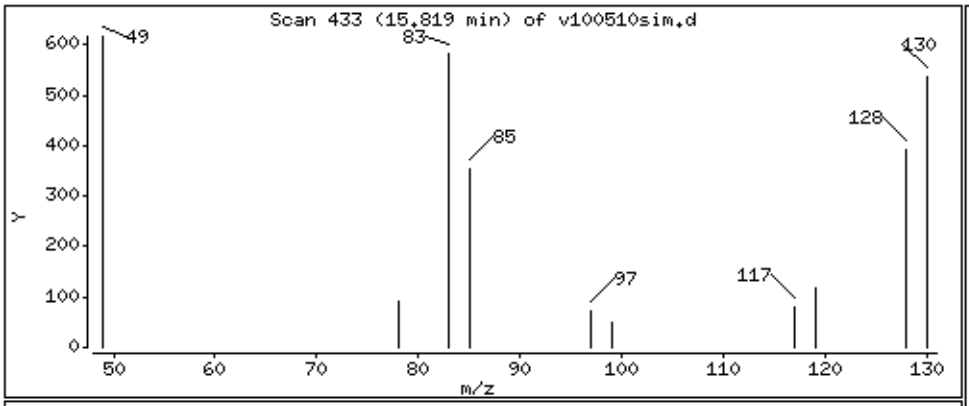
Operator: gh

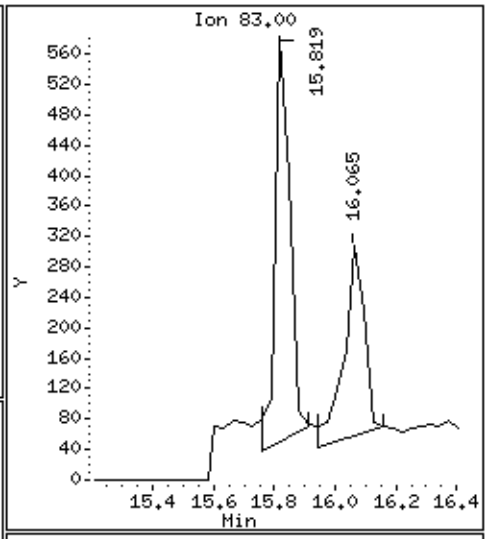
Column phase: RTx-624

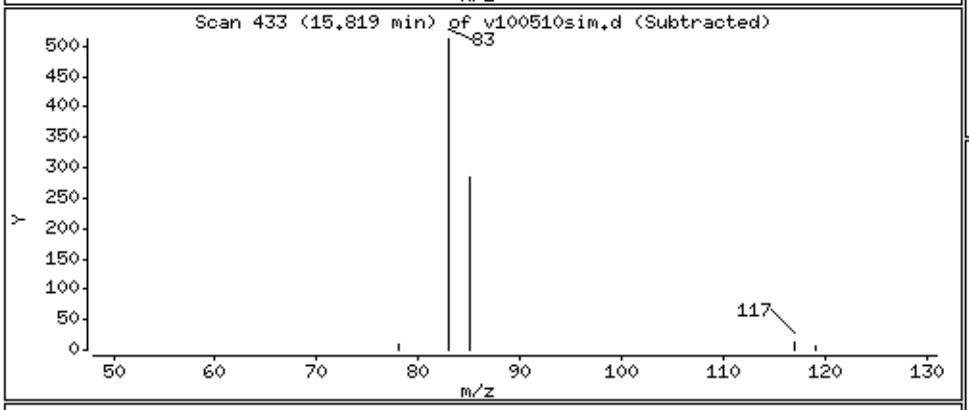
Column diameter: 0.32

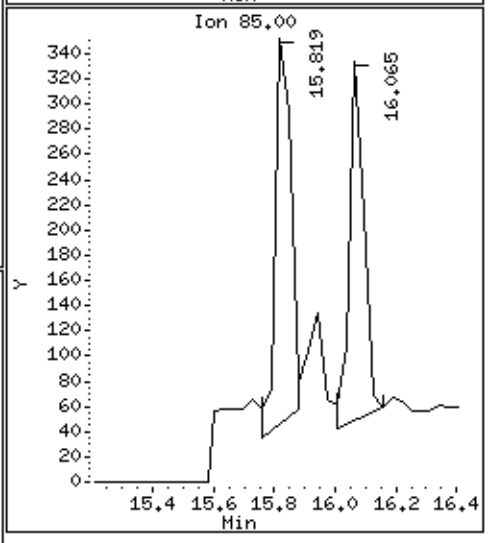
32 Chloroform

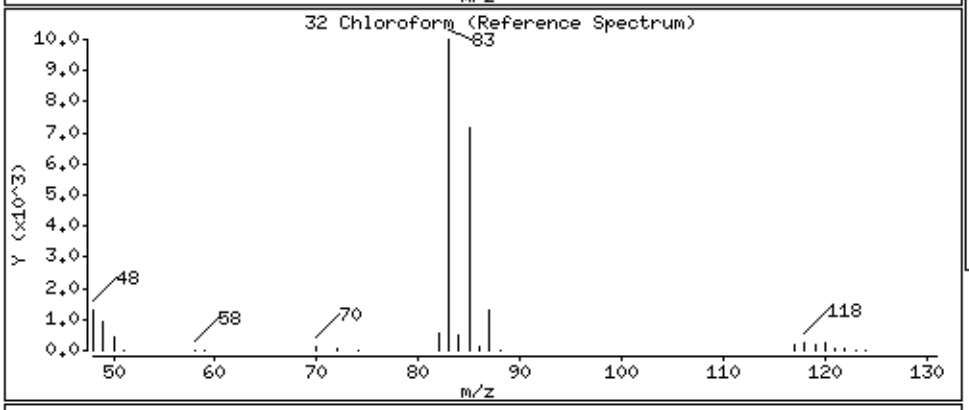
Concentration: 0.1531 PPBV

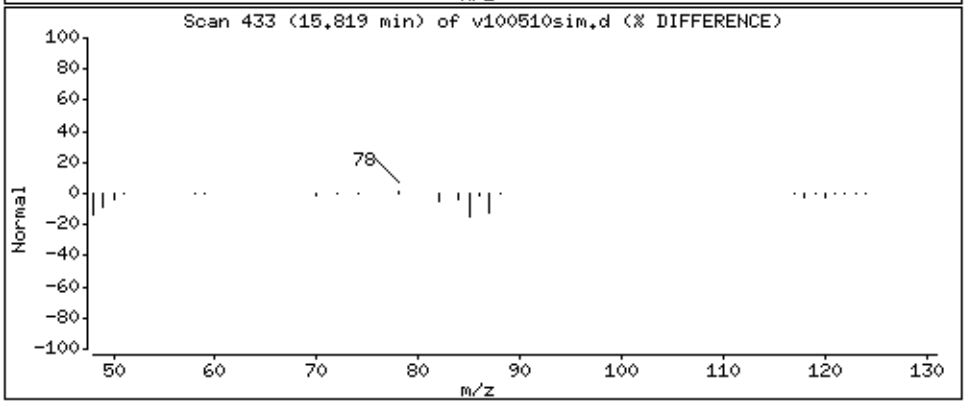












Data File: /chem/msdv.i/05Oct2015.b/v100510sim.d

Date : 05-OCT-2015 16:24

Client ID:

Instrument: msdv.i

Sample Info: 100mL #34481

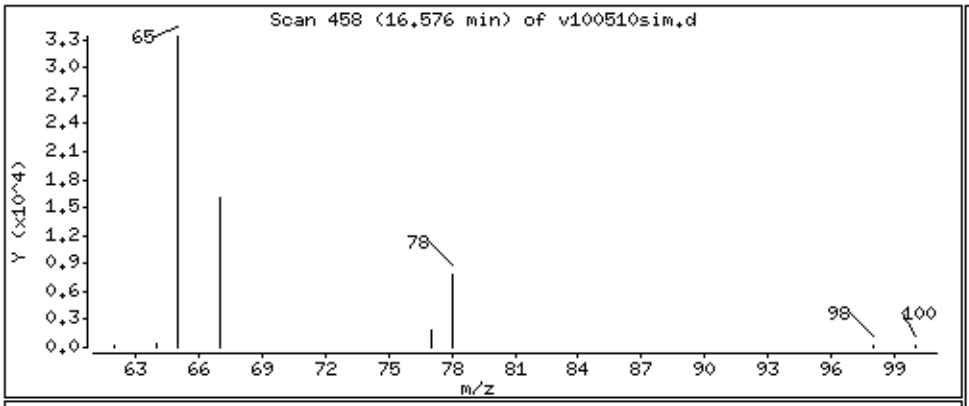
Operator: gh

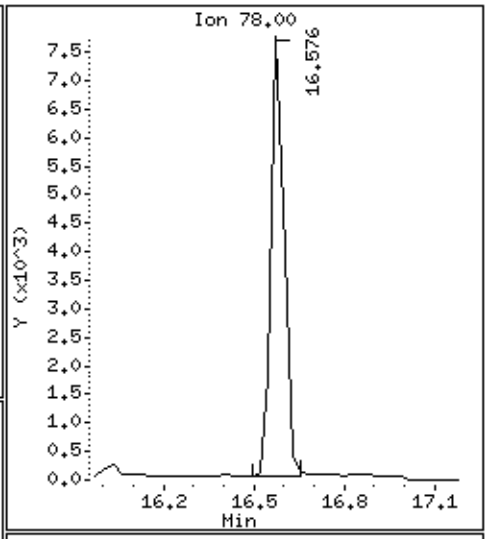
Column phase: RTx-624

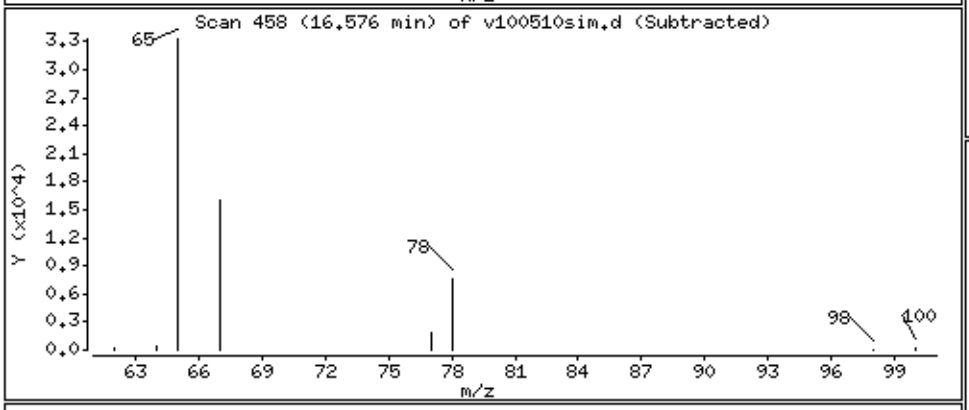
Column diameter: 0.32

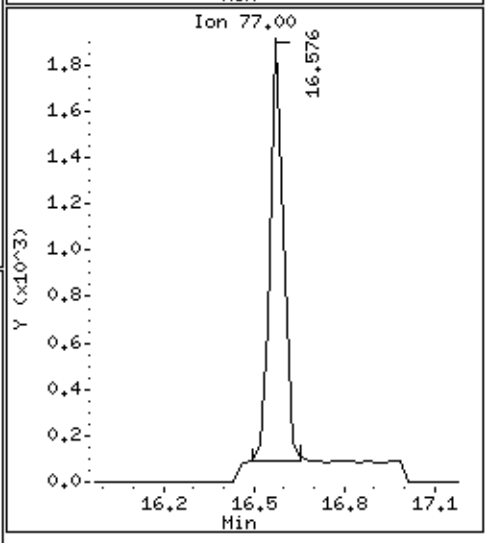
36 Benzene

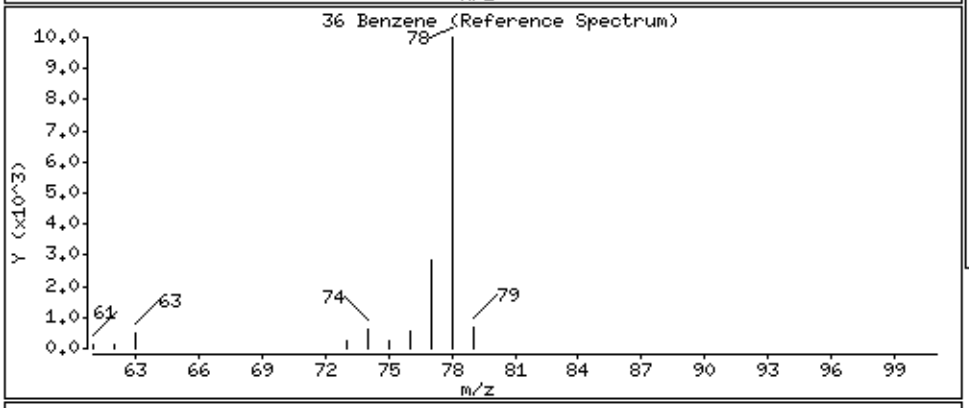
Concentration: 1.202 PPBV

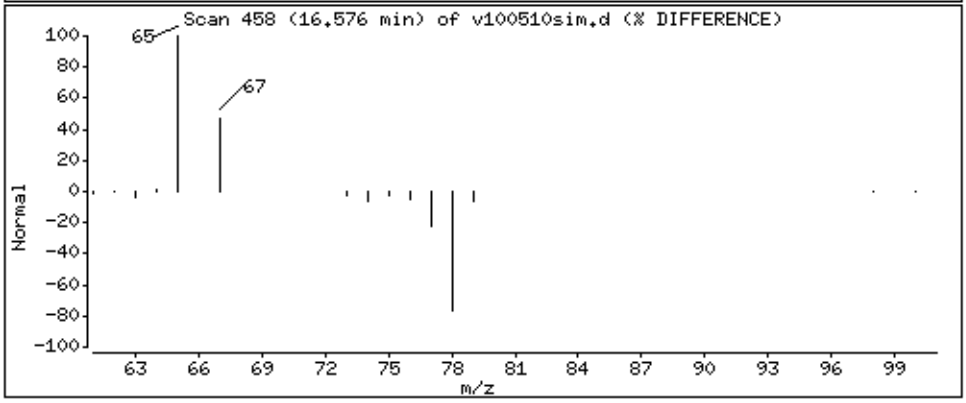












Data File: /chem/msdv.i/05Oct2015.b/v100510sim.d

Date : 05-OCT-2015 16:24

Client ID:

Instrument: msdv.i

Sample Info: 100mL #34481

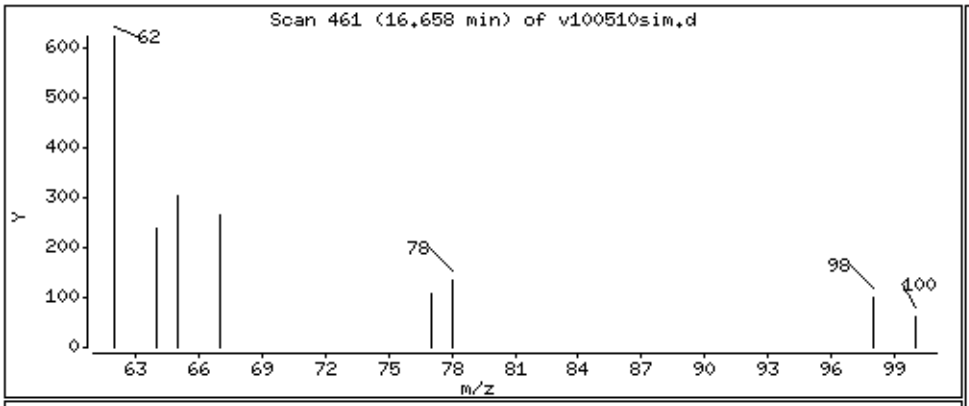
Operator: gh

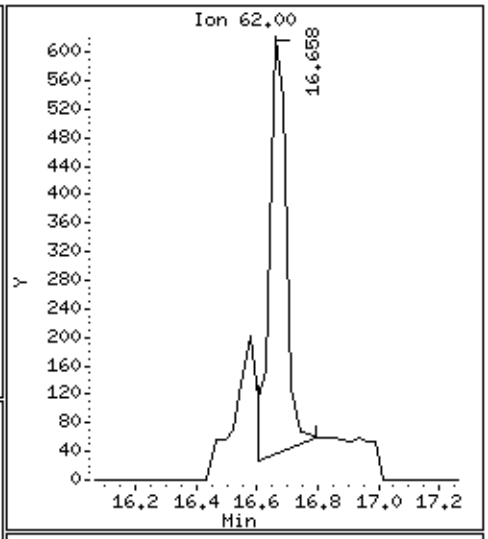
Column phase: RTx-624

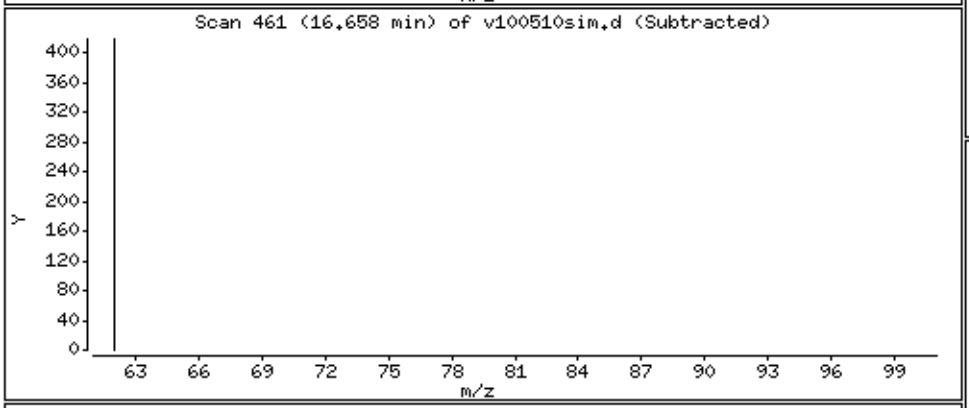
Column diameter: 0.32

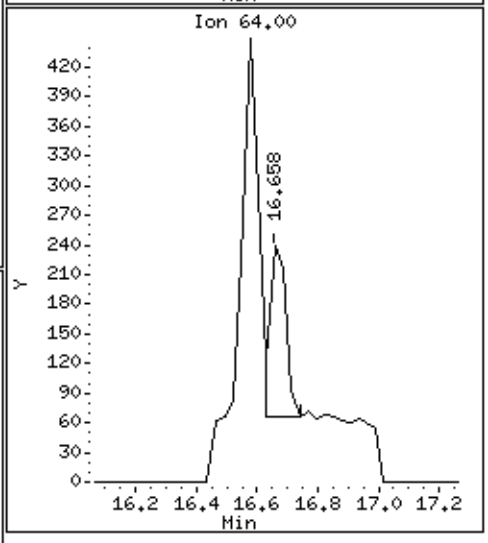
38 1,2-Dichloroethane

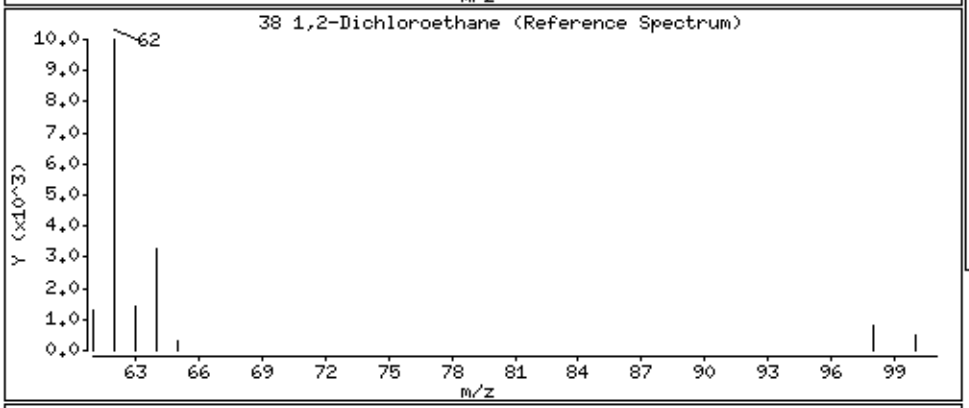
Concentration: 0.2076 PPBV

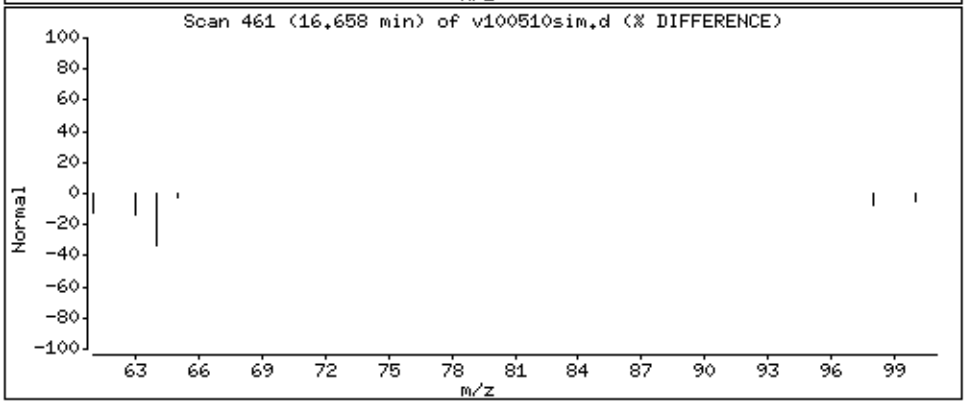












Data File: /chem/msdv.i/05Oct2015.b/v100510sim.d

Date : 05-OCT-2015 16:24

Client ID:

Instrument: msdv.i

Sample Info: 100mL #34481

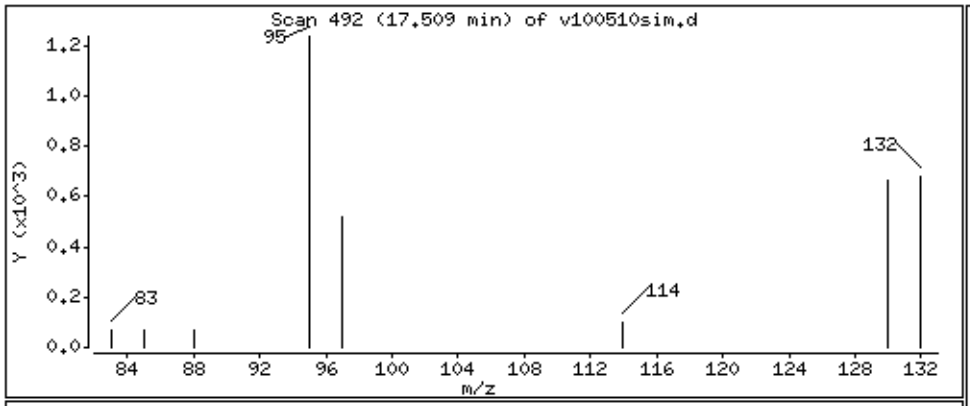
Operator: gh

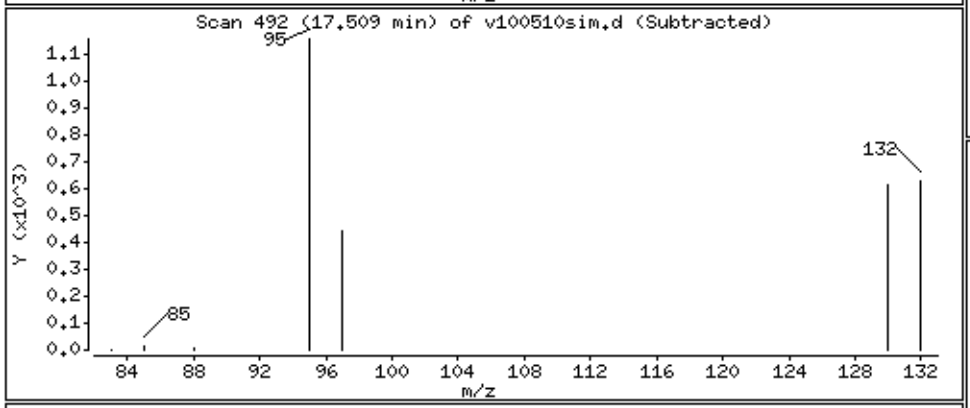
Column phase: RTx-624

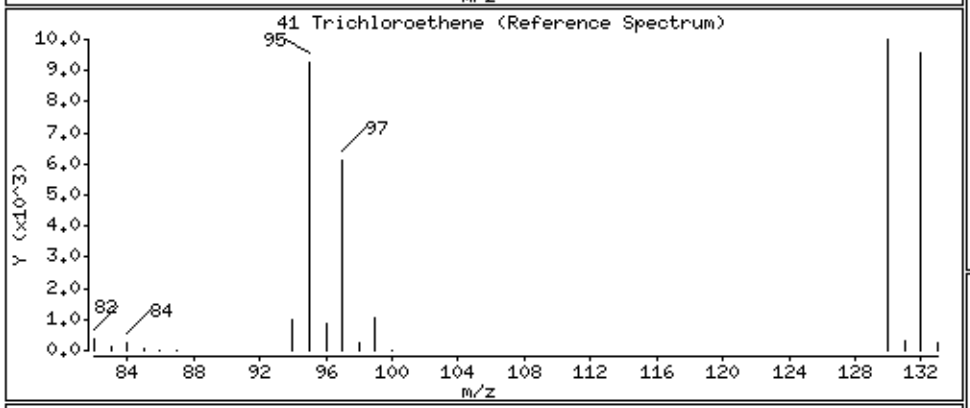
Column diameter: 0.32

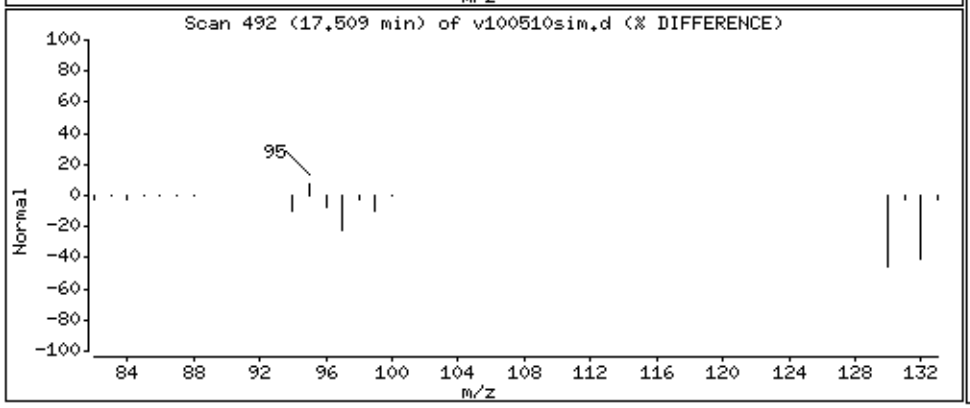
41 Trichloroethene

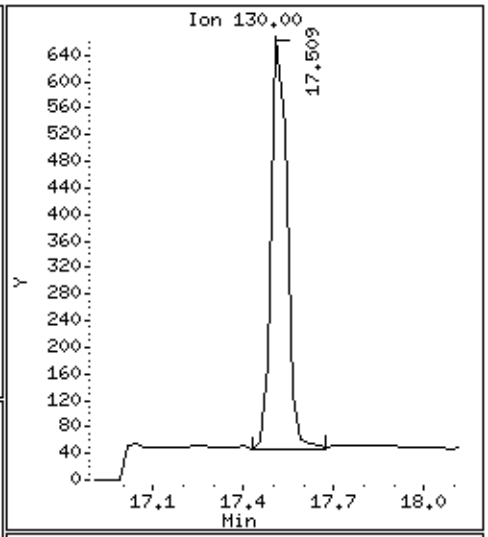
Concentration: 0.2009 PPBV

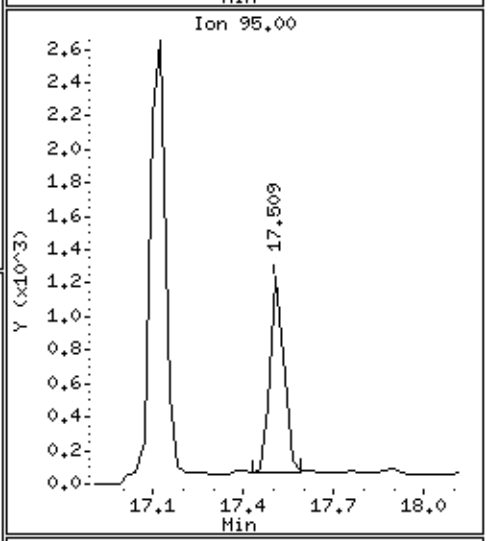


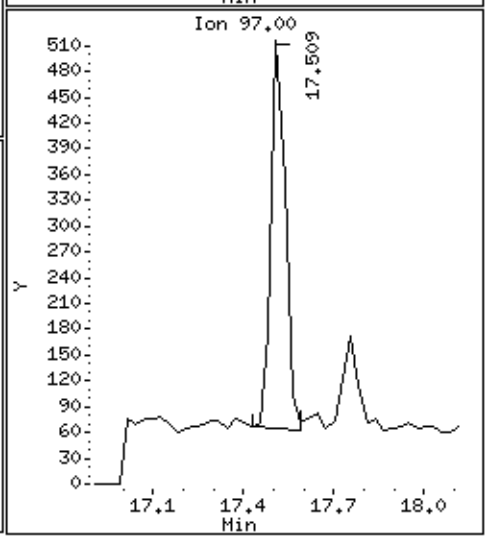












Data File: /chem/msdv.i/05Oct2015.b/v100510sim.d

Date : 05-OCT-2015 16:24

Client ID:

Instrument: msdv.i

Sample Info: 100mL #34481

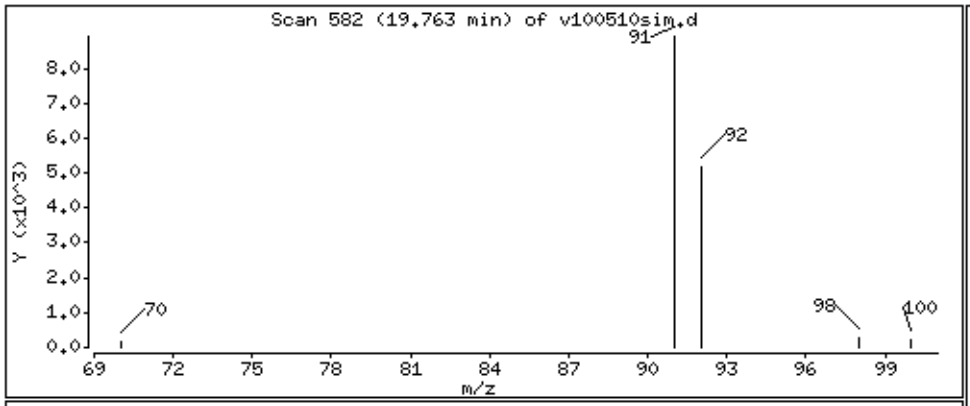
Operator: gh

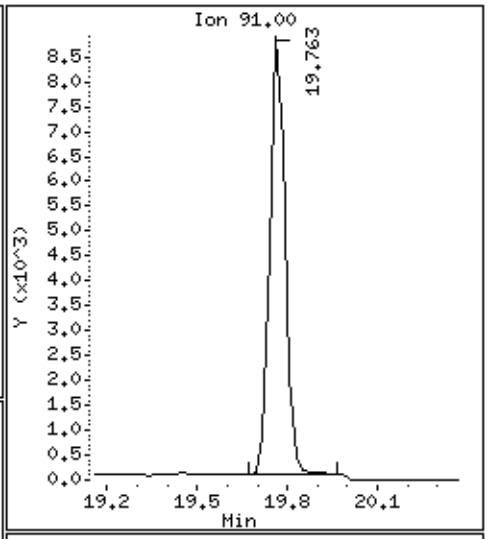
Column phase: RTx-624

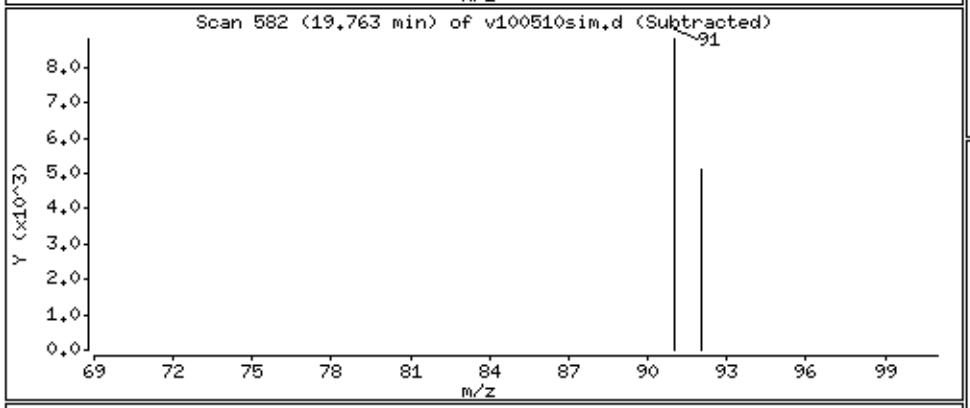
Column diameter: 0.32

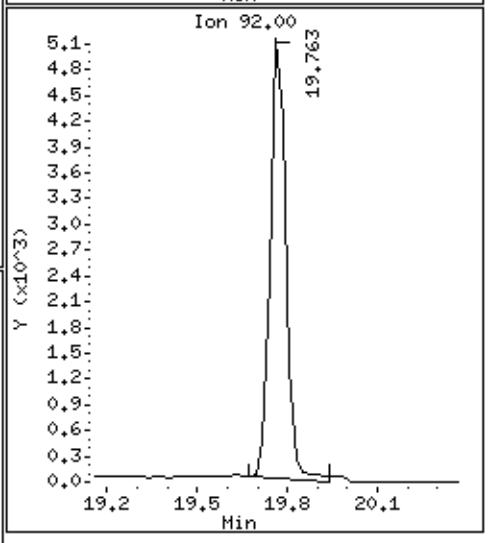
48 Toluene

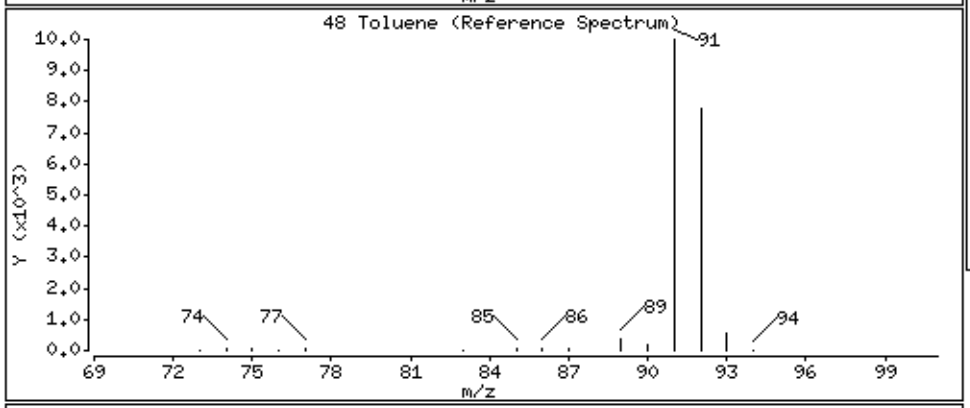
Concentration: 1.446 PPBV

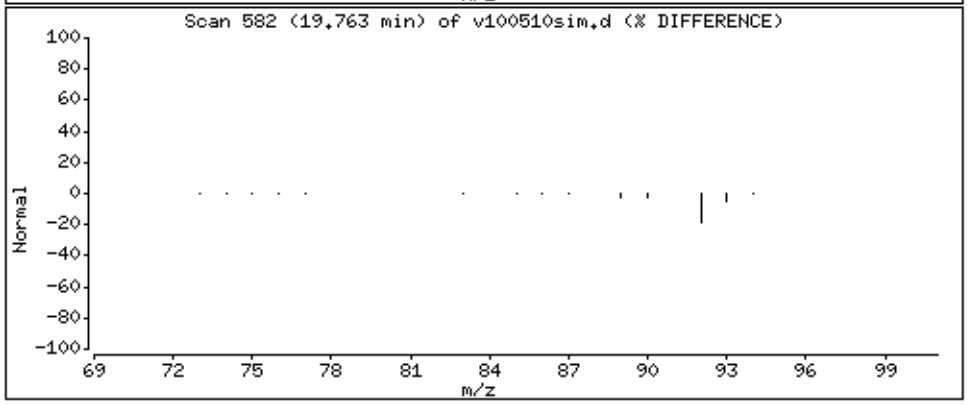












Data File: /chem/msdv.i/05Oct2015.b/v100510sim.d

Date : 05-OCT-2015 16:24

Client ID:

Instrument: msdv.i

Sample Info: 100mL #34481

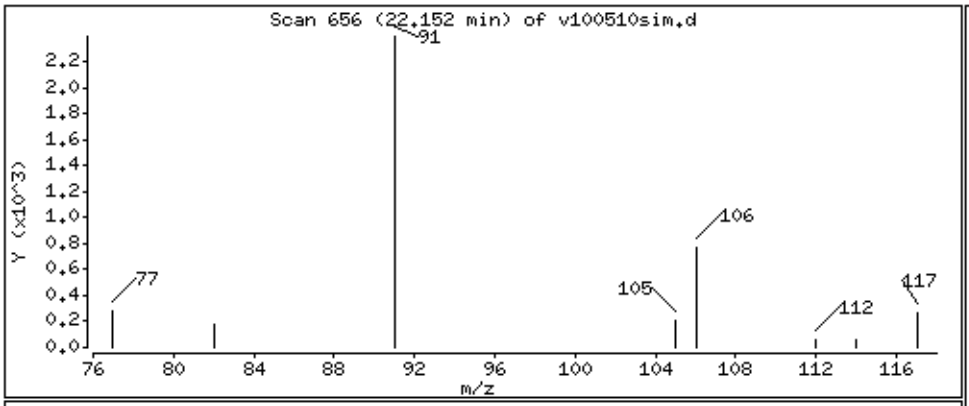
Operator: gh

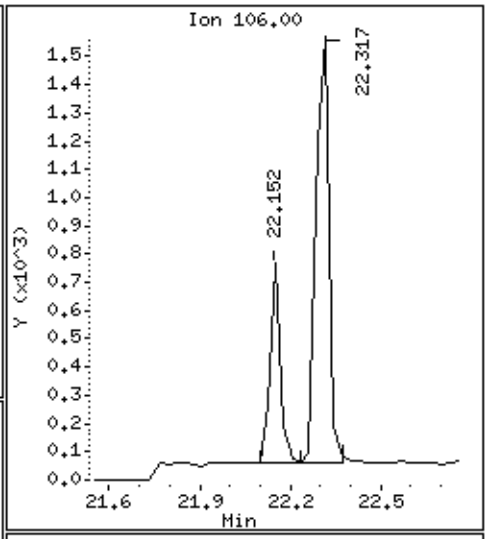
Column phase: RTx-624

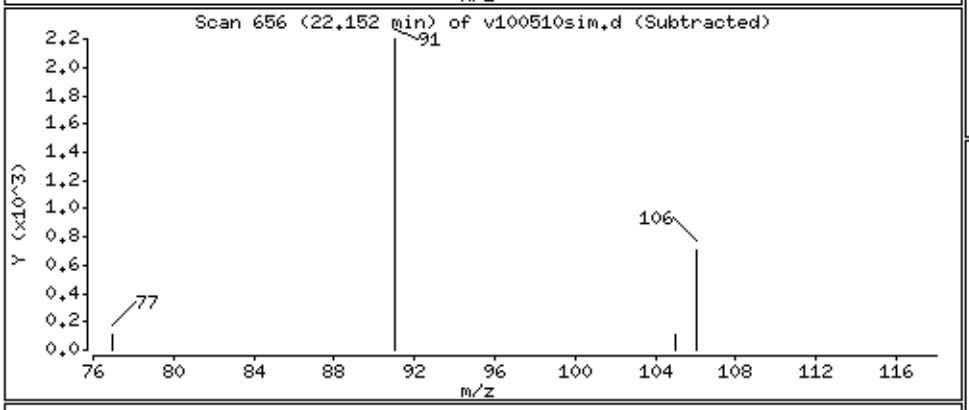
Column diameter: 0.32

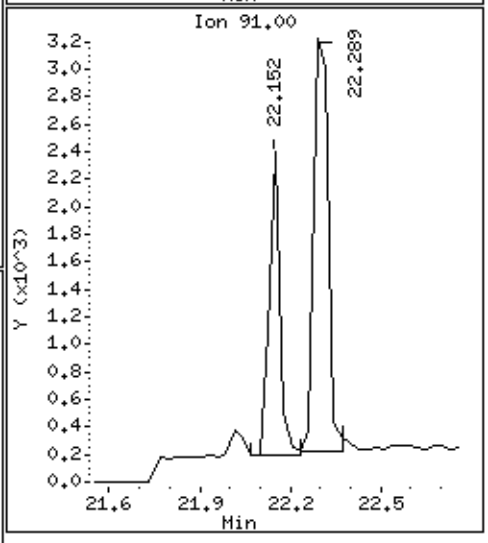
58 Ethyl Benzene

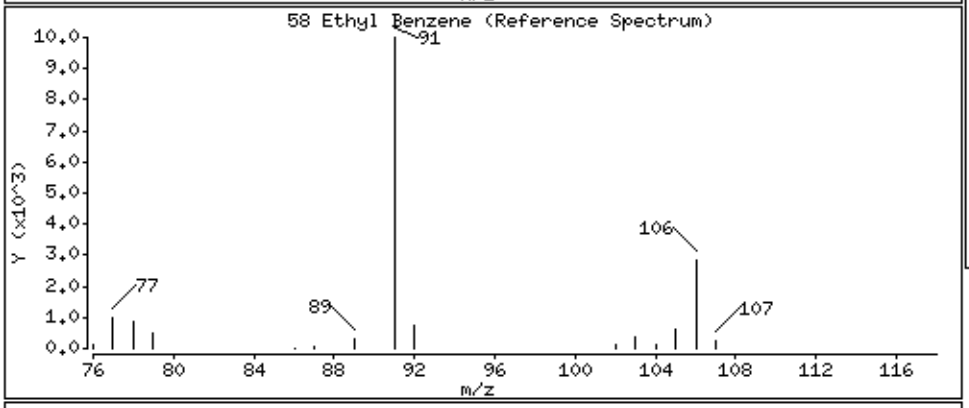
Concentration: 0.2335 PPBV

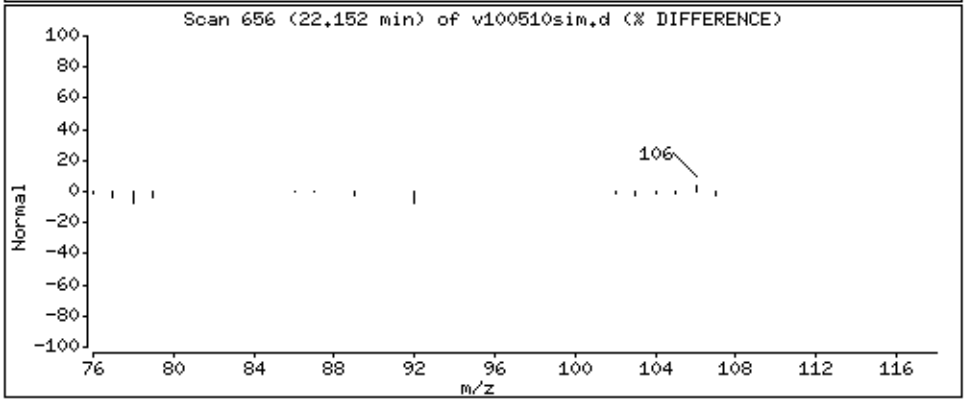












Data File: /chem/msdv.i/05Oct2015.b/v100510sim.d

Date : 05-OCT-2015 16:24

Client ID:

Instrument: msdv.i

Sample Info: 100mL #34481

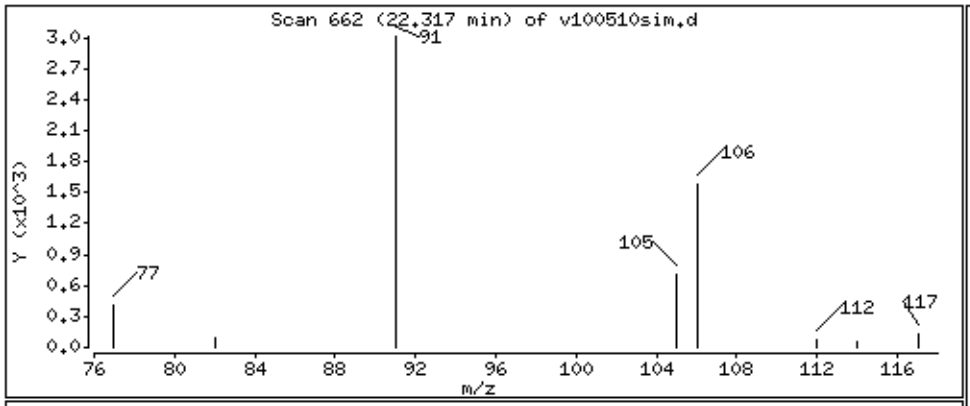
Operator: gh

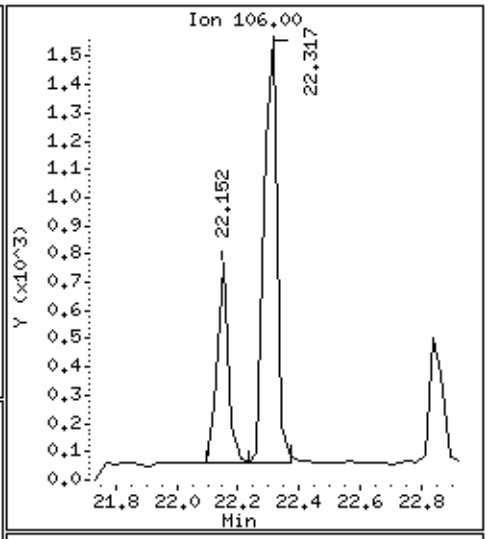
Column phase: RTx-624

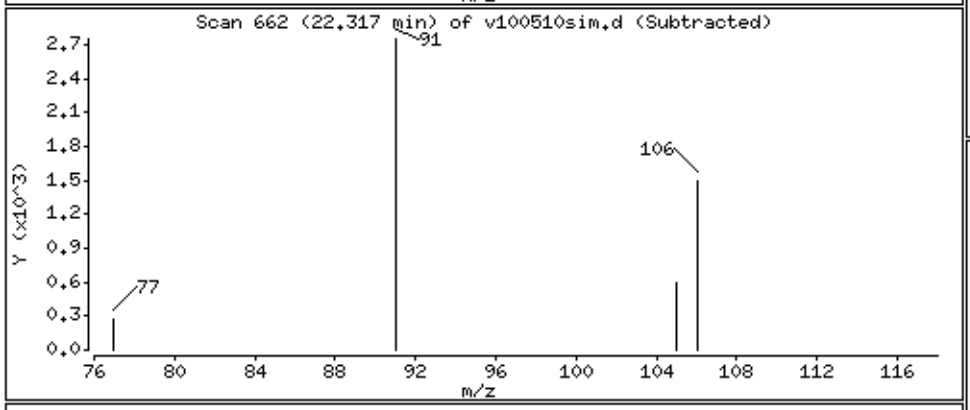
Column diameter: 0.32

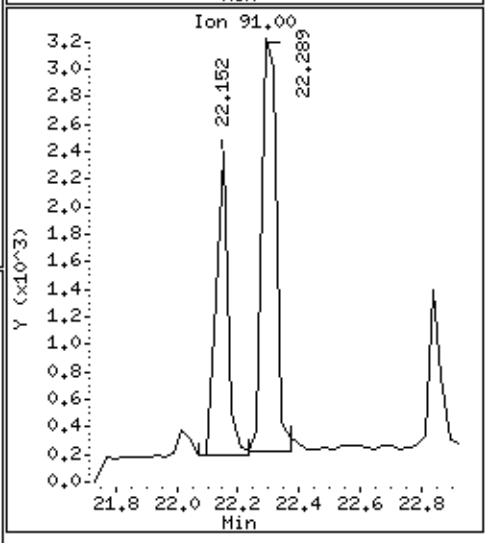
59 m,p-Xylene

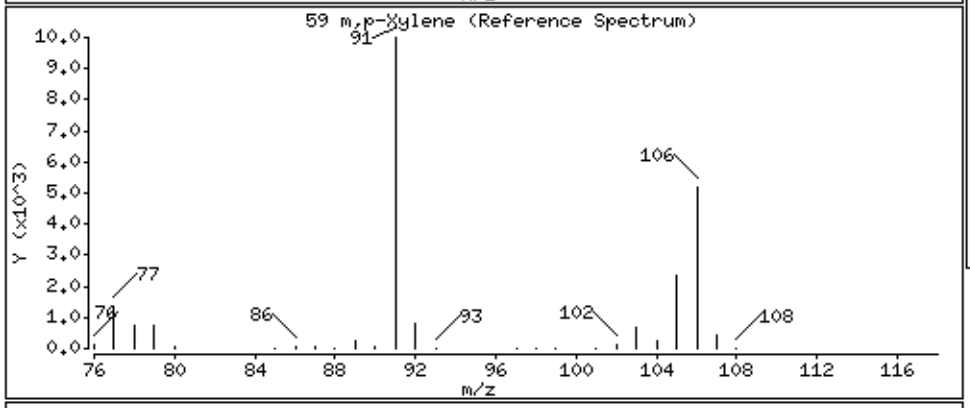
Concentration: 0.5914 PPBV

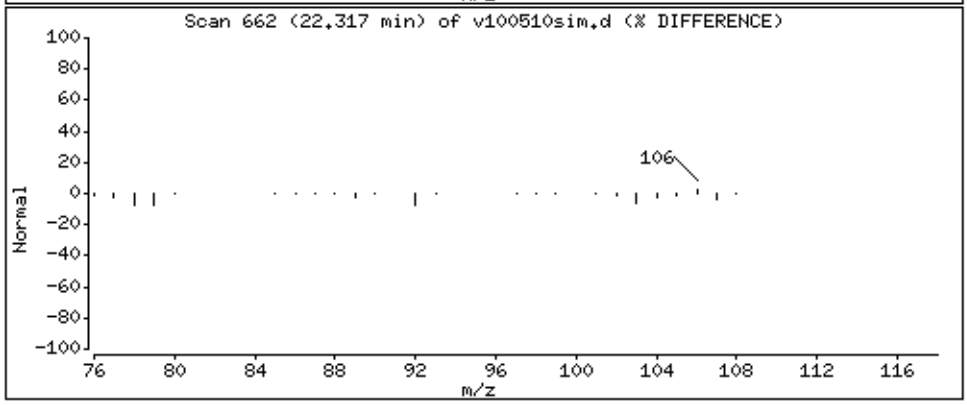












Data File: /chem/msdv.i/05Oct2015.b/v100510sim.d

Date : 05-OCT-2015 16:24

Client ID:

Instrument: msdv.i

Sample Info: 100mL #34481

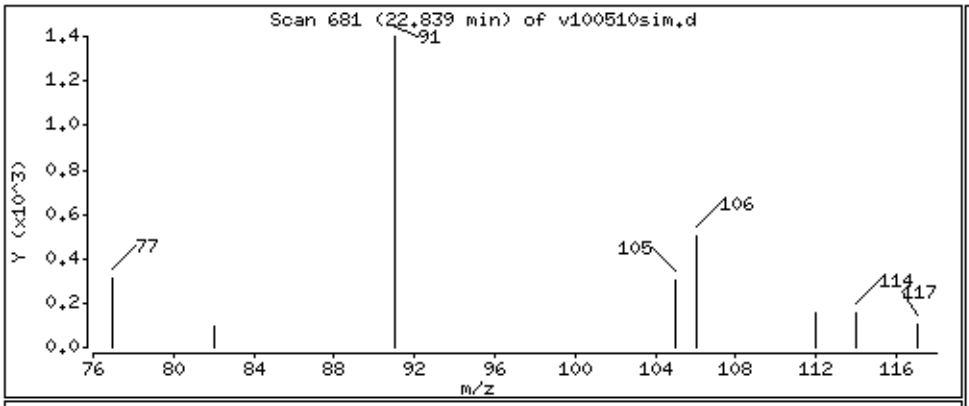
Operator: gh

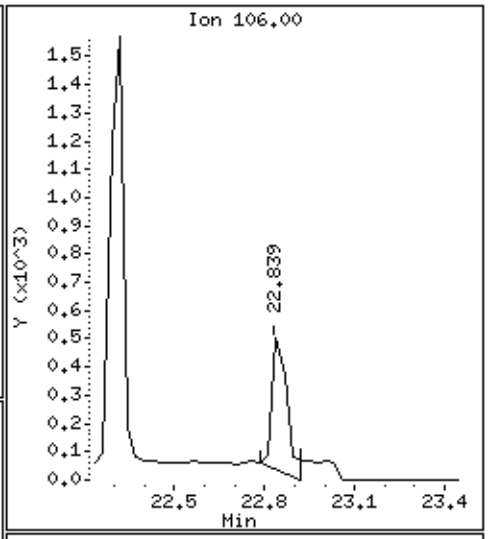
Column phase: RTx-624

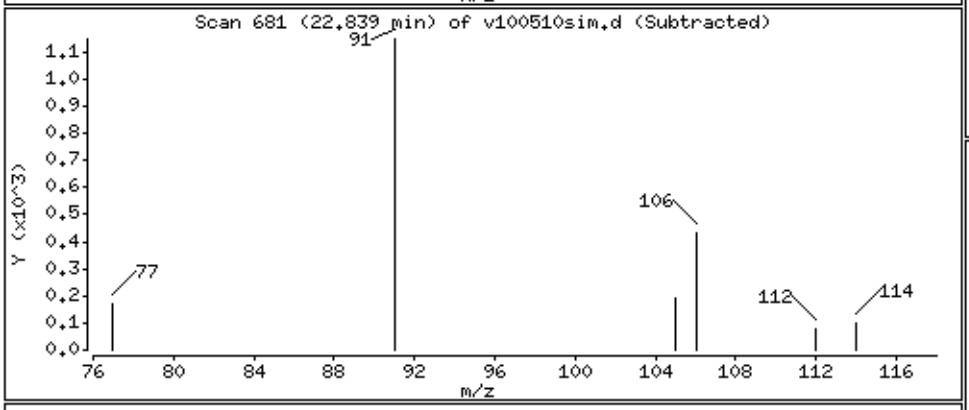
Column diameter: 0.32

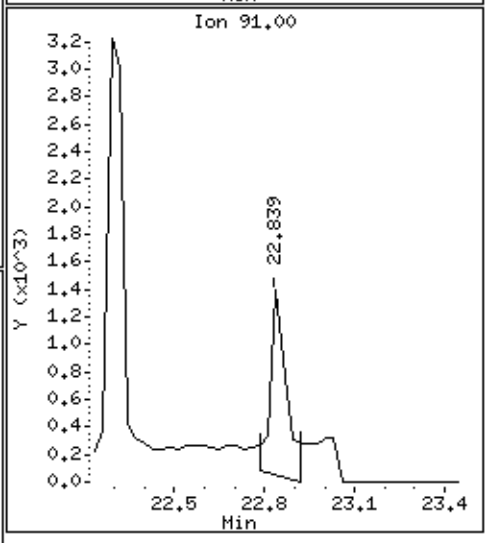
61 o-Xylene

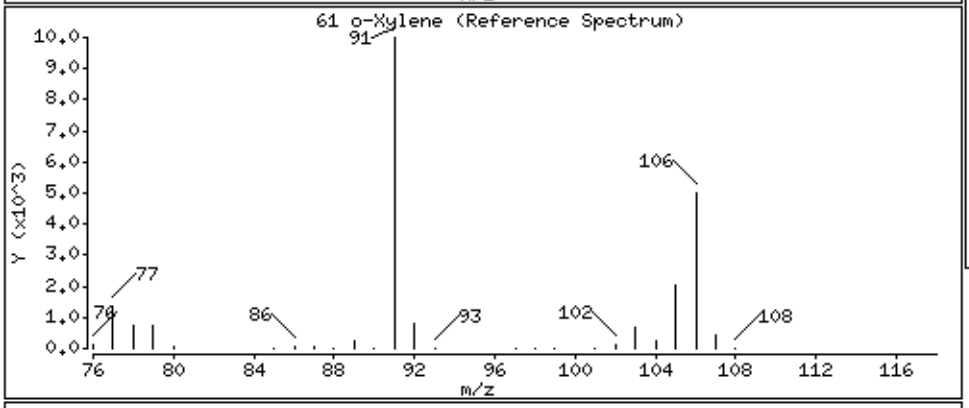
Concentration: 0.2196 PPBV

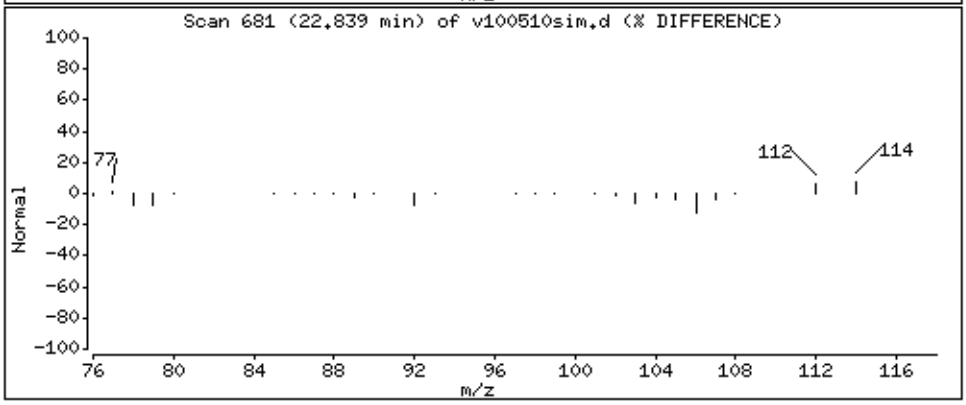












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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: 5-IA(092215)

Lab ID#: 1509512-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.38	0.59	1.3	2.0

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Client Sample ID: 5-IA(092215)

Lab ID#: 1509512-05A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100511**	**Date of Collection: 9/23/15 1:05:00 PM**	
Dil. Factor:	**1.91**	**Date of Analysis: 10/5/15 05:19 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.38	0.59	1.3	2.0
1,2,4-Trimethylbenzene	0.19	Not Detected	0.94	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	98	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/05Oct2015.b/v100511.d
Lab Smp Id: 1509512-05A
Inj Date : 05-OCT-2015 17:19
Operator : gh Inst ID: msdv.i
Smp Info : 250mL #35166
Misc Info : 9.0"Hg ->5.0psi
Comment : Low Level GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m
Meth Date : 05-Oct-2015 11:52 mskidmor Quant Type: ISTD
Cal Date : 29-SEP-2015 21:58 Cal File: v092913.d
Als bottle: 1
Dil Factor: 1.91000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 54 Bromochloromethane						CAS #: 74-97-5	
15.743	15.743 (1.000)	130	68043	5.00000		80.00- 120.00	100.00
15.743	15.743 (1.000)	128	52275			48.04- 108.04	76.83
15.743	15.743 (1.000)	49	194739			284.77- 344.77	286.20
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.111	17.111 (1.000)	114	326480	5.00000		80.00- 120.00	100.00
17.111	17.111 (1.000)	88	44127			0.00- 44.16	13.52
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.029	22.029 (1.000)	117	284546	5.00000		80.00- 120.00	100.00
22.029	22.029 (1.000)	82	140537			18.70- 78.70	49.39
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.562	16.562 (1.052)	65	124313	5.18047	5.180	80.00- 120.00	100.00
16.562	16.562 (1.052)	67	54490			19.41- 79.41	43.83
$ 80 Toluene-d8						CAS #: 2037-26-5	
19.638	19.615 (1.148)	98	298983	4.85814	4.858	80.00- 120.00	100.00
19.615	19.615 (1.146)	70	29315			0.00- 40.74	9.80

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.638	19.615 (1.148)	100	194015			34.93- 94.93	64.89
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.534	23.535 (1.068)	174	142684	4.88082	4.881	80.00- 120.00	100.00
23.534	23.535 (1.068)	95	166676			94.06- 154.06	116.82
23.534	23.535 (1.068)	176	140866			68.95- 128.95	98.73
37 Methylene Chloride					CAS #: 75-09-2		
13.484	13.484 (0.856)	84	6560	0.30803	0.5883	80.00- 120.00	100.00
13.484	13.484 (0.856)	49	17975			254.12- 314.12	273.98
13.484	13.484 (0.856)	51	5491			56.45- 116.45	83.71

Report Date: 12-Oct-2015 12:22

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100511.d
Lab Smp Id: 1509512-05A
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: 9.0"Hg ->5.0psi

Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	78102	46861	109343	68043	-12.88
71 1,4-Difluorobenze	340477	204286	476668	326480	-4.11
92 Chlorobenzene-d5	294231	176539	411923	284546	-3.29

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.74	15.41	16.07	15.74	0.00
71 1,4-Difluorobenze	17.11	16.78	17.44	17.11	0.00
92 Chlorobenzene-d5	22.03	21.70	22.36	22.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509512-05A
Level: LOW Operator: gh
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: 9.0"Hg ->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	5.180	103.61	70-130
$ 80 Toluene-d8	5.000	4.858	97.16	70-130
$ 106 Bromofluorobenzene	5.000	4.881	97.62	70-130

Data File: /chem/msdv.i/05Oct2015.b/v100511.d

Date : 05-OCT-2015 17:19

Client ID:

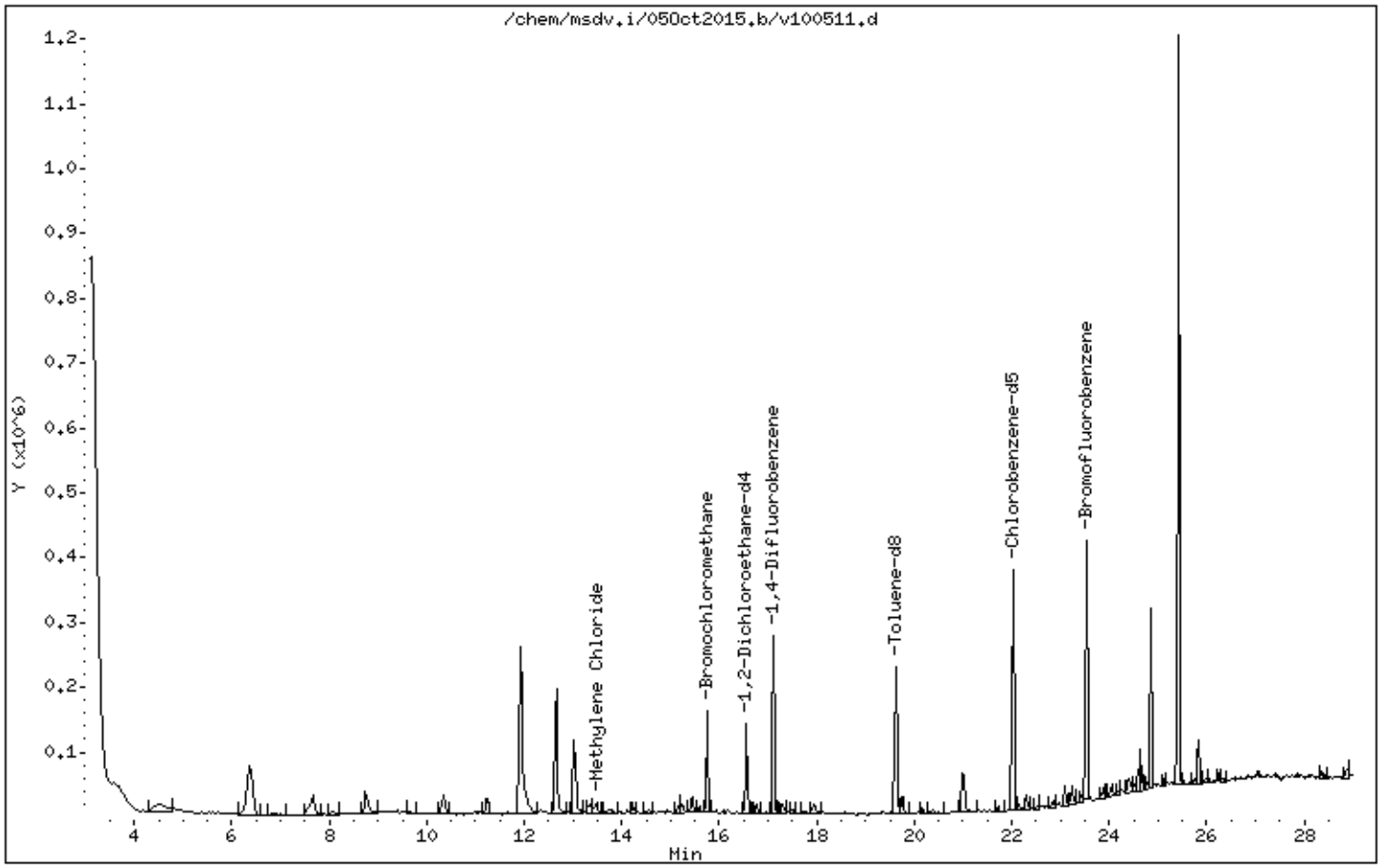
Instrument: msdv.i

Sample Info: 250mL #35166

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/05Oct2015.b/v100511.d

Date : 05-OCT-2015 17:19

Client ID:

Instrument: msdv.i

Sample Info: 250mL #35166

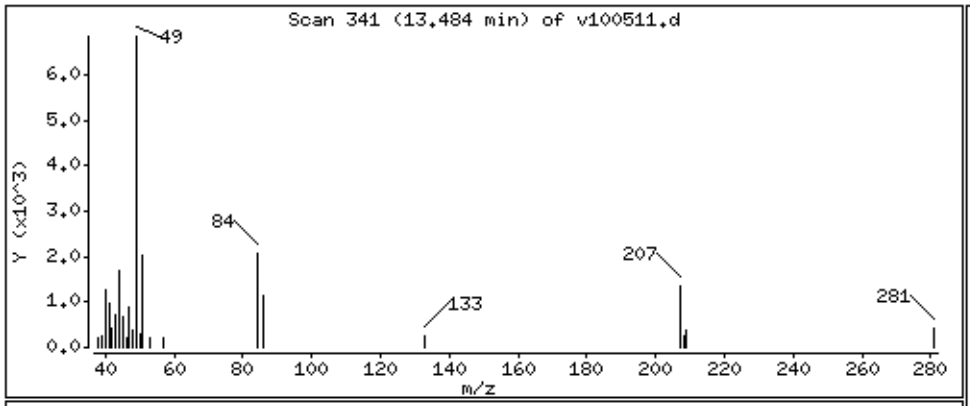
Operator: gh

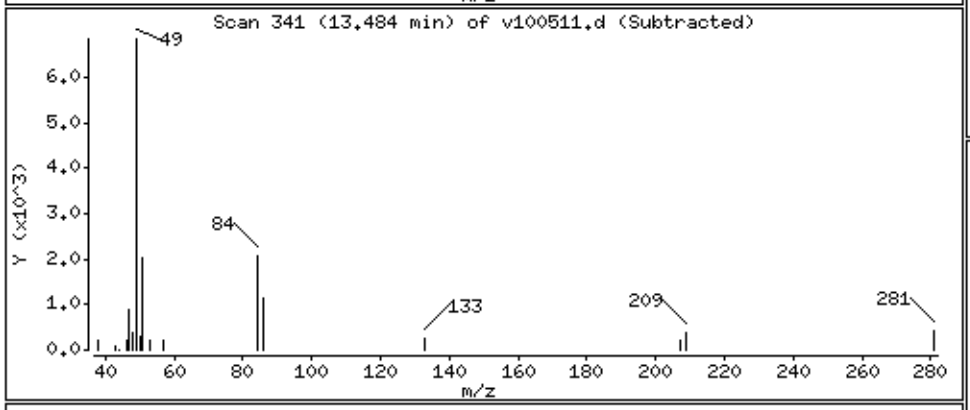
Column phase: RTx-624

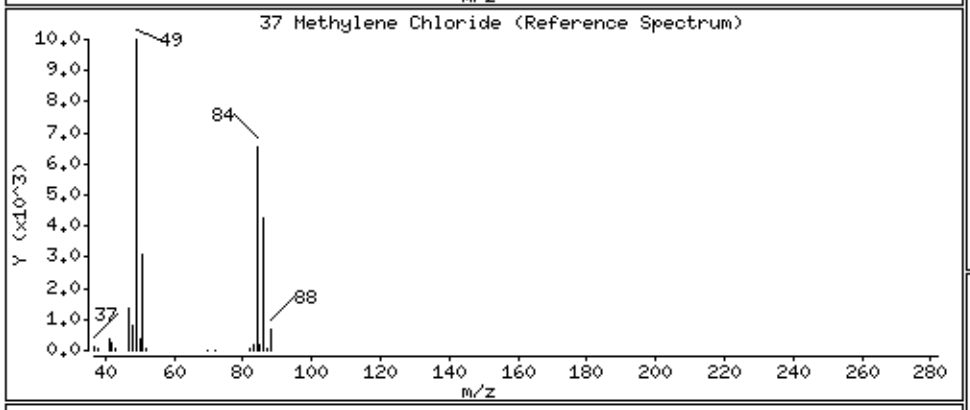
Column diameter: 0.32

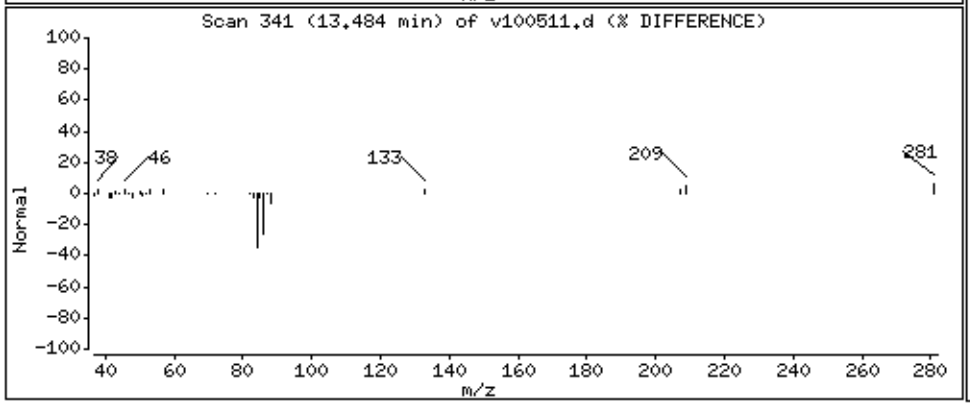
37 Methylene Chloride

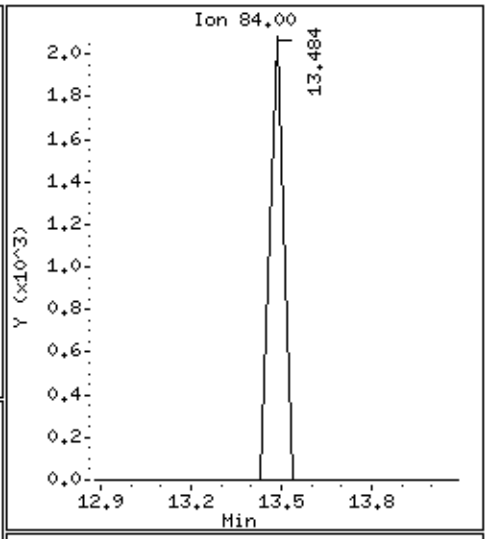
Concentration: 0.5883 PPBV

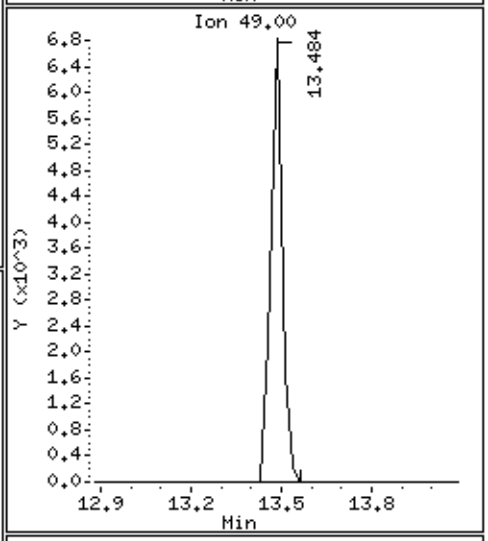


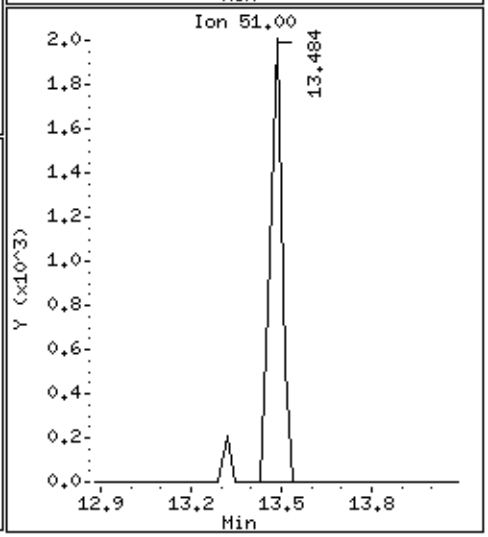












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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: 5-IA(092215)

Lab ID#: 1509512-05B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.019	0.024	0.049	0.062
cis-1,2-Dichloroethene	0.038	0.16	0.15	0.65
Chloroform	0.038	0.044	0.19	0.21
Benzene	0.096	0.27	0.30	0.86
1,2-Dichloroethane	0.038	0.044	0.15	0.18
Trichloroethene	0.038	0.16	0.20	0.86
Toluene	0.038	0.70	0.14	2.6
Ethyl Benzene	0.038	0.12	0.16	0.55
m,p-Xylene	0.076	0.37	0.33	1.6
o-Xylene	0.038	0.13	0.16	0.56

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Client Sample ID: 5-IA(092215)

Lab ID#: 1509512-05B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100511sim**	**Date of Collection: 9/23/15 1:05:00 PM**	
Dil. Factor:	**1.91**	**Date of Analysis: 10/5/15 05:19 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.019	0.024	0.049	0.062
1,1-Dichloroethene	0.019	Not Detected	0.076	Not Detected
trans-1,2-Dichloroethene	0.19	Not Detected	0.76	Not Detected
cis-1,2-Dichloroethene	0.038	0.16	0.15	0.65
Chloroform	0.038	0.044	0.19	0.21
Benzene	0.096	0.27	0.30	0.86
1,2-Dichloroethane	0.038	0.044	0.15	0.18
Trichloroethene	0.038	0.16	0.20	0.86
Toluene	0.038	0.70	0.14	2.6
1,1,2-Trichloroethane	0.038	Not Detected	0.21	Not Detected
Tetrachloroethene	0.038	Not Detected	0.26	Not Detected
Ethyl Benzene	0.038	0.12	0.16	0.55
m,p-Xylene	0.076	0.37	0.33	1.6
o-Xylene	0.038	0.13	0.16	0.56

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	94	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/05Oct2015.b/v100511sim.d
Lab Smp Id: 1509512-05B
Inj Date : 05-OCT-2015 17:19
Operator : gh Inst ID: msdv.i
Smp Info : 250mL #35166
Misc Info : 9.0"Hg ->5.0psi
Comment : SIM GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 05-Oct-2015 12:58 mskidmor Quant Type: ISTD
Cal Date : 29-SEP-2015 14:34 Cal File: v092903sim.d
Als bottle: 1
Dil Factor: 1.91000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 31 Bromochloromethane						CAS #: 74-97-5	
15.757	15.757 (1.000)	130	74946	5.00000		80.00- 120.00	100.00
15.757	15.757 (1.000)	128	58577			48.13- 108.13	78.16
15.757	15.757 (1.000)	49	209255			238.09- 298.09	279.21
* 40 1,4-Difluorobenzene						CAS #: 540-36-3	
17.125	17.125 (1.000)	114	324079	5.00000		80.00- 120.00	100.00
17.125	17.125 (1.000)	88	46212			0.00- 44.50	14.26
* 56 Chlorobenzene-d5						CAS #: 3114-55-4	
22.042	22.042 (1.000)	117	275565	5.00000		80.00- 120.00	100.00
22.015	22.042 (1.000)	82	128703			16.61- 76.61	46.71
$ 37 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.548	16.548 (1.050)	65	130289	5.26751	5.268	80.00- 120.00	100.00
16.576	16.548 (1.052)	67	59073			19.91- 79.91	45.34
$ 47 Toluene-d8						CAS #: 2037-26-5	
19.629	19.629 (1.146)	98	261408	4.99225	4.992	80.00- 120.00	100.00
19.629	19.629 (1.146)	70	29015			0.00- 41.04	11.10

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.629	19.629 (1.146)	100	161622			32.99- 92.99	61.83
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	144944	4.72147	4.721	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	162439			84.02- 144.02	112.07
23.548	23.548 (1.068)	176	141444			67.56- 127.56	97.59
5 Vinyl Chloride					CAS #: 75-01-4		
7.840	7.809 (0.498)	62	452	0.01264	0.02414	80.00- 120.00	100.00
7.375	7.809 (0.468)	64	578			0.00- 57.67	127.96
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.437	15.437 (0.980)	98	1647	0.08652	0.1652	80.00- 120.00	100.00
15.437	15.437 (0.980)	61	7754			264.63- 324.63	470.55
15.437	15.437 (0.980)	96	2783			126.49- 186.49	168.92
32 Chloroform					CAS #: 67-66-3		
15.819	15.819 (1.004)	83	1244	0.02279	0.04353	80.00- 120.00	100.00
15.819	15.819 (1.004)	85	691			34.82- 94.82	55.58
36 Benzene					CAS #: 71-43-2		
16.576	16.576 (0.968)	78	12177	0.14184	0.2709	80.00- 120.00	100.00
16.576	16.576 (0.968)	77	3170			0.00- 52.79	26.03
38 1,2-Dichloroethane					CAS #: 107-06-2		
16.658	16.658 (0.973)	62	1172	0.02314	0.04419	80.00- 120.00	100.00(M)
16.658	16.658 (0.973)	64	553			0.00- 59.27	47.15
41 Trichloroethene					CAS #: 79-01-6		
17.509	17.509 (1.022)	130	4256	0.08397	0.1604	80.00- 120.00	100.00
17.509	17.509 (1.022)	95	4133			64.71- 124.71	97.10
17.509	17.509 (1.022)	97	2560			31.19- 91.19	60.15
48 Toluene					CAS #: 108-88-3		
19.763	19.764 (1.154)	91	36175	0.36826	0.7034	80.00- 120.00	100.00
19.763	19.764 (1.154)	92	20535			28.99- 88.99	56.77
58 Ethyl Benzene					CAS #: 100-41-4		
22.152	22.152 (1.005)	106	2228	0.06594	0.1259	80.00- 120.00	100.00
22.152	22.152 (1.005)	91	7642			301.49- 361.49	342.90
59 m,p-Xylene					CAS #: 108-38-3		
22.317	22.317 (1.012)	106	6917	0.19492	0.3723	80.00- 120.00	100.00
22.289	22.317 (1.011)	91	15210			185.00- 245.00	219.89

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
61 o-Xylene						CAS #: 95-47-6		
22.838	22.839	(1.036)	106	2286	0.06820	0.1303	80.00- 120.00	100.00
22.838	22.839	(1.036)	91	7417			198.20- 258.20	324.42

QC Flag Legend

M - Compound response manually integrated.

Report Date: 12-Oct-2015 12:38

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100511sim.d
Lab Smp Id: 1509512-05B
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Level: LOW
Sample Type: AIR
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 9.0"Hg ->5.0psi

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	81342	48805	113879	74946	-7.86
40 1,4-Difluorobenze	339188	203513	474863	324079	-4.45
56 Chlorobenzene-d5	289088	173453	404723	275565	-4.68

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Oct-2015 12:38

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509512-05B
Level: LOW Operator: gh
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 9.0"Hg ->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 37 1,2-Dichloroethane	5.000	5.268	105.35	70-130
$ 47 Toluene-d8	5.000	4.992	99.84	70-130
$ 66 Bromofluorobenzene	5.000	4.721	94.43	70-130

Data File: /chem/msdv.i/05Oct2015.b/v100511sim.d

Date : 05-OCT-2015 17:19

Client ID:

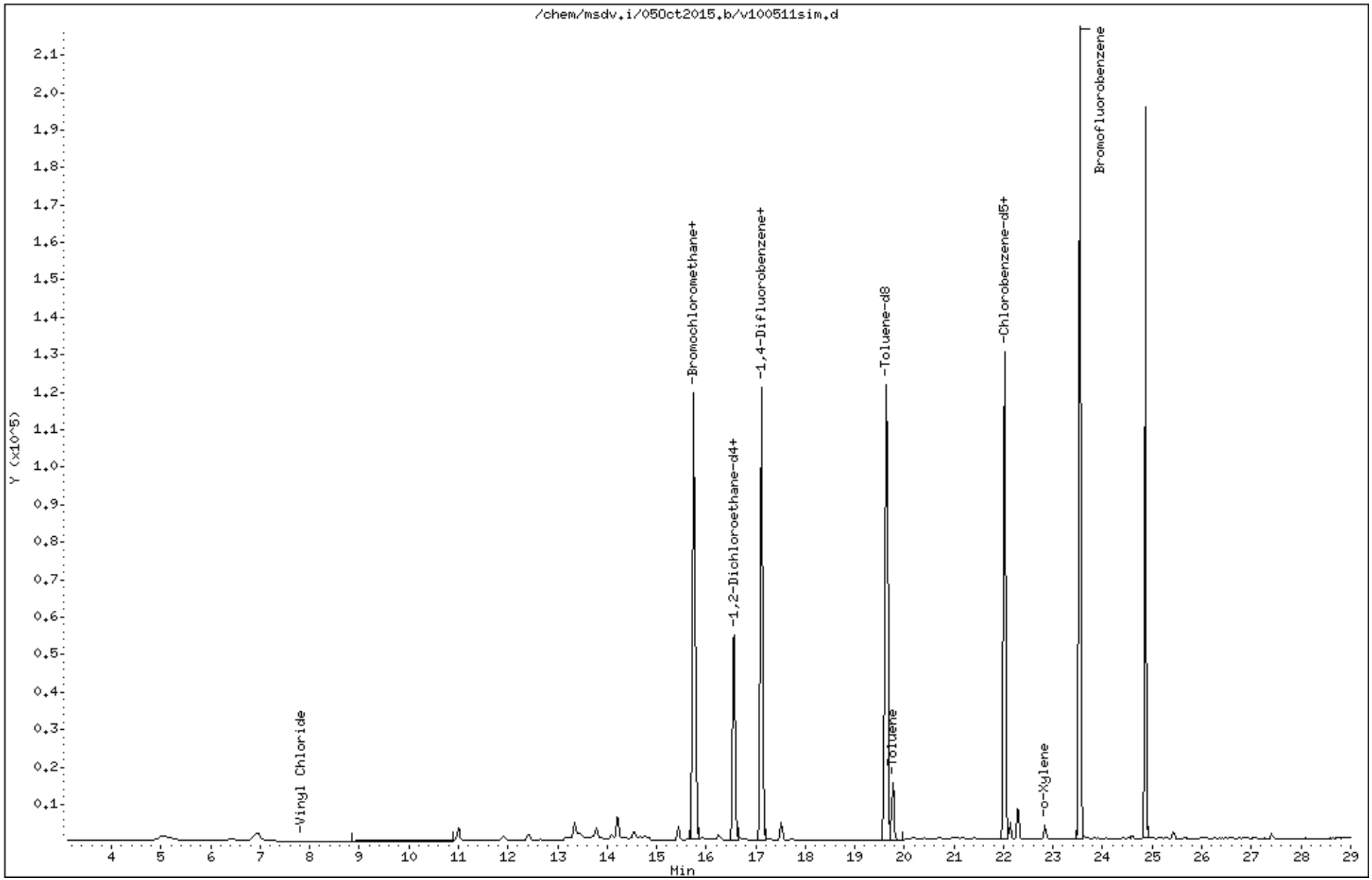
Instrument: msdv.i

Sample Info: 250mL #35166

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/05Oct2015.b/v100511sim.d

Date : 05-OCT-2015 17:19

Client ID:

Instrument: msdv.i

Sample Info: 250mL #35166

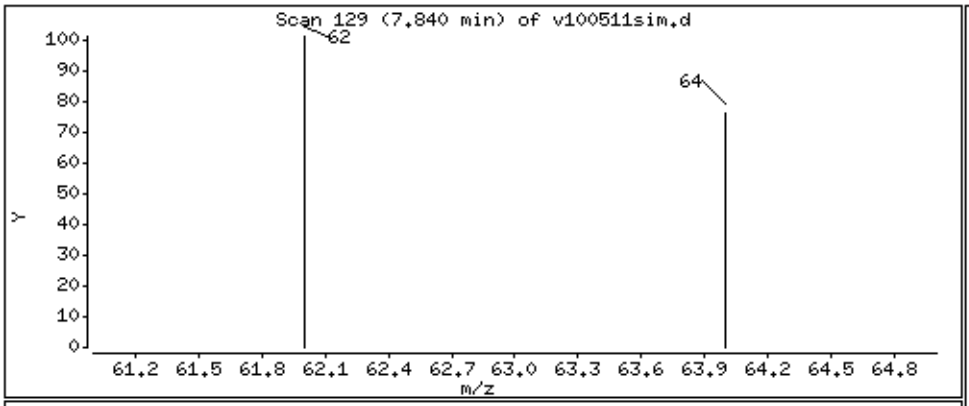
Operator: gh

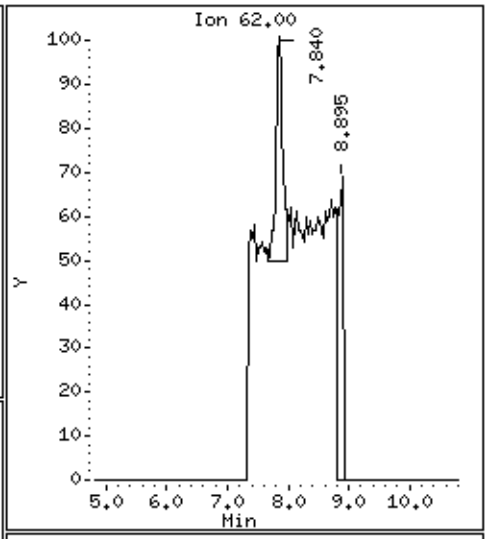
Column phase: RTx-624

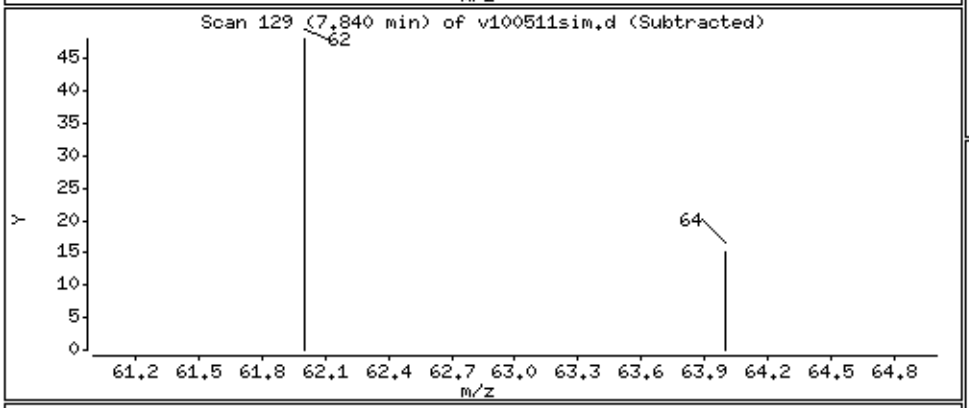
Column diameter: 0.32

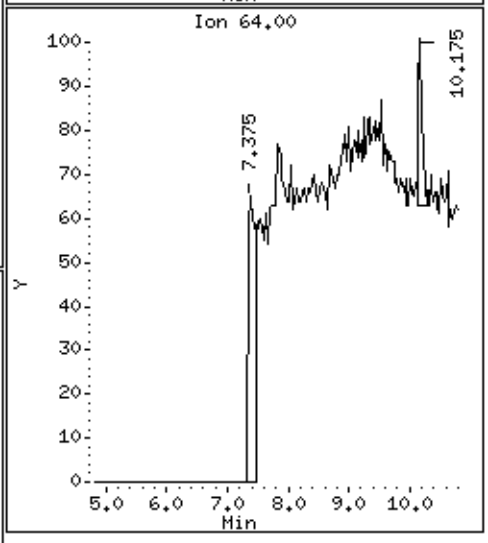
5 Vinyl Chloride

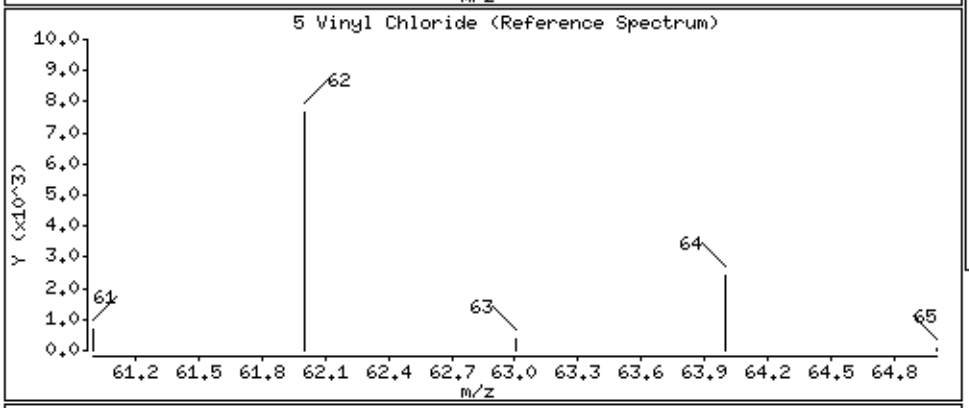
Concentration: 0.02414 PPBV

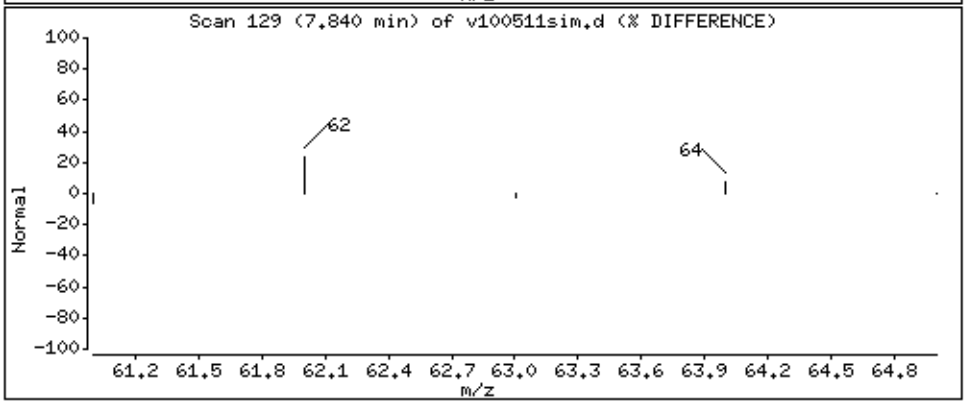












Data File: /chem/msdv.i/05Oct2015.b/v100511sim.d

Date : 05-OCT-2015 17:19

Client ID:

Instrument: msdv.i

Sample Info: 250mL #35166

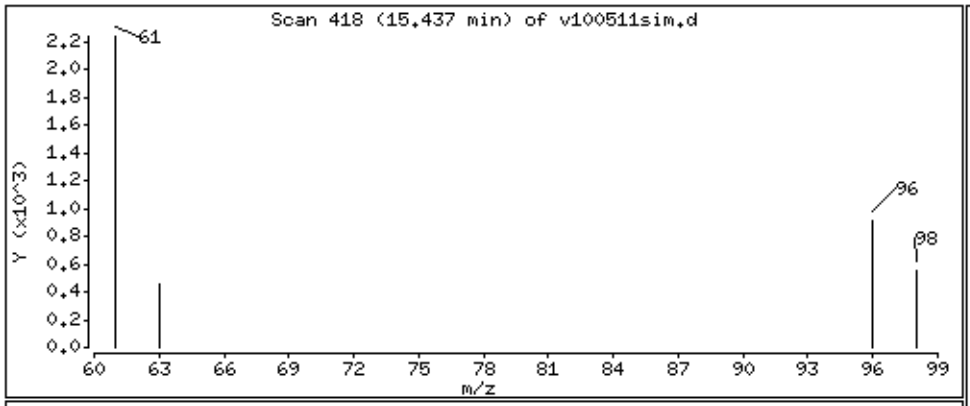
Operator: gh

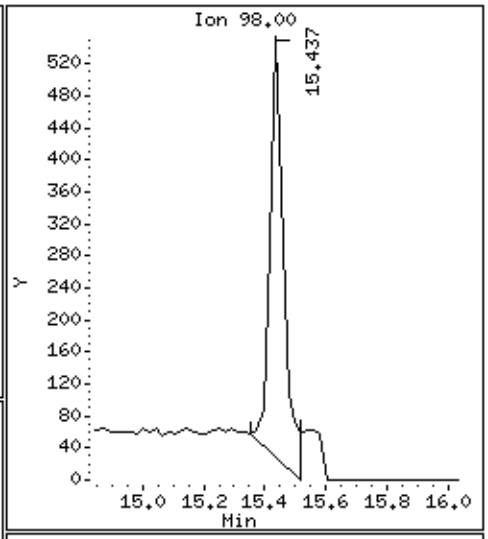
Column phase: RTx-624

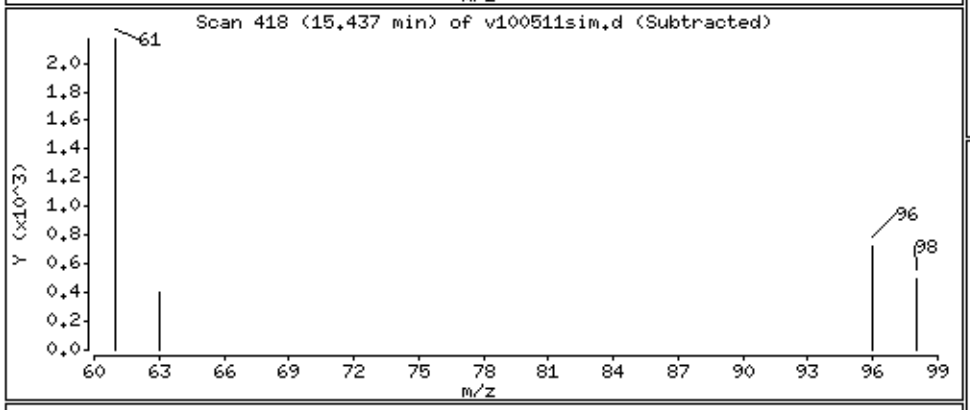
Column diameter: 0.32

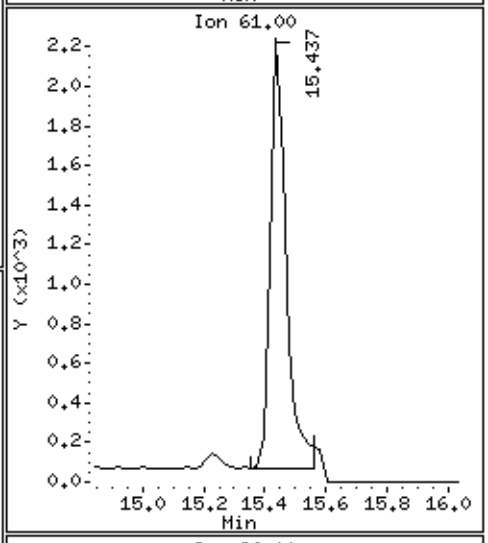
29 cis-1,2-Dichloroethene

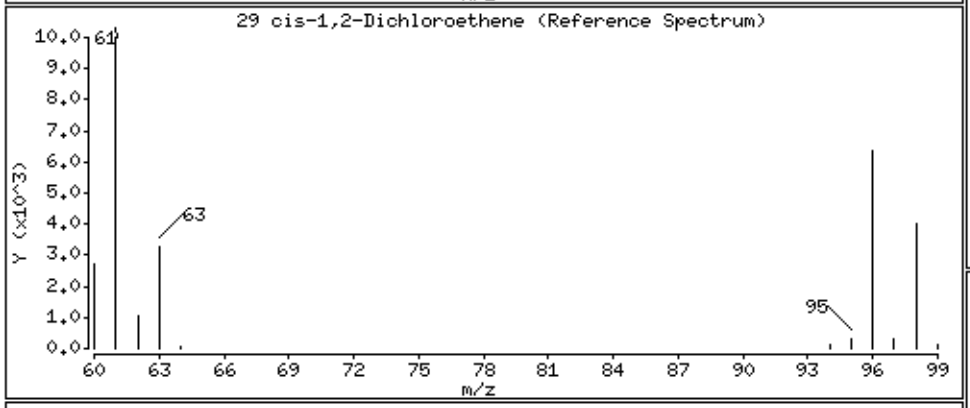
Concentration: 0.1652 PPBV

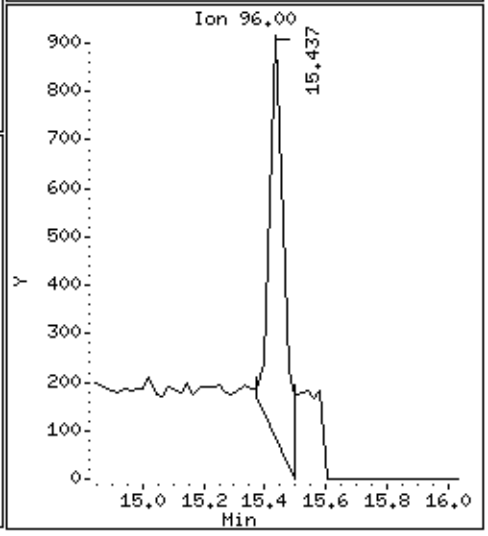


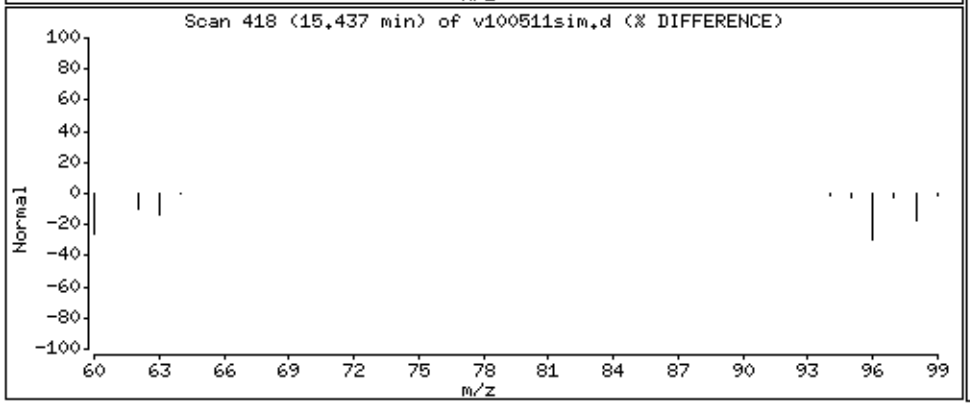












Data File: /chem/msdv.i/05Oct2015.b/v100511sim.d

Date : 05-OCT-2015 17:19

Client ID:

Instrument: msdv.i

Sample Info: 250mL #35166

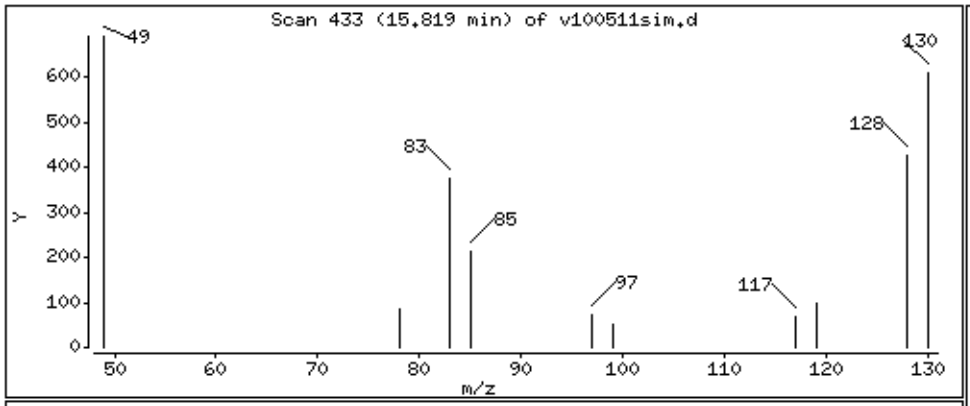
Operator: gh

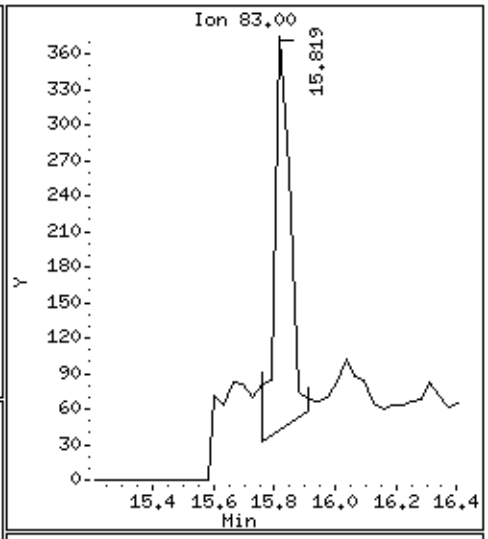
Column phase: RTx-624

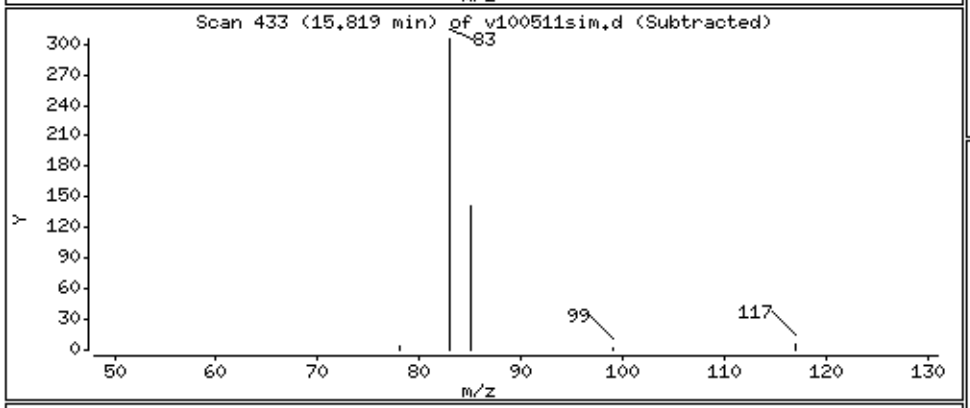
Column diameter: 0.32

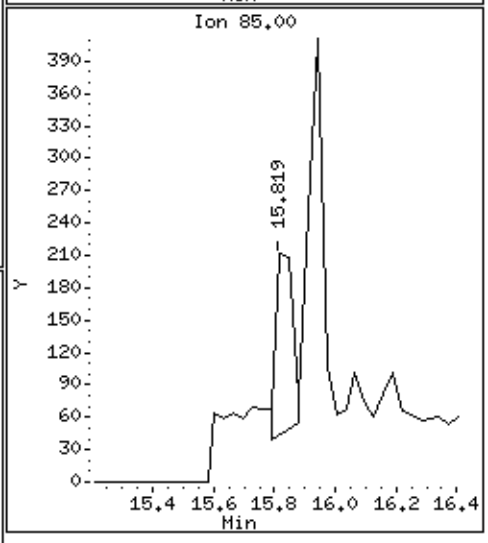
32 Chloroform

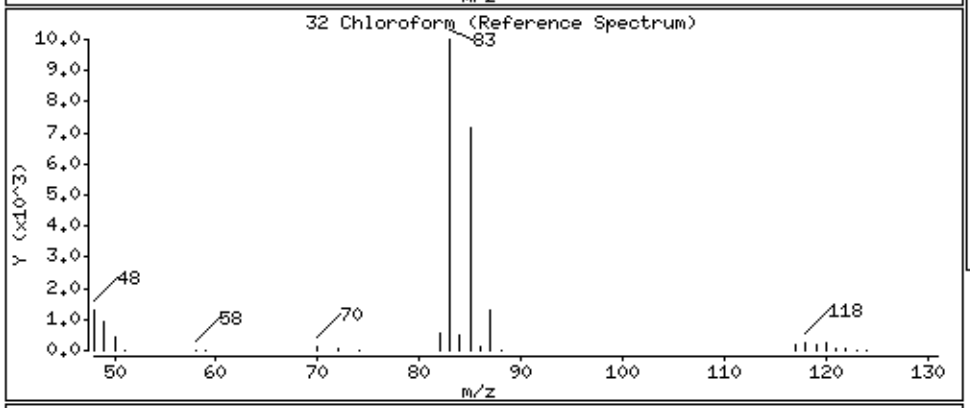
Concentration: 0.04353 PPBV

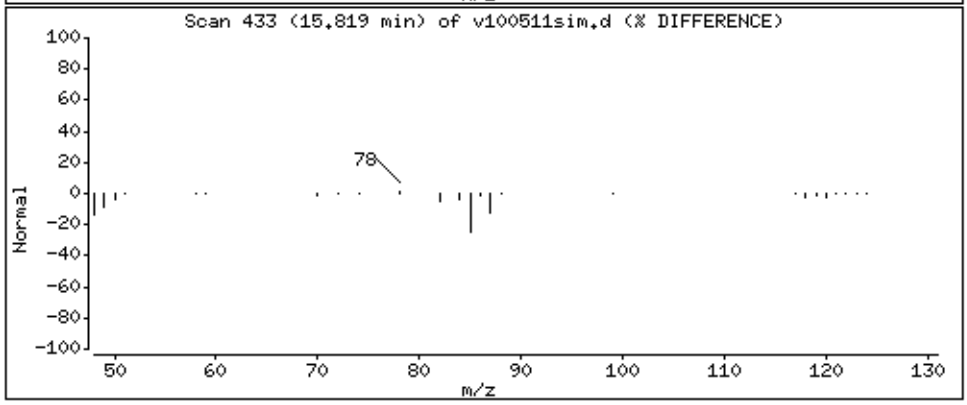












Data File: /chem/msdv.i/05Oct2015.b/v100511sim.d

Date : 05-OCT-2015 17:19

Client ID:

Instrument: msdv.i

Sample Info: 250mL #35166

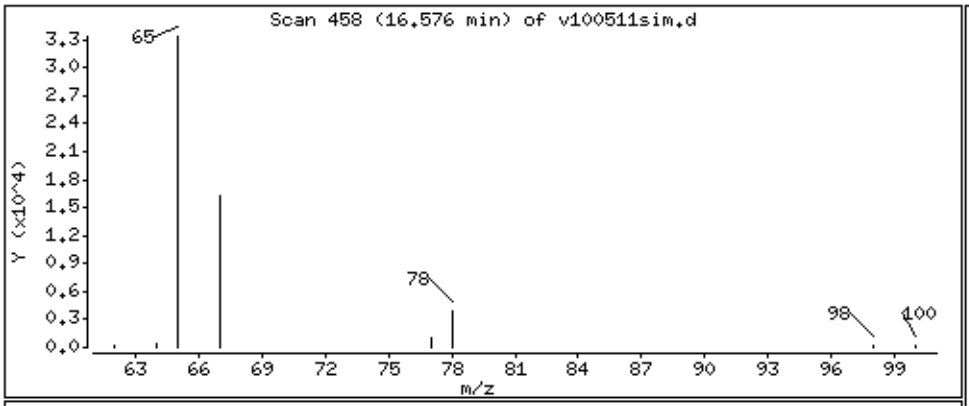
Operator: gh

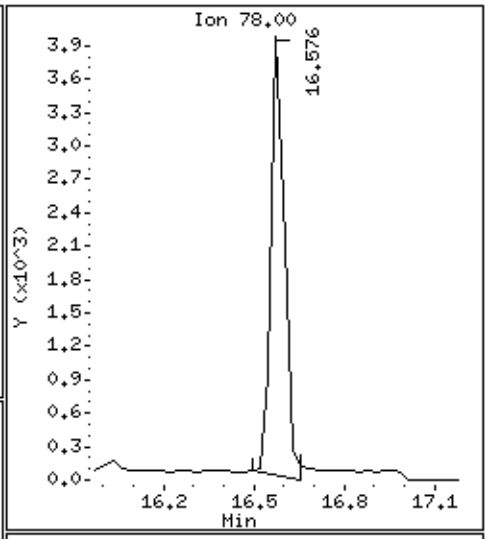
Column phase: RTx-624

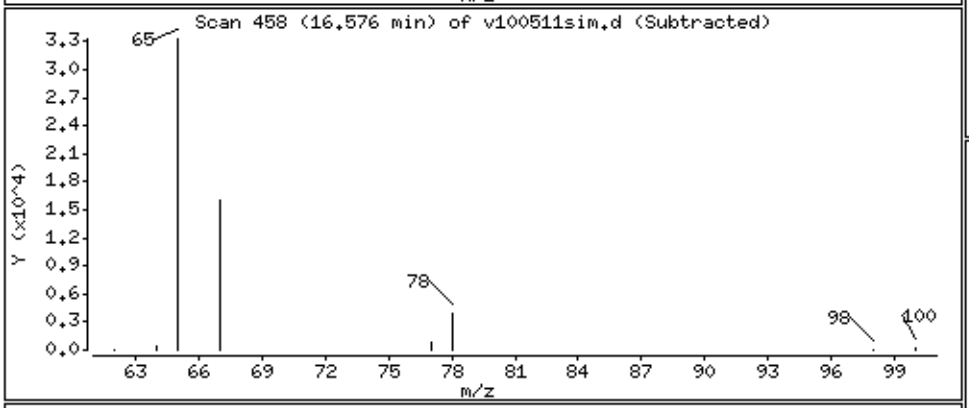
Column diameter: 0.32

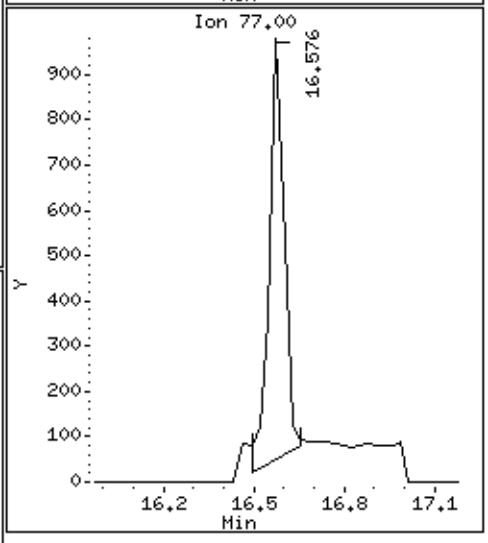
36 Benzene

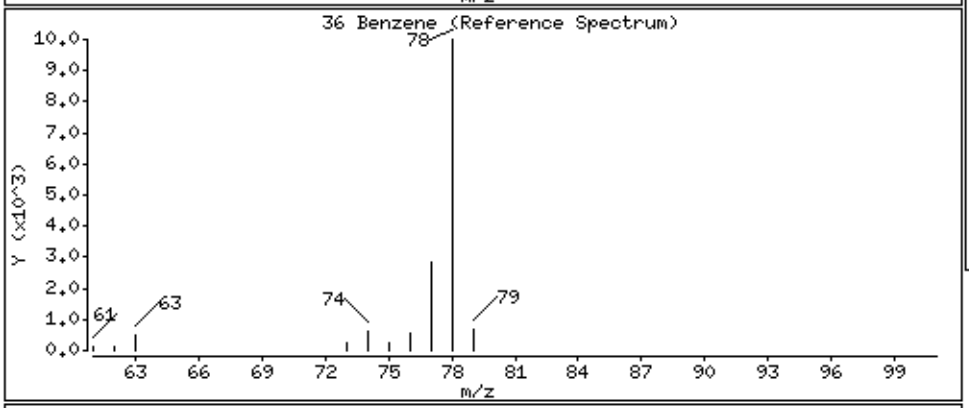
Concentration: 0.2709 PPBV

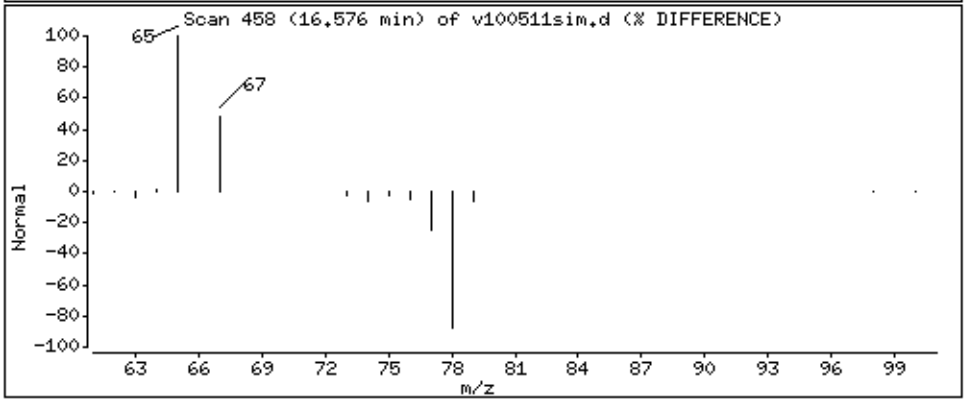












Data File: /chem/msdv.i/05Oct2015.b/v100511sim.d

Date : 05-OCT-2015 17:19

Client ID:

Instrument: msdv.i

Sample Info: 250mL #35166

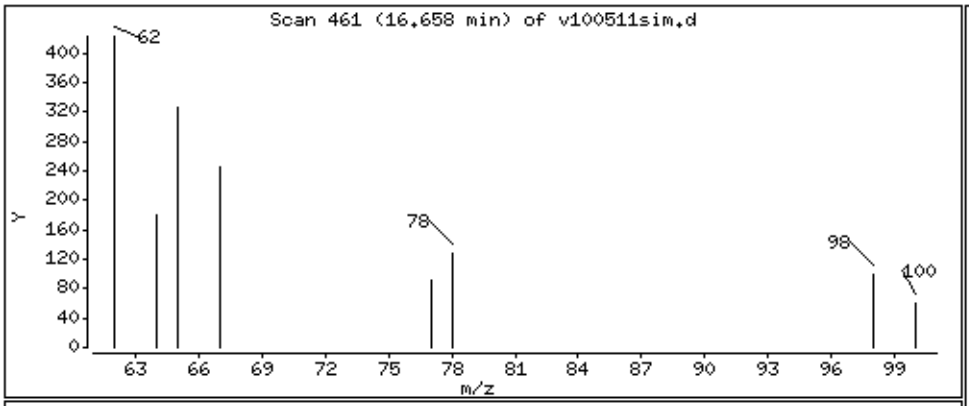
Operator: gh

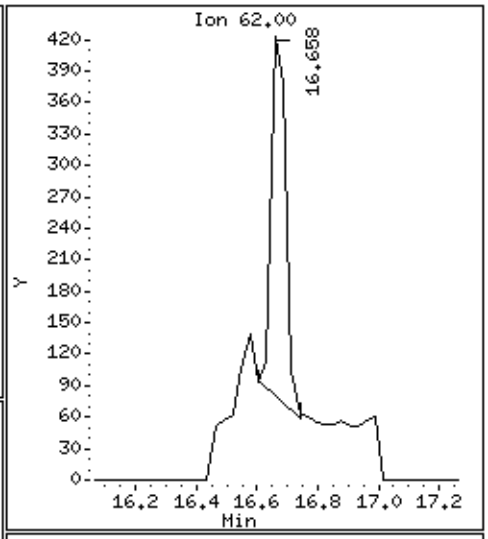
Column phase: RTx-624

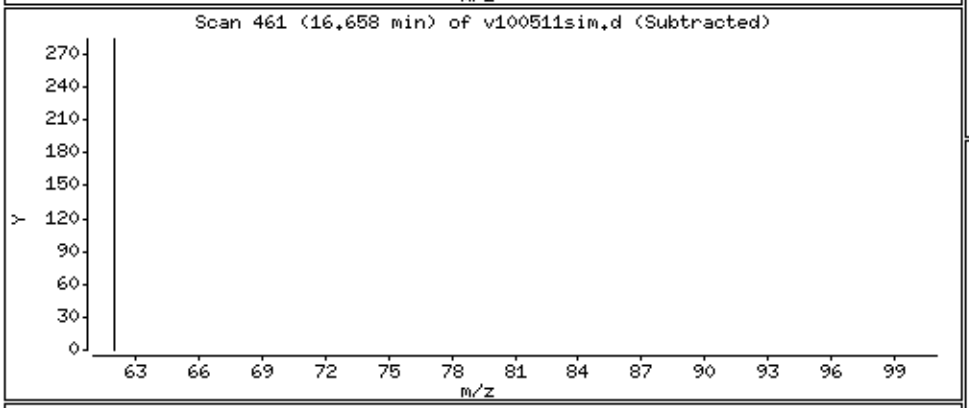
Column diameter: 0.32

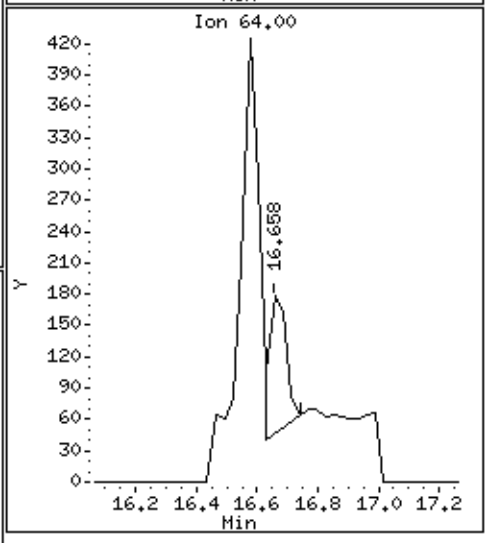
38 1,2-Dichloroethane

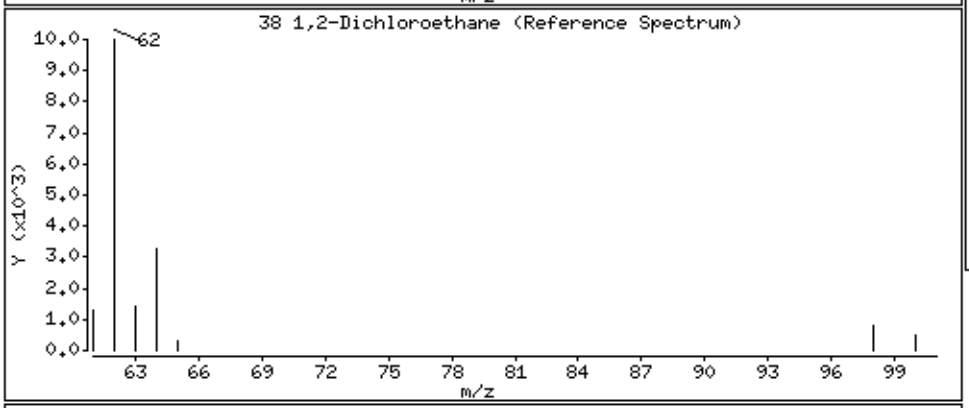
Concentration: 0.04419 PPBV

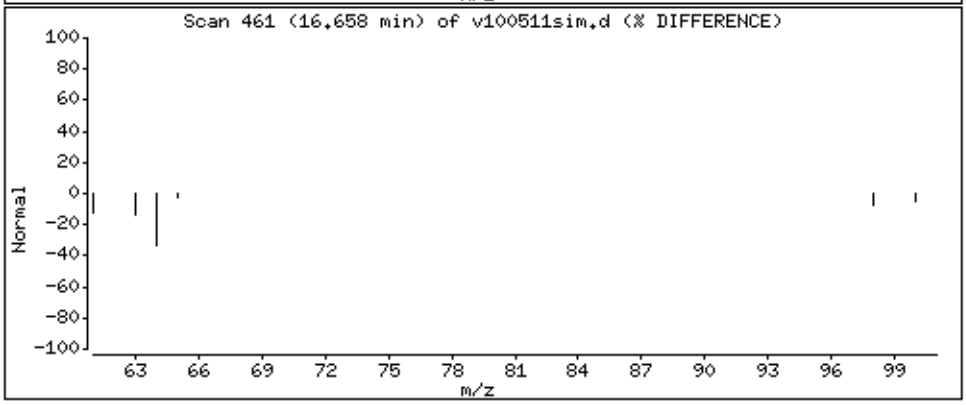












Data File: /chem/msdv.i/05Oct2015.b/v100511sim.d

Date : 05-OCT-2015 17:19

Client ID:

Instrument: msdv.i

Sample Info: 250mL #35166

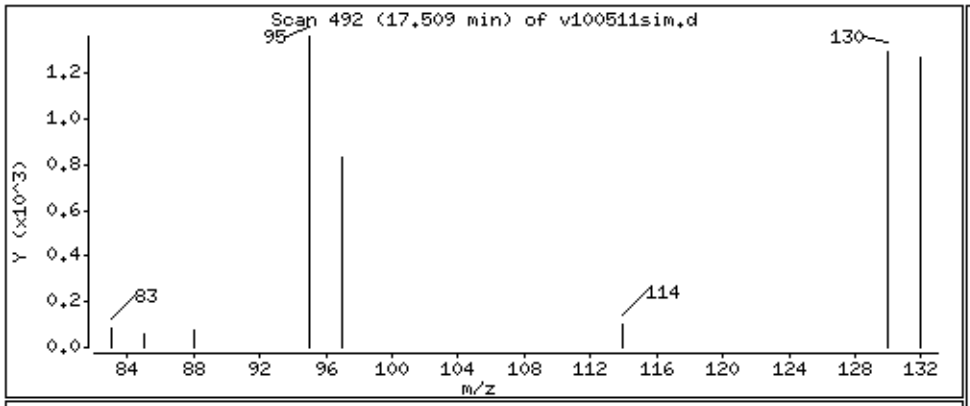
Operator: gh

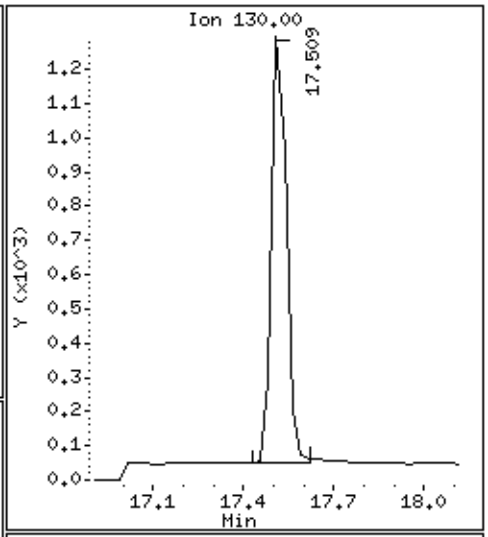
Column phase: RTx-624

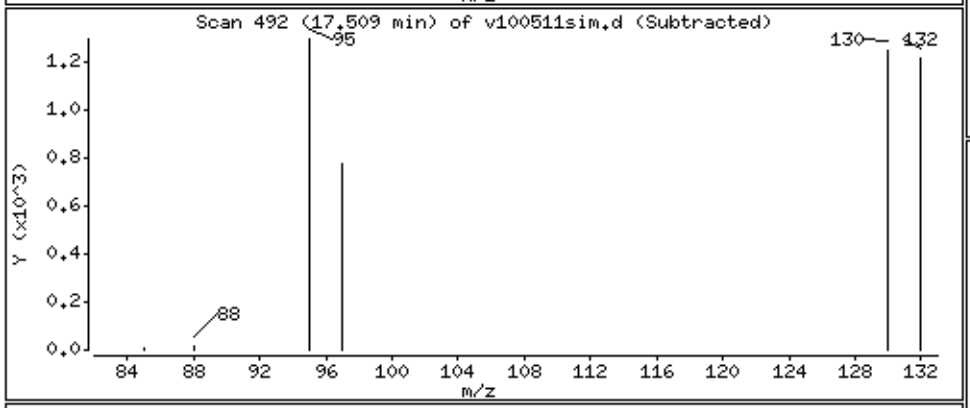
Column diameter: 0.32

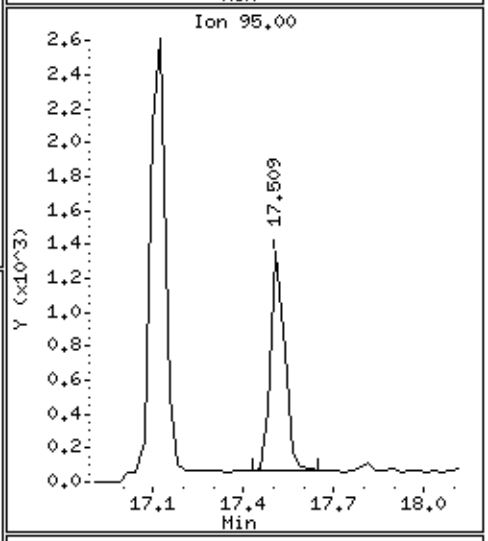
41 Trichloroethene

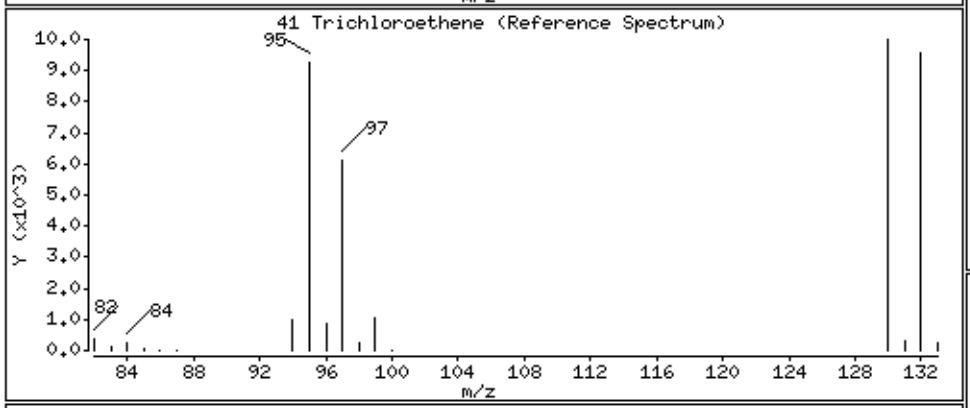
Concentration: 0.1604 PPBV

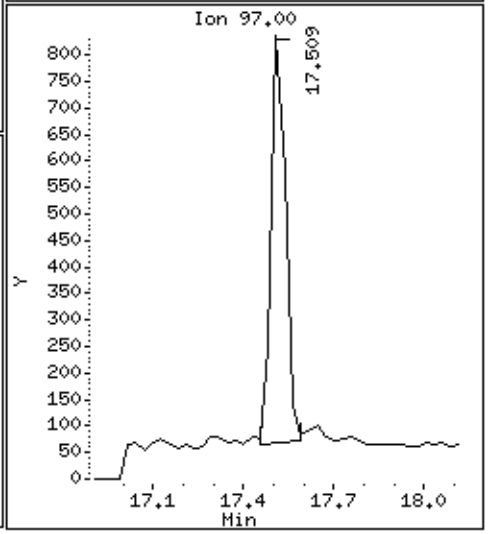


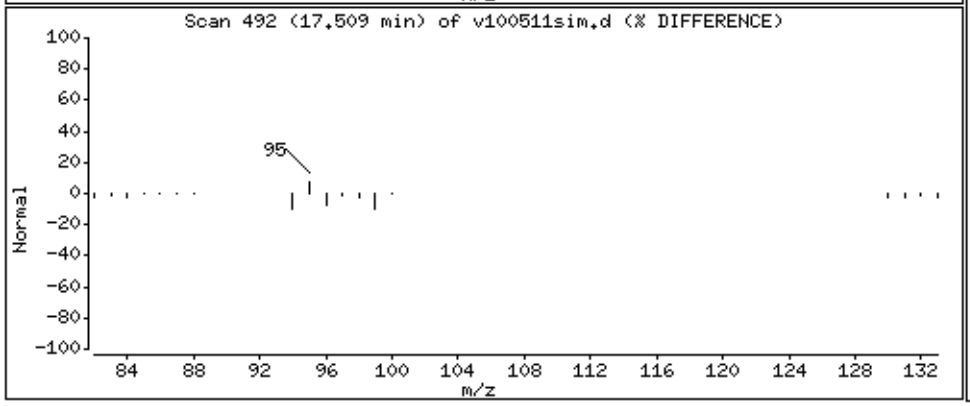












Data File: /chem/msdv.i/05Oct2015.b/v100511sim.d

Date : 05-OCT-2015 17:19

Client ID:

Instrument: msdv.i

Sample Info: 250mL #35166

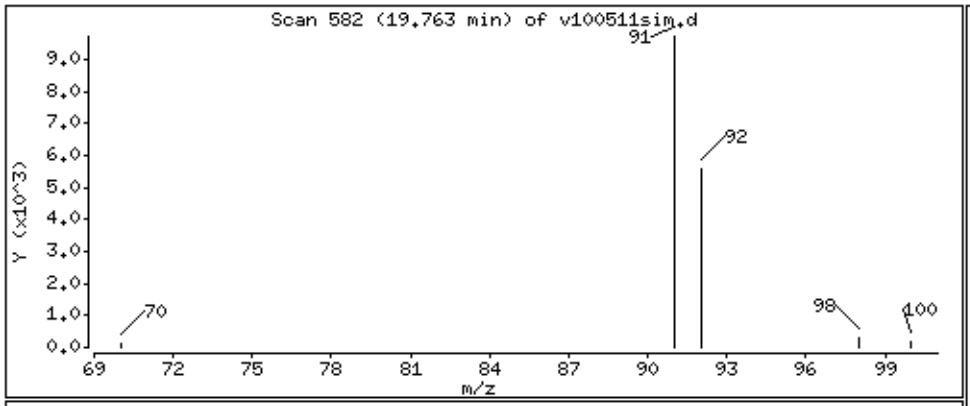
Operator: gh

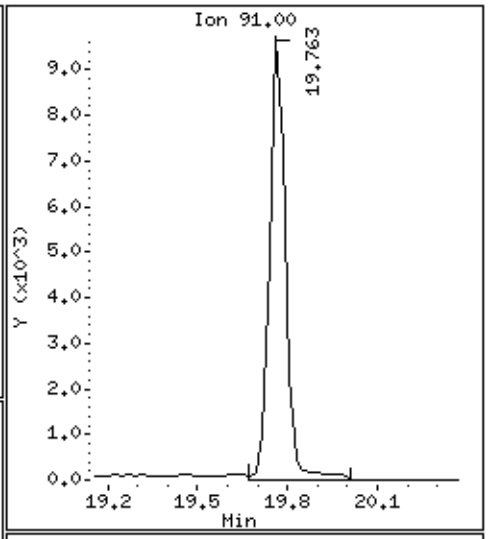
Column phase: RTx-624

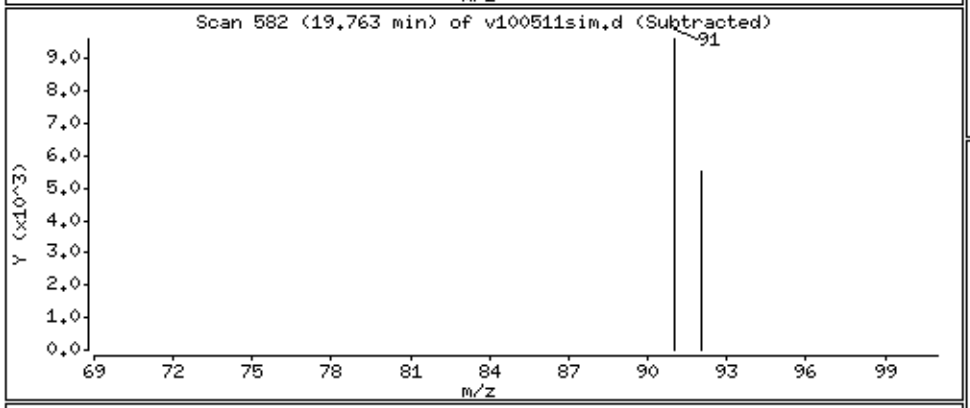
Column diameter: 0.32

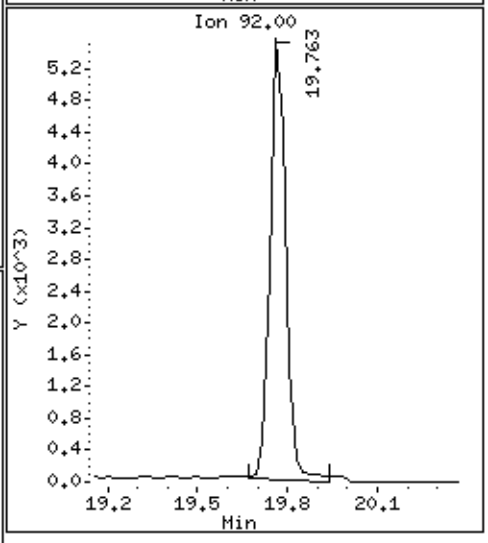
48 Toluene

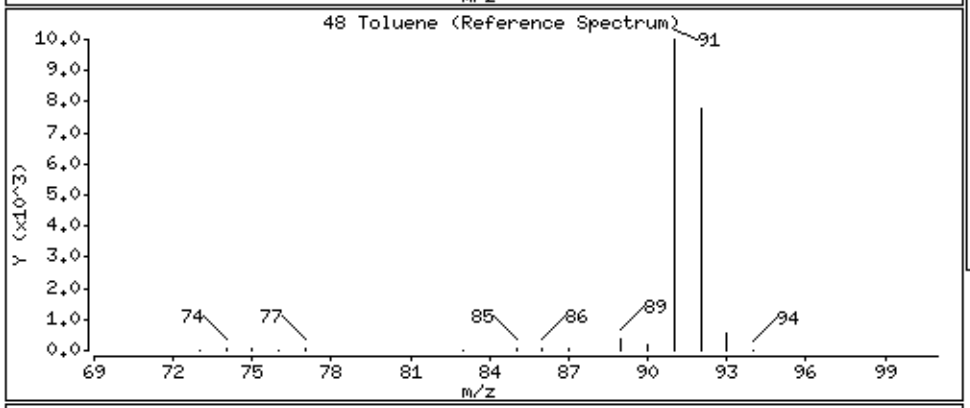
Concentration: 0.7034 PPBV

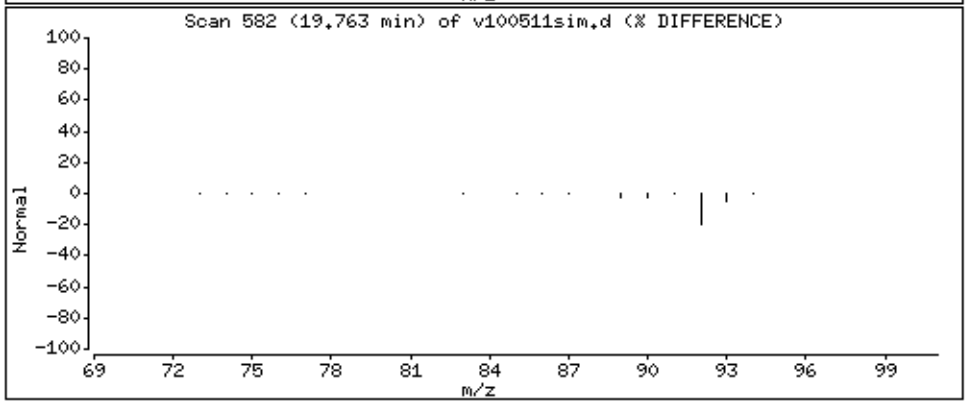












Data File: /chem/msdv.i/05Oct2015.b/v100511sim.d

Date : 05-OCT-2015 17:19

Client ID:

Instrument: msdv.i

Sample Info: 250mL #35166

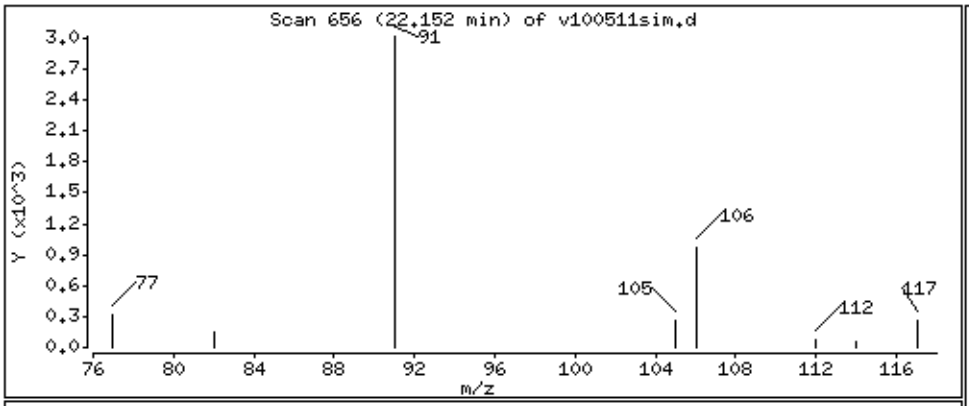
Operator: gh

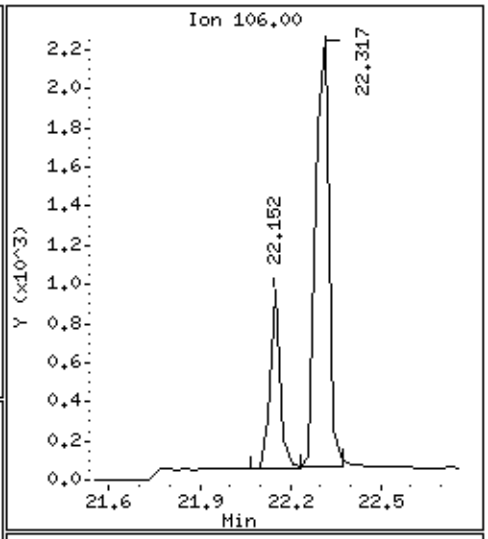
Column phase: RTx-624

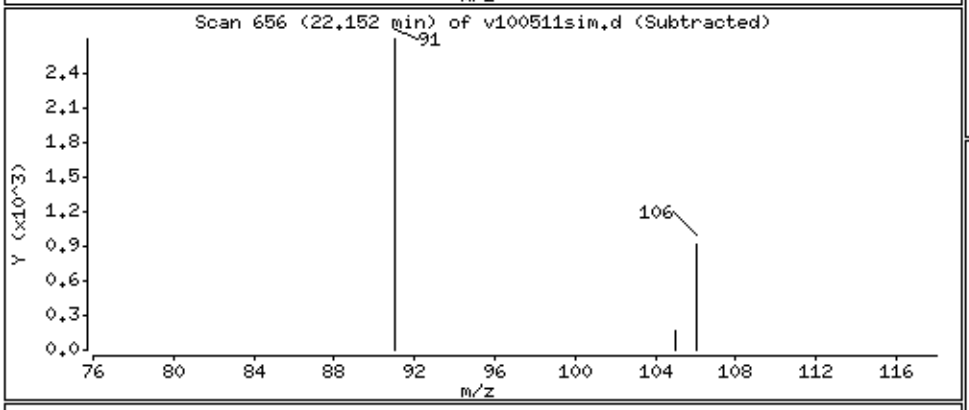
Column diameter: 0.32

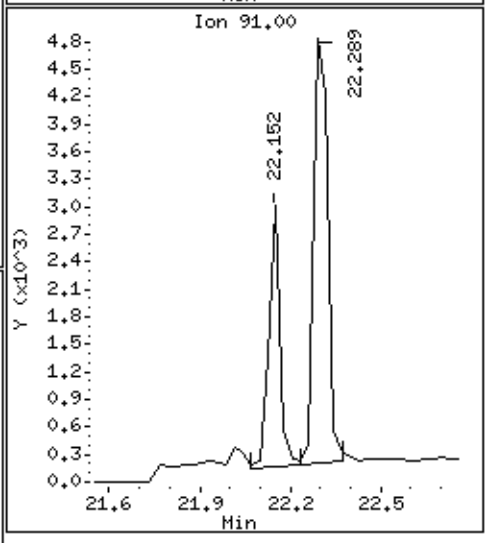
58 Ethyl Benzene

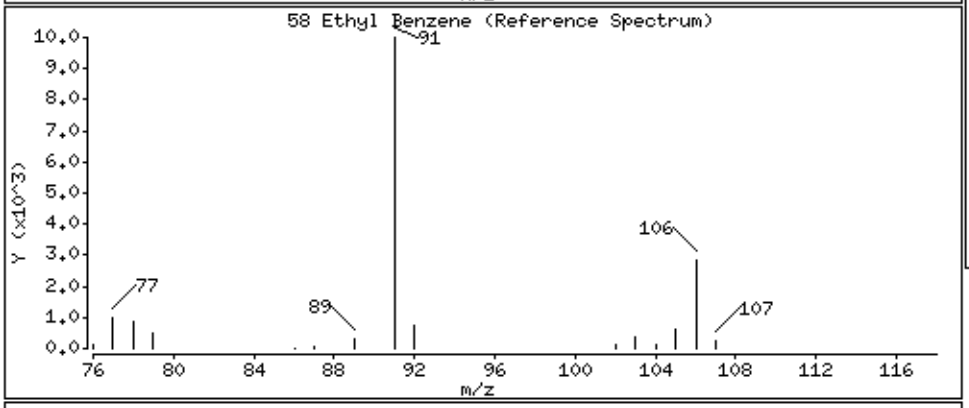
Concentration: 0.1259 PPBV

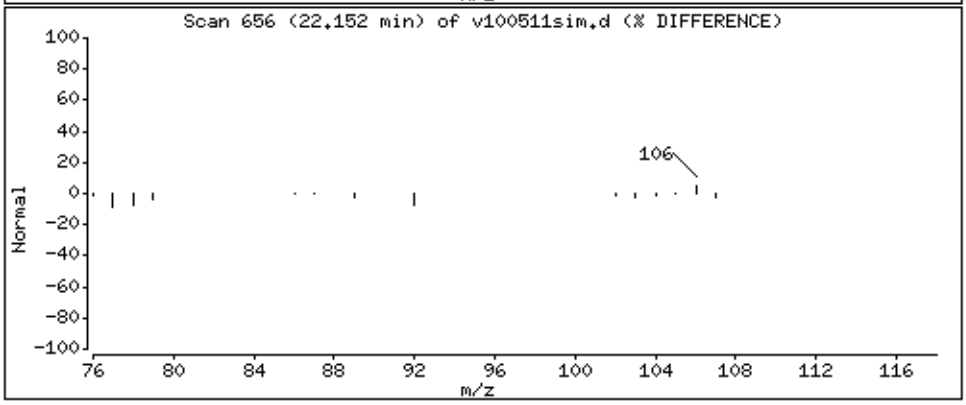












Data File: /chem/msdv.i/05Oct2015.b/v100511sim.d

Date : 05-OCT-2015 17:19

Client ID:

Instrument: msdv.i

Sample Info: 250mL #35166

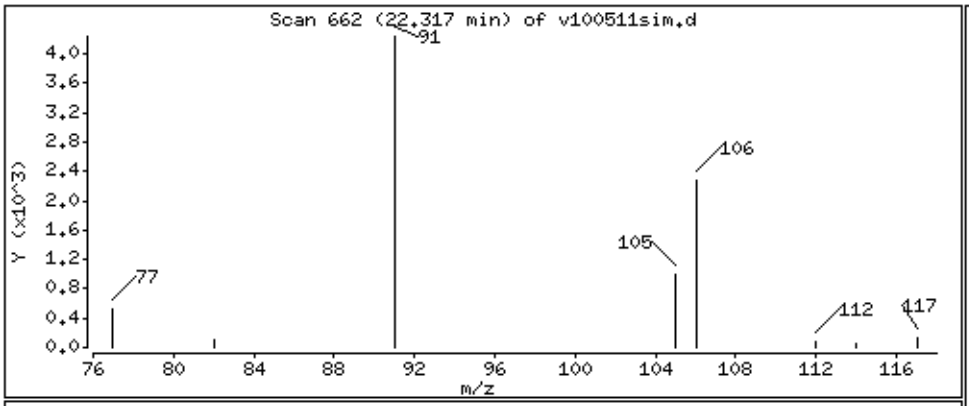
Operator: gh

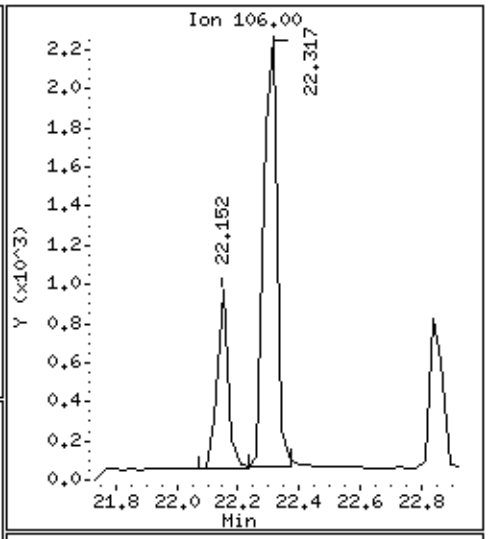
Column phase: RTx-624

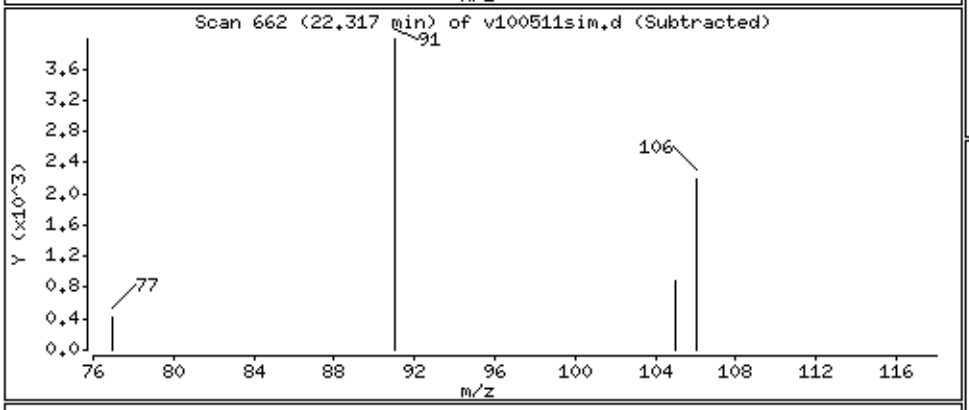
Column diameter: 0.32

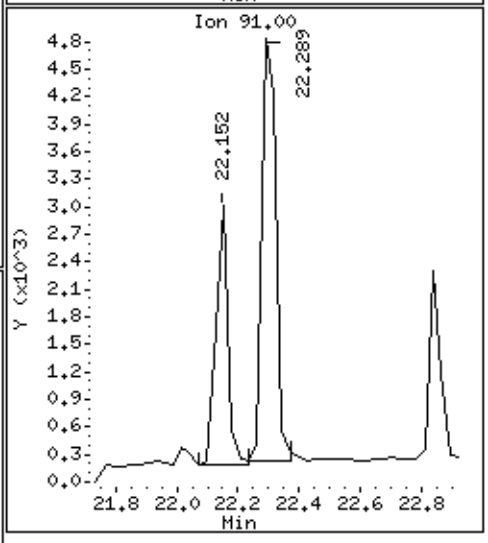
59 m,p-Xylene

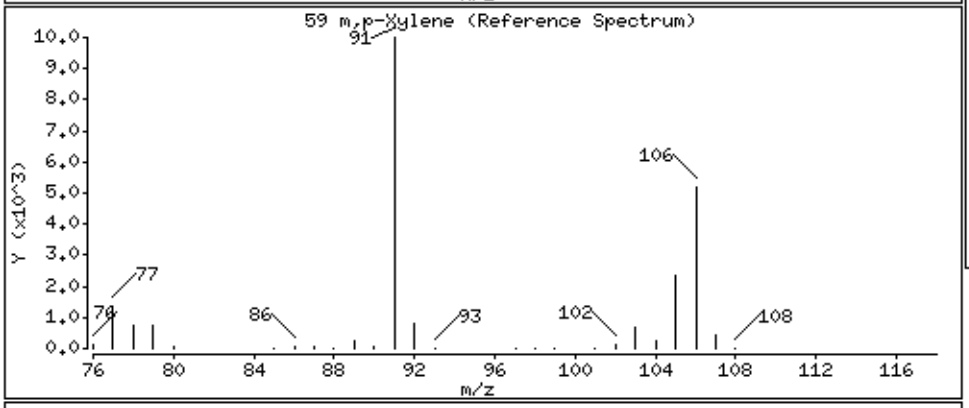
Concentration: 0.3723 PPBV

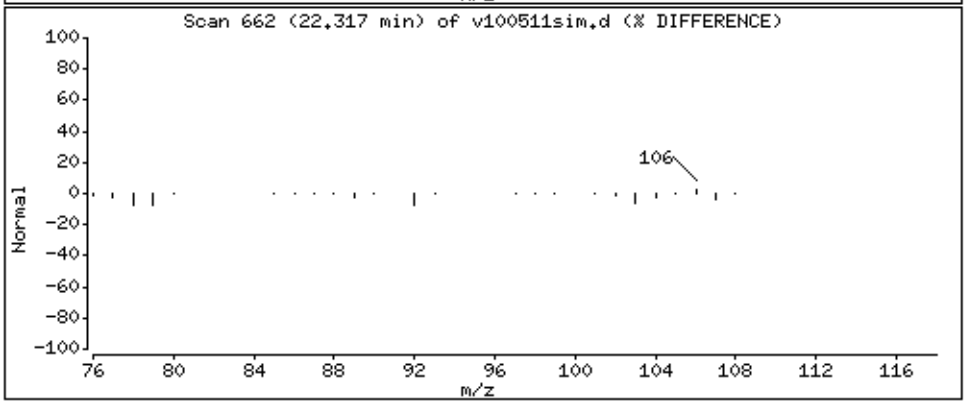












Data File: /chem/msdv.i/05Oct2015.b/v100511sim.d

Date : 05-OCT-2015 17:19

Client ID:

Instrument: msdv.i

Sample Info: 250mL #35166

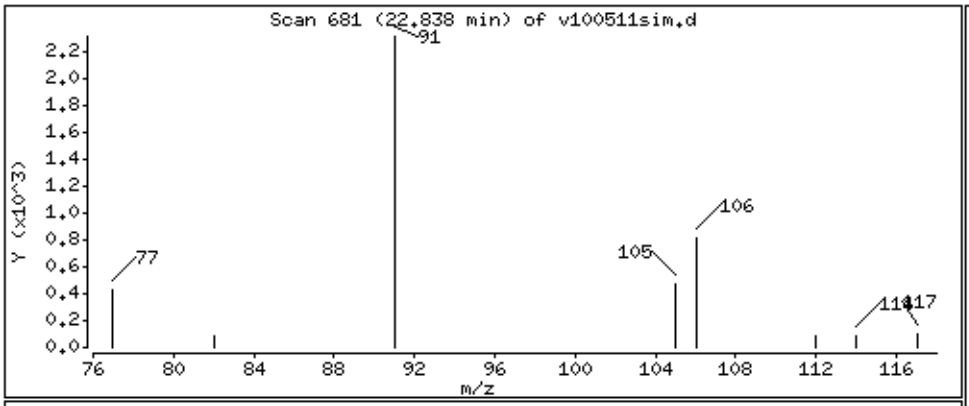
Operator: gh

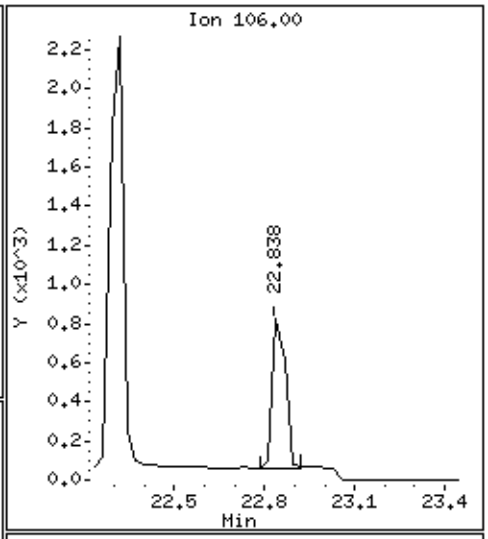
Column phase: RTx-624

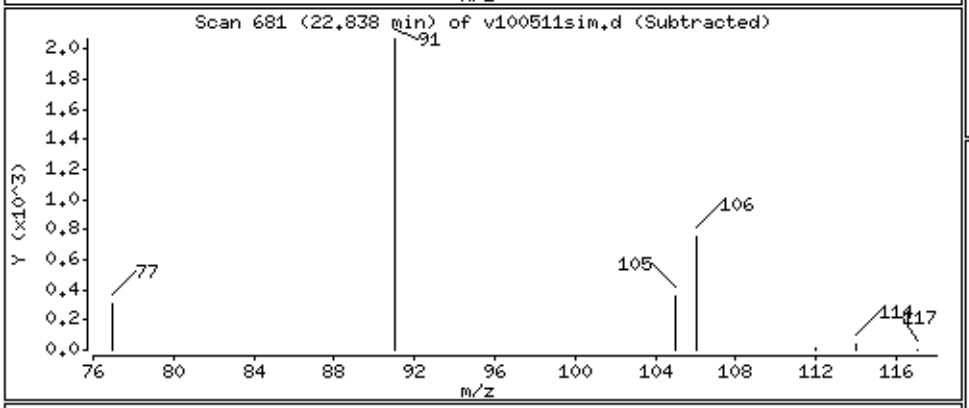
Column diameter: 0.32

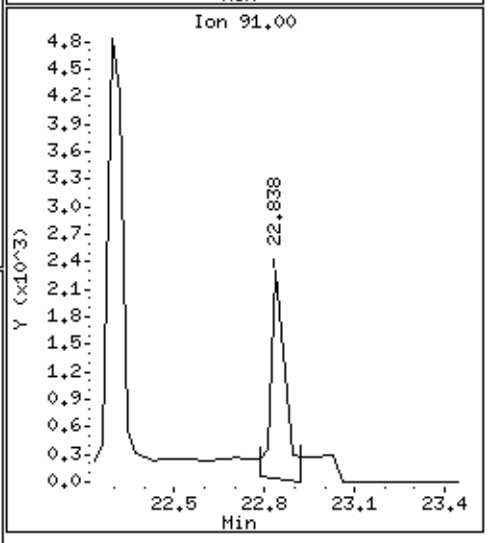
61 o-Xylene

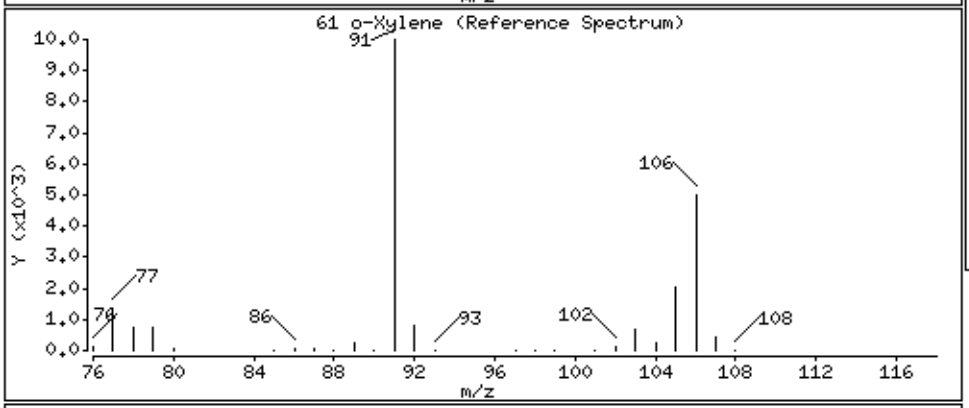
Concentration: 0.1303 PPBV

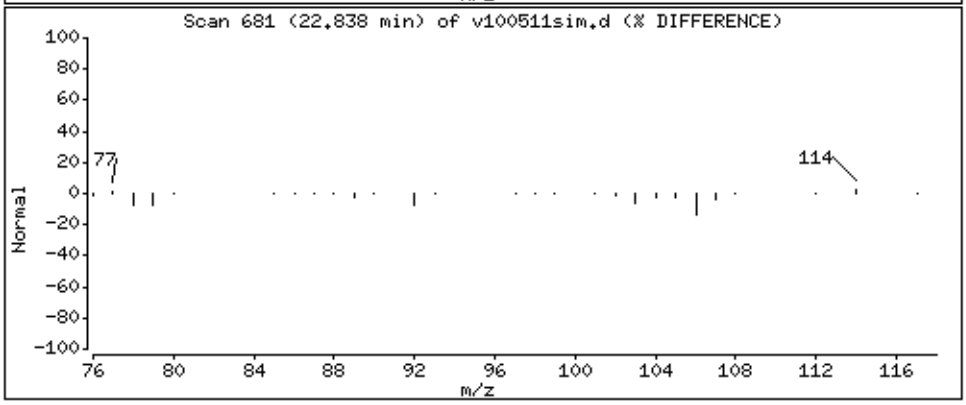












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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: 2-IA(092215)

Lab ID#: 1509512-06A

No Detections Were Found.

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Client Sample ID: 2-IA(092215)

Lab ID#: 1509512-06A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100512**	**Date of Collection: 9/23/15 2:08:00 PM**	
Dil. Factor:	**4.38**	**Date of Analysis: 10/5/15 06:04 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.88	Not Detected	3.0	Not Detected
1,2,4-Trimethylbenzene	0.44	Not Detected	2.2	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	102	70-130
4-Bromofluorobenzene	103	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/05Oct2015.b/v100512.d
Lab Smp Id: 1509512-06A
Inj Date : 05-OCT-2015 18:04
Operator : gh Inst ID: msdv.i
Smp Info : 100mL #34356
Misc Info : 7.0"Hg ->5.0psi
Comment : Low Level GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m
Meth Date : 05-Oct-2015 11:52 mskidmor Quant Type: ISTD
Cal Date : 29-SEP-2015 21:58 Cal File: v092913.d
Als bottle: 1
Dil Factor: 4.38000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 54 Bromochloromethane					CAS #: 74-97-5		
15.743	15.743 (1.000)	130	66927	5.00000		80.00- 120.00	100.00
15.743	15.743 (1.000)	128	54781			48.04- 108.04	81.85
15.743	15.743 (1.000)	49	204164			284.77- 344.77	305.05
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.111	17.111 (1.000)	114	308677	5.00000		80.00- 120.00	100.00
17.111	17.111 (1.000)	88	43288			0.00- 44.16	14.02
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.029	22.029 (1.000)	117	280365	5.00000		80.00- 120.00	100.00
22.029	22.029 (1.000)	82	136937			18.70- 78.70	48.84
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.562	16.562 (1.052)	65	122564	5.19272	5.193	80.00- 120.00	100.00
16.562	16.562 (1.052)	67	59431			19.41- 79.41	48.49
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.638	19.615 (1.148)	98	296431	5.09447	5.094	80.00- 120.00	100.00
19.615	19.615 (1.146)	70	29804			0.00- 40.74	10.05

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.638	19.615 (1.148)	100	198960			34.93- 94.93	67.12
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.535	23.535 (1.068)	174	149030	5.17392	5.174	80.00- 120.00	100.00
23.535	23.535 (1.068)	95	180292			94.06- 154.06	120.98
23.535	23.535 (1.068)	176	139140			68.95- 128.95	93.36

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100512.d
Lab Smp Id: 1509512-06A
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: 7.0"Hg ->5.0psi

Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	78102	46861	109343	66927	-14.31
71 1,4-Difluorobenze	340477	204286	476668	308677	-9.34
92 Chlorobenzene-d5	294231	176539	411923	280365	-4.71

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.74	15.41	16.07	15.74	0.00
71 1,4-Difluorobenze	17.11	16.78	17.44	17.11	0.00
92 Chlorobenzene-d5	22.03	21.70	22.36	22.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Oct-2015 12:23

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509512-06A
Level: LOW Operator: gh
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: 7.0"Hg ->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	5.193	103.85	70-130
$ 80 Toluene-d8	5.000	5.094	101.89	70-130
$ 106 Bromofluorobenzene	5.000	5.174	103.48	70-130

Data File: /chem/msdv.i/05Oct2015.b/v100512.d

Date : 05-OCT-2015 18:04

Client ID:

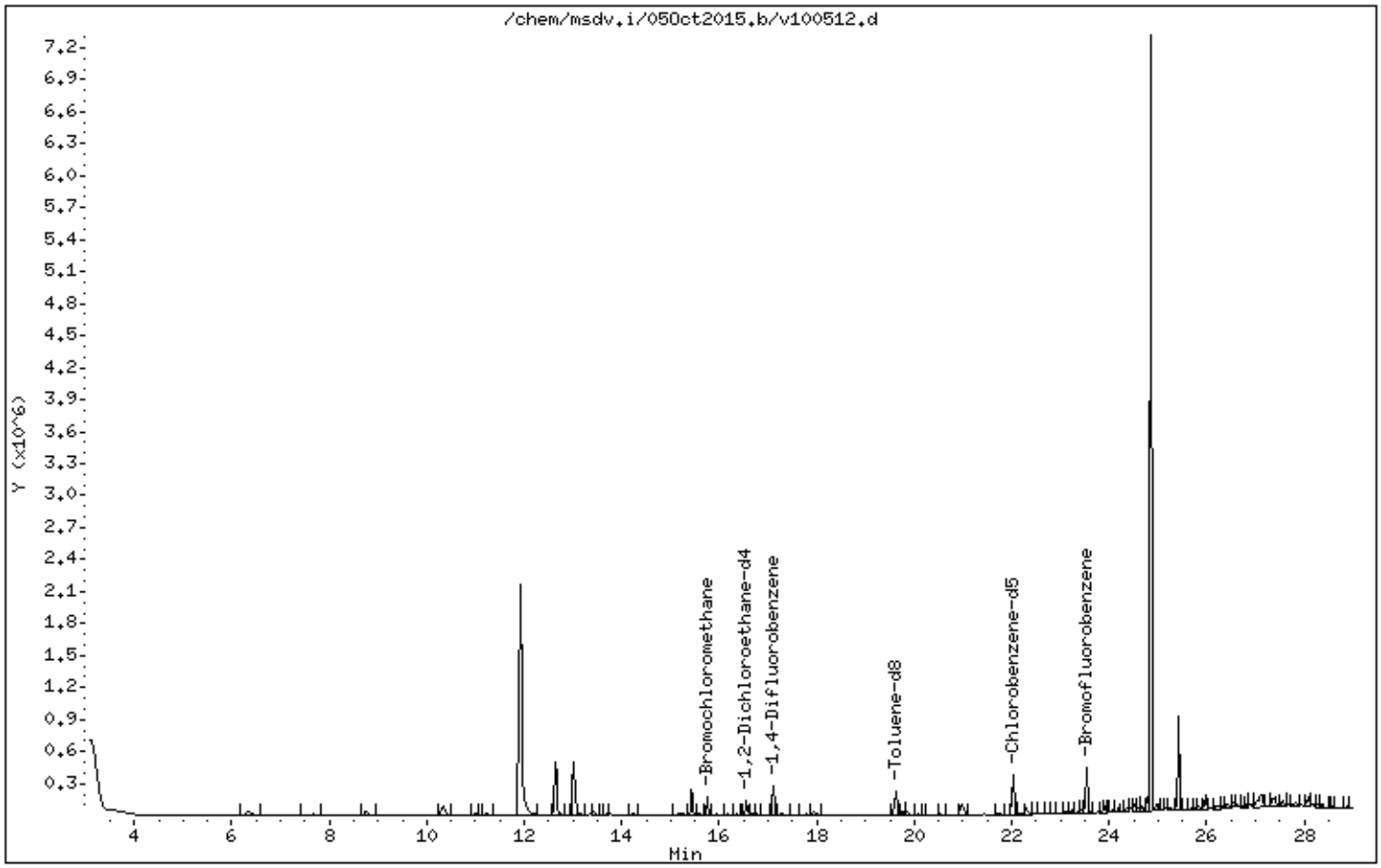
Instrument: msdv.i

Sample Info: 100mL #34356

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: 2-IA(092215)

Lab ID#: 1509512-06B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	0.088	0.14	0.35	0.57
Chloroform	0.088	0.19	0.43	0.91
Benzene	0.22	0.25	0.70	0.81
1,2-Dichloroethane	0.088	1.7	0.35	7.0
Trichloroethene	0.088	0.20	0.47	1.1
Toluene	0.088	2.1	0.33	7.9
Ethyl Benzene	0.088	0.20	0.38	0.85
m,p-Xylene	0.18	0.43	0.76	1.9
o-Xylene	0.088	0.25	0.38	1.1

eurofins | Air Toxics

Client Sample ID: 2-IA(092215)

Lab ID#: 1509512-06B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100512sim**	**Date of Collection: 9/23/15 2:08:00 PM**	
Dil. Factor:	**4.38**	**Date of Analysis: 10/5/15 06:04 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.044	Not Detected	0.11	Not Detected
1,1-Dichloroethene	0.044	Not Detected	0.17	Not Detected
trans-1,2-Dichloroethene	0.44	Not Detected	1.7	Not Detected
cis-1,2-Dichloroethene	0.088	0.14	0.35	0.57
Chloroform	0.088	0.19	0.43	0.91
Benzene	0.22	0.25	0.70	0.81
1,2-Dichloroethane	0.088	1.7	0.35	7.0
Trichloroethene	0.088	0.20	0.47	1.1
Toluene	0.088	2.1	0.33	7.9
1,1,2-Trichloroethane	0.088	Not Detected	0.48	Not Detected
Tetrachloroethene	0.088	Not Detected	0.59	Not Detected
Ethyl Benzene	0.088	0.20	0.38	0.85
m,p-Xylene	0.18	0.43	0.76	1.9
o-Xylene	0.088	0.25	0.38	1.1

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	100	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/05Oct2015.b/v100512sim.d
Lab Smp Id: 1509512-06B
Inj Date : 05-OCT-2015 18:04
Operator : gh Inst ID: msdv.i
Smp Info : 100mL #34356
Misc Info : 7.0"Hg ->5.0psi
Comment : SIM GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 05-Oct-2015 12:58 mskidmor Quant Type: ISTD
Cal Date : 29-SEP-2015 14:34 Cal File: v092903sim.d
Als bottle: 1
Dil Factor: 4.38000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 31 Bromochloromethane					CAS #: 74-97-5		
15.757	15.757 (1.000)	130	76091	5.00000		80.00- 120.00	100.00
15.757	15.757 (1.000)	128	59190			48.13- 108.13	77.79
15.757	15.757 (1.000)	49	212960			238.09- 298.09	279.87
* 40 1,4-Difluorobenzene					CAS #: 540-36-3		
17.125	17.125 (1.000)	114	323117	5.00000		80.00- 120.00	100.00
17.125	17.125 (1.000)	88	45989			0.00- 44.50	14.23
* 56 Chlorobenzene-d5					CAS #: 3114-55-4		
22.042	22.042 (1.000)	117	275757	5.00000		80.00- 120.00	100.00
22.015	22.042 (1.000)	82	130972			16.61- 76.61	47.50
$ 37 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.548	16.548 (1.050)	65	128276	5.10809	5.108	80.00- 120.00	100.00
16.576	16.548 (1.052)	67	58149			19.91- 79.91	45.33
$ 47 Toluene-d8					CAS #: 2037-26-5		
19.629	19.629 (1.146)	98	261256	5.00420	5.004	80.00- 120.00	100.00
19.629	19.629 (1.146)	70	28713			0.00- 41.04	10.99

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.629	19.629 (1.146)	100	162888			32.99- 92.99	62.35
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	152897	4.97706	4.977	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	171739			84.02- 144.02	112.32
23.548	23.548 (1.068)	176	149251			67.56- 127.56	97.62
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.437	15.437 (0.980)	98	636	0.03295	0.1443	80.00- 120.00	100.00(M)
15.437	15.437 (0.980)	61	64720			264.63- 324.63	10162.44
15.437	15.437 (0.980)	96	1125			126.49- 186.49	176.74
32 Chloroform					CAS #: 67-66-3		
15.819	15.819 (1.004)	83	2370	0.04277	0.1873	80.00- 120.00	100.00
15.819	15.819 (1.004)	85	1575			34.82- 94.82	66.46
36 Benzene					CAS #: 71-43-2		
16.576	16.576 (0.968)	78	4977	0.05815	0.2547	80.00- 120.00	100.00
16.576	16.576 (0.968)	77	1472			0.00- 52.79	29.58
38 1,2-Dichloroethane					CAS #: 107-06-2		
16.658	16.658 (0.973)	62	19965	0.39503	1.730	80.00- 120.00	100.00
16.658	16.658 (0.973)	64	6379			0.00- 59.27	31.95
41 Trichloroethene					CAS #: 79-01-6		
17.509	17.509 (1.022)	130	2313	0.04577	0.2005	80.00- 120.00	100.00
17.509	17.509 (1.022)	95	2191			64.71- 124.71	94.73
17.509	17.509 (1.022)	97	1423			31.19- 91.19	61.54
48 Toluene					CAS #: 108-88-3		
19.764	19.764 (1.154)	91	46910	0.47896	2.098	80.00- 120.00	100.00
19.764	19.764 (1.154)	92	27568			28.99- 88.99	58.77
58 Ethyl Benzene					CAS #: 100-41-4		
22.152	22.152 (1.005)	106	1508	0.04460	0.1953	80.00- 120.00	100.00
22.152	22.152 (1.005)	91	5056			301.49- 361.49	335.15
59 m,p-Xylene					CAS #: 108-38-3		
22.317	22.317 (1.012)	106	3510	0.09884	0.4329	80.00- 120.00	100.00
22.290	22.317 (1.011)	91	7897			185.00- 245.00	224.96
61 o-Xylene					CAS #: 95-47-6		
22.839	22.839 (1.036)	106	1917	0.05715	0.2503	80.00- 120.00	100.00
22.839	22.839 (1.036)	91	5704			198.20- 258.20	297.51

QC Flag Legend

M - Compound response manually integrated.

Report Date: 12-Oct-2015 12:41

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100512sim.d
Lab Smp Id: 1509512-06B
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 7.0"Hg ->5.0psi

Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	81342	48805	113879	76091	-6.46
40 1,4-Difluorobenze	339188	203513	474863	323117	-4.74
56 Chlorobenzene-d5	289088	173453	404723	275757	-4.61

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Oct-2015 12:41

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509512-06B
Level: LOW Operator: gh
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 7.0"Hg ->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 37 1,2-Dichloroethane	5.000	5.108	102.16	70-130
$ 47 Toluene-d8	5.000	5.004	100.08	70-130
$ 66 Bromofluorobenzene	5.000	4.977	99.54	70-130

Data File: /chem/msdv.i/05Oct2015.b/v100512sim.d

Date : 05-OCT-2015 18:04

Client ID:

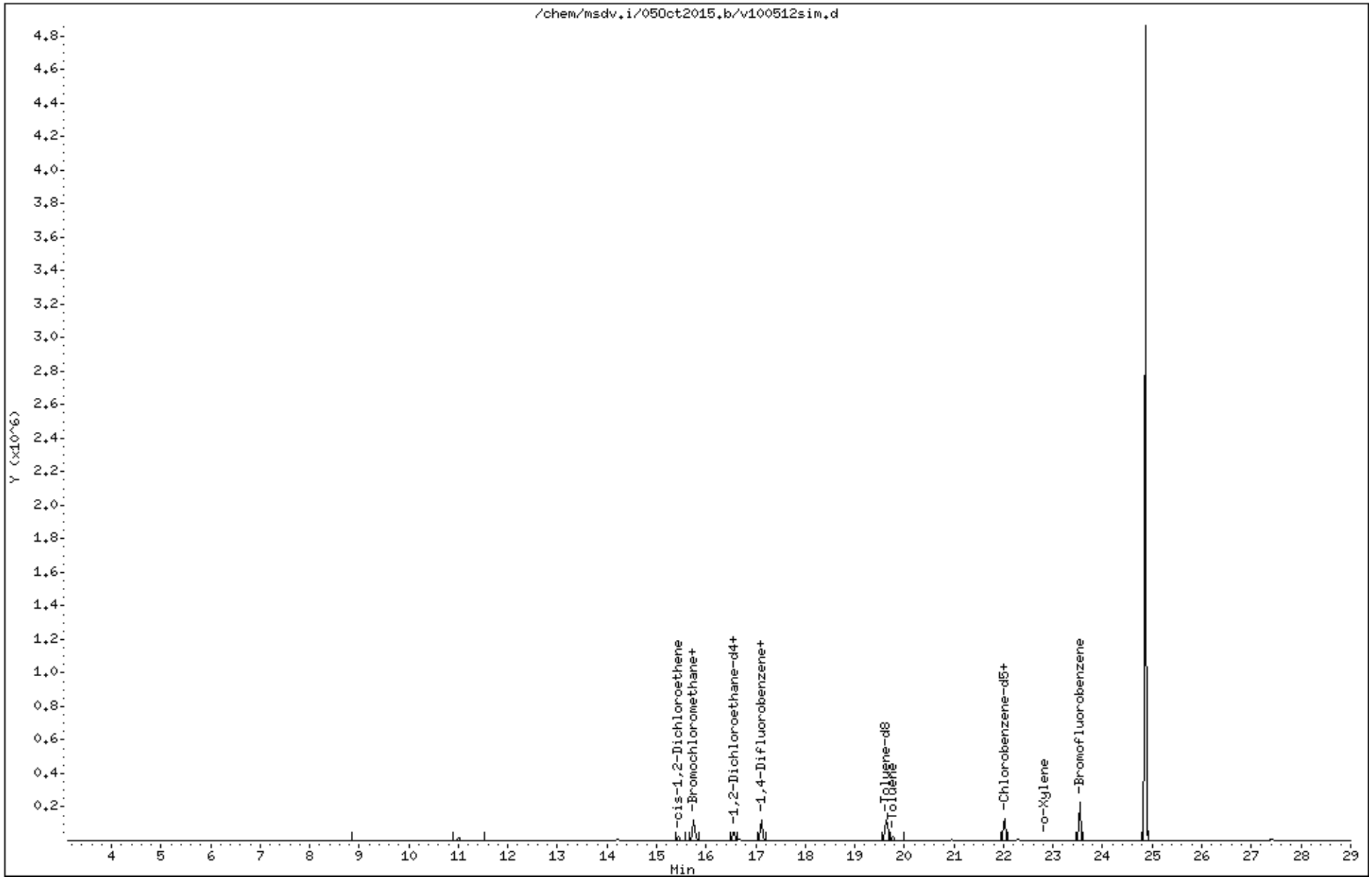
Instrument: msdv.i

Sample Info: 100mL #34356

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/05Oct2015.b/v100512sim.d

Date : 05-OCT-2015 18:04

Client ID:

Instrument: msdv.i

Sample Info: 100mL #34356

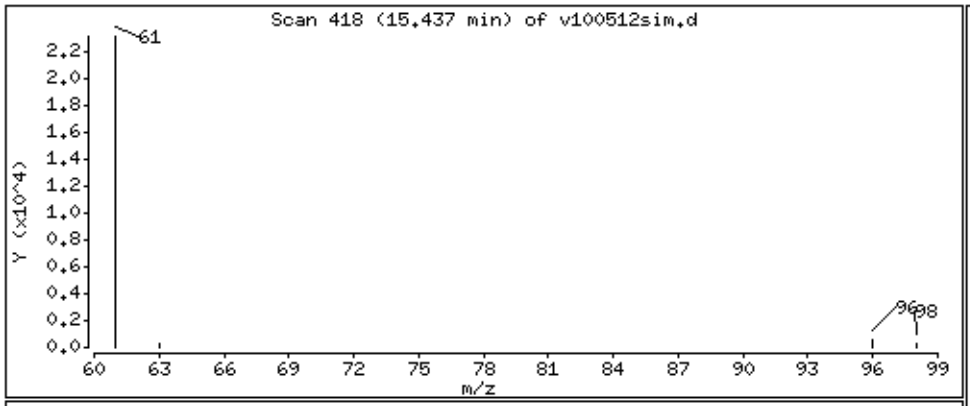
Operator: gh

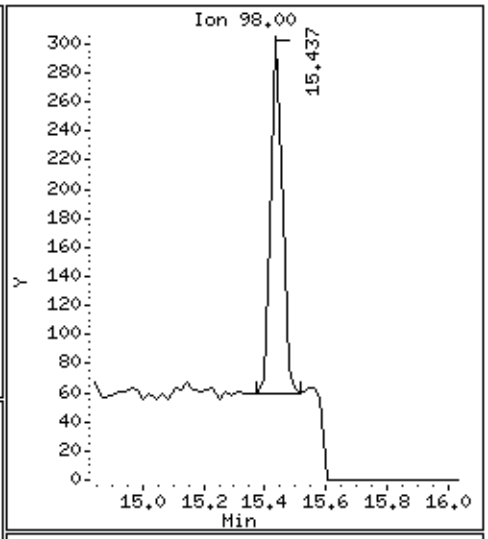
Column phase: RTx-624

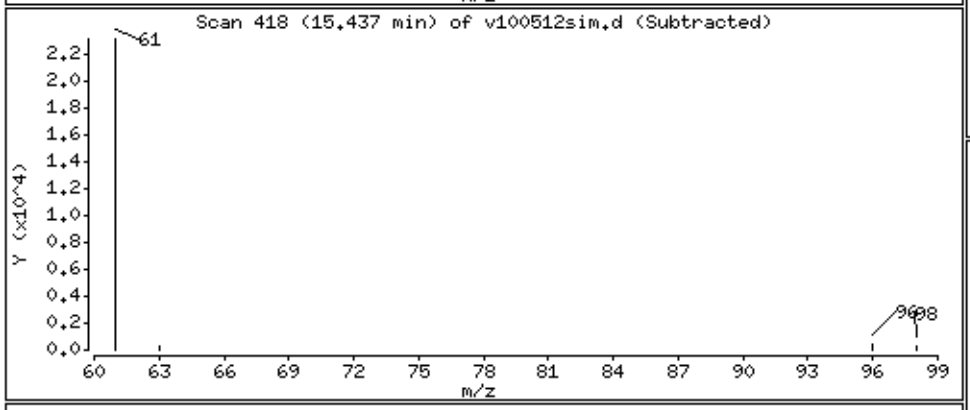
Column diameter: 0.32

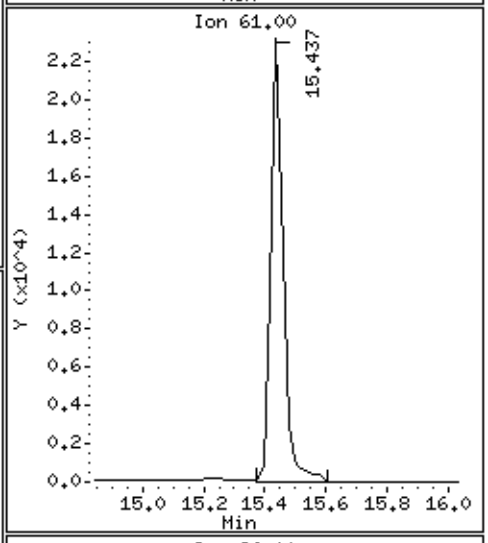
29 cis-1,2-Dichloroethene

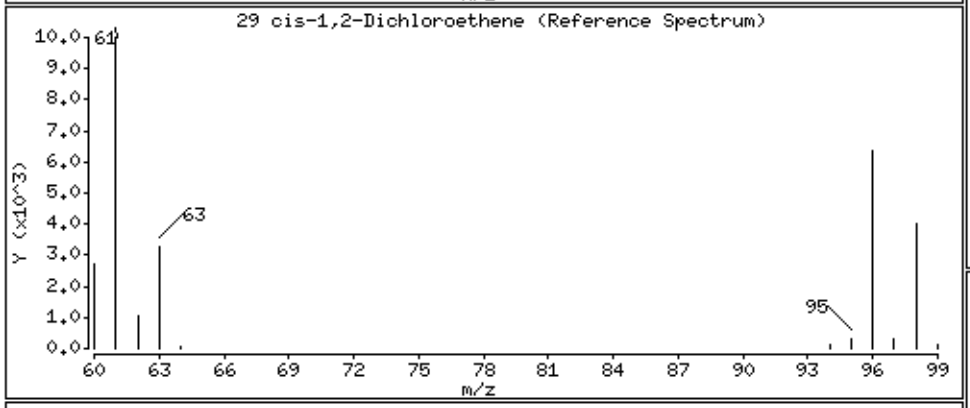
Concentration: 0.1443 PPBV

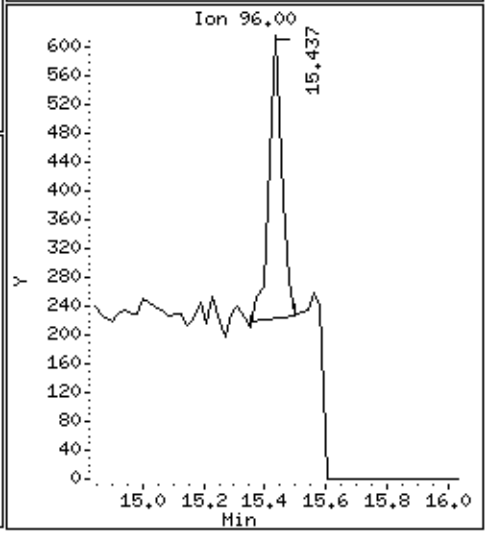


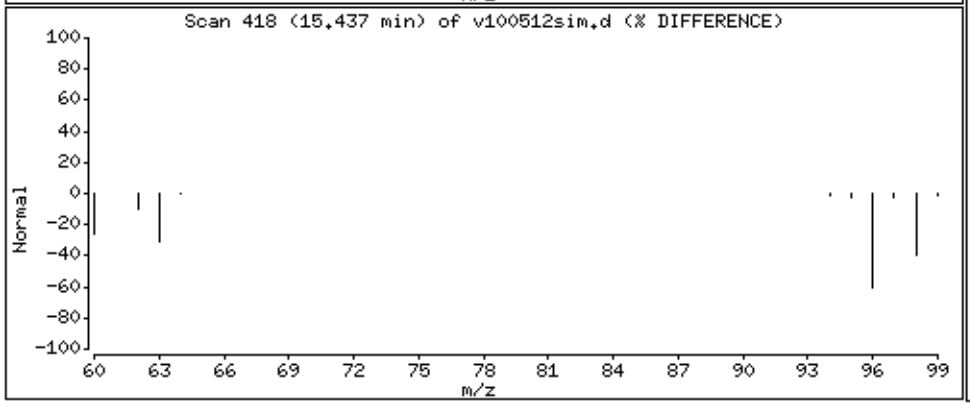












Data File: /chem/msdv.i/05Oct2015.b/v100512sim.d

Date : 05-OCT-2015 18:04

Client ID:

Instrument: msdv.i

Sample Info: 100mL #34356

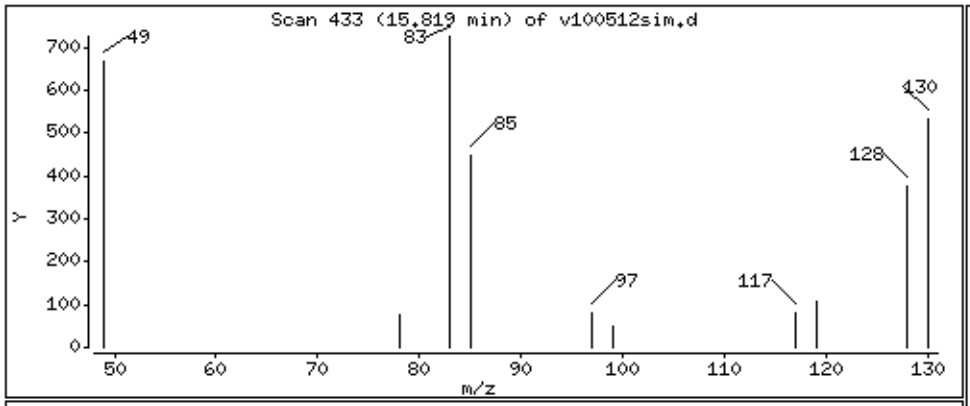
Operator: gh

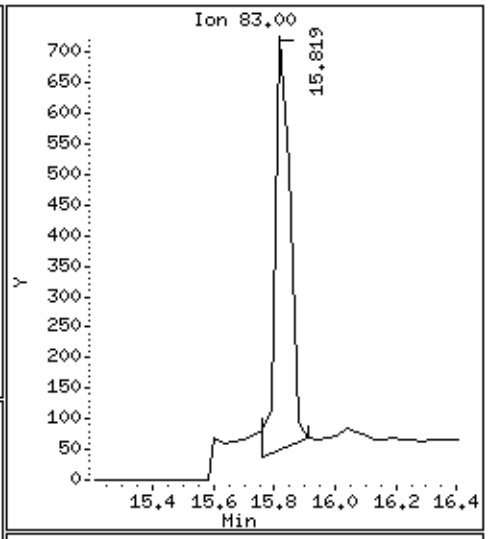
Column phase: RTx-624

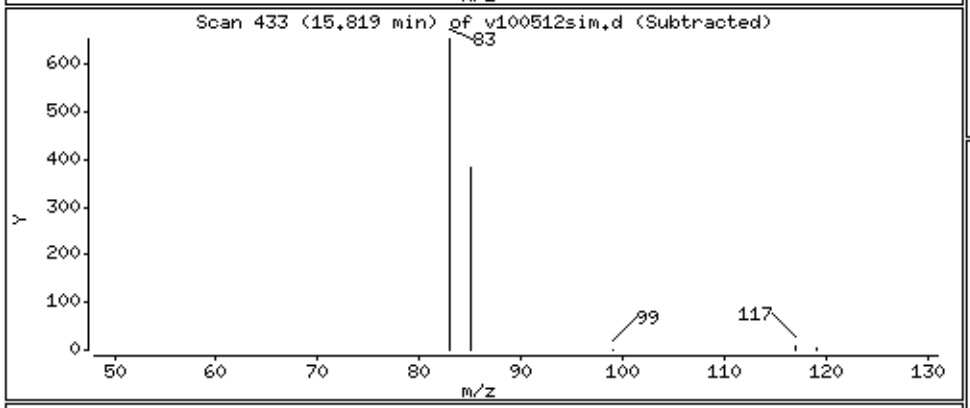
Column diameter: 0.32

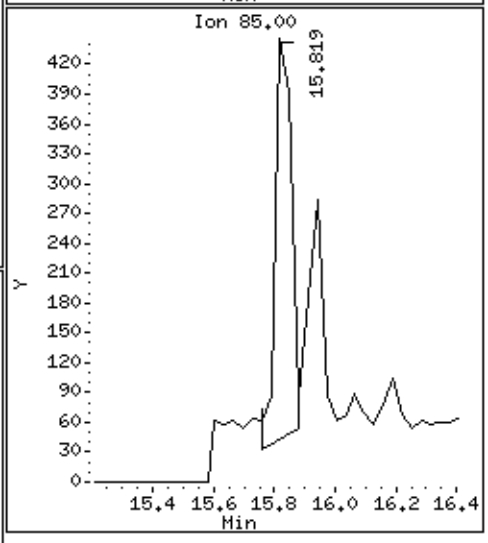
32 Chloroform

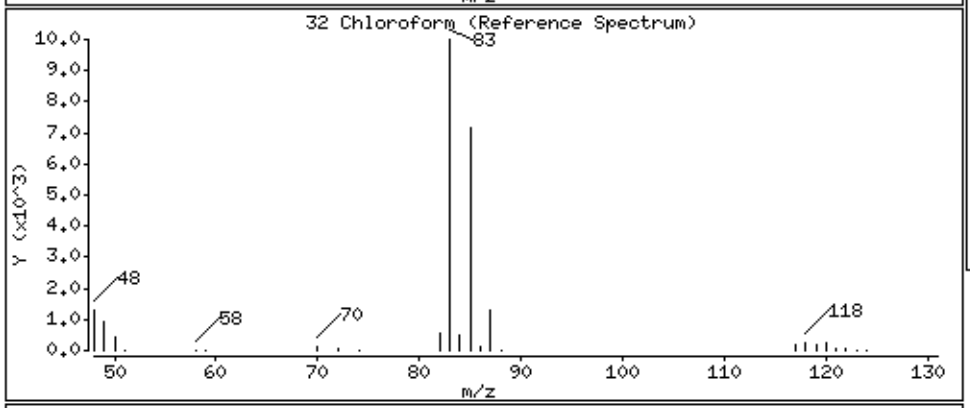
Concentration: 0.1873 PPBV

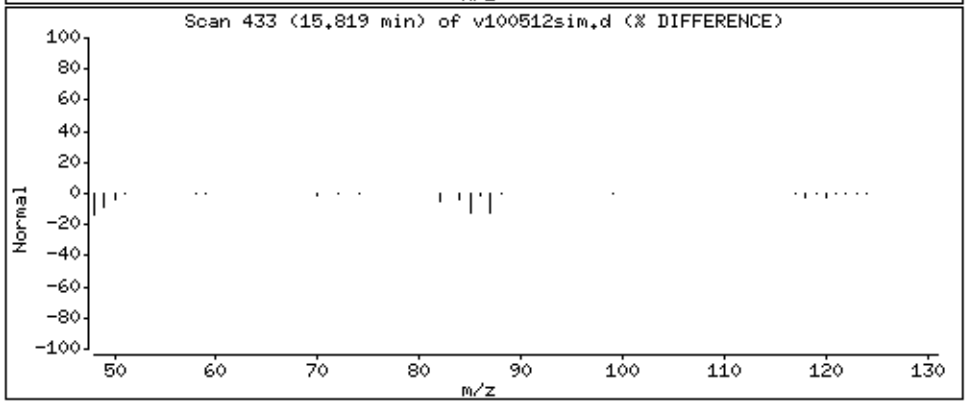












Data File: /chem/msdv.i/05Oct2015.b/v100512sim.d

Date : 05-OCT-2015 18:04

Client ID:

Instrument: msdv.i

Sample Info: 100mL #34356

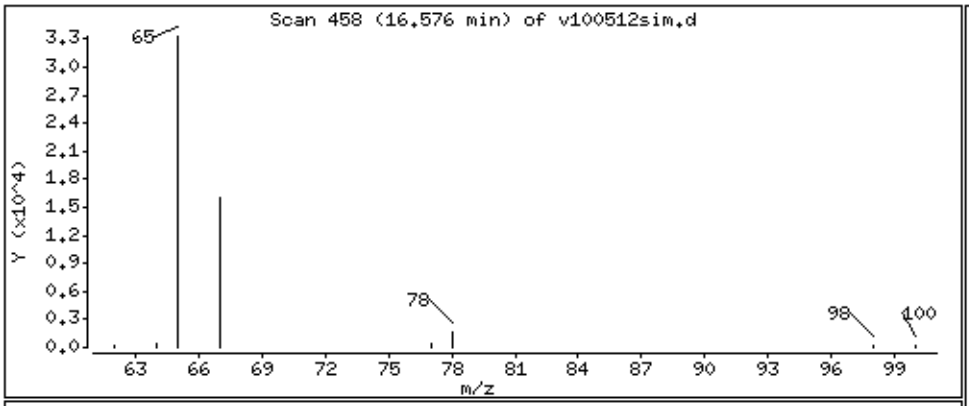
Operator: gh

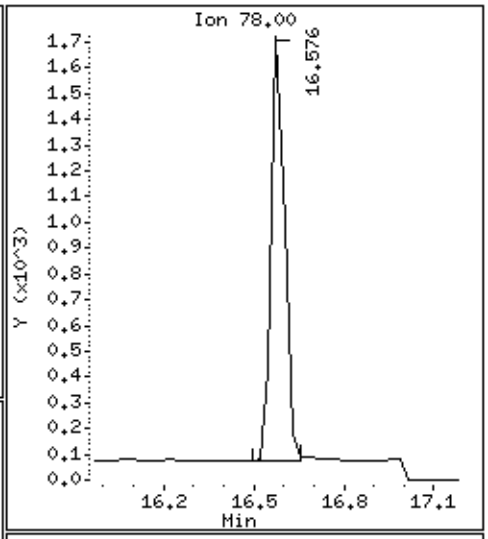
Column phase: RTx-624

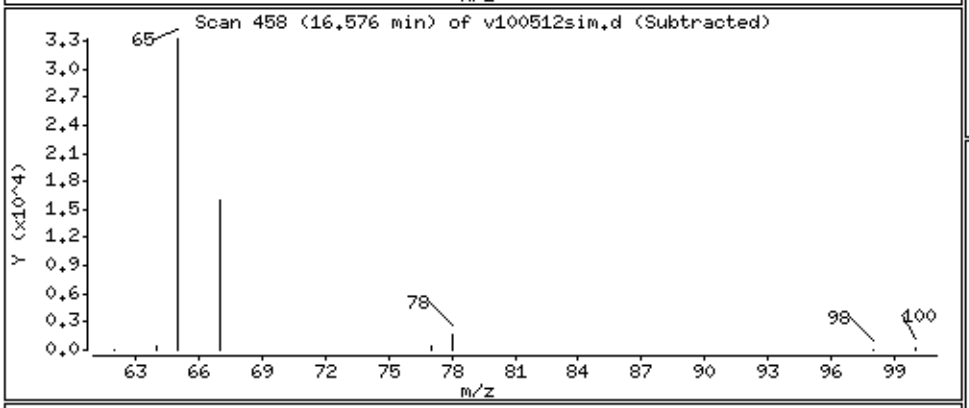
Column diameter: 0.32

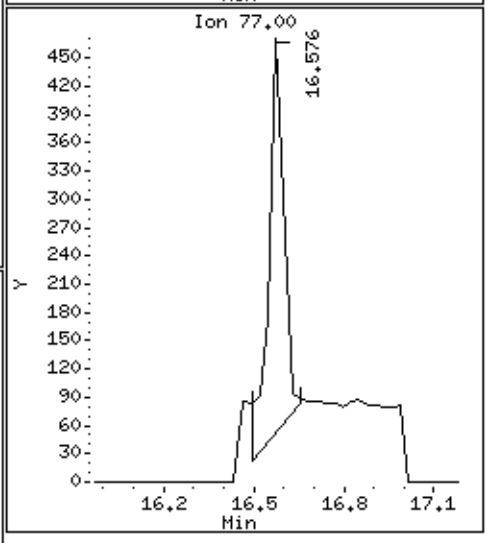
36 Benzene

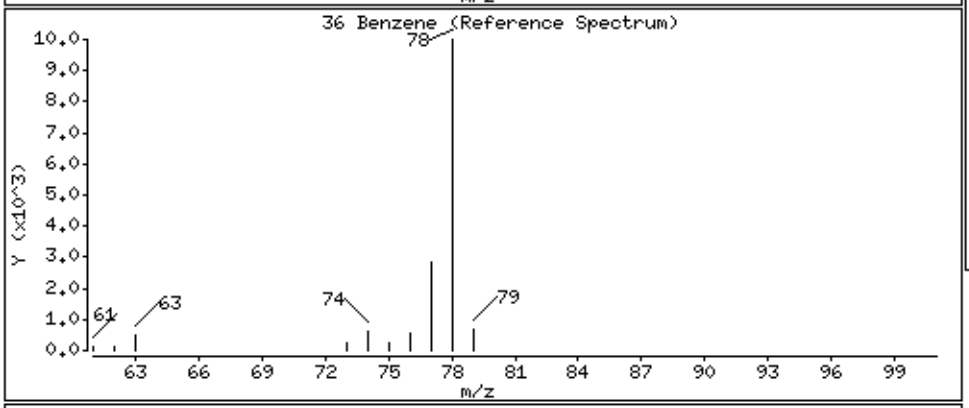
Concentration: 0.2547 PPBV

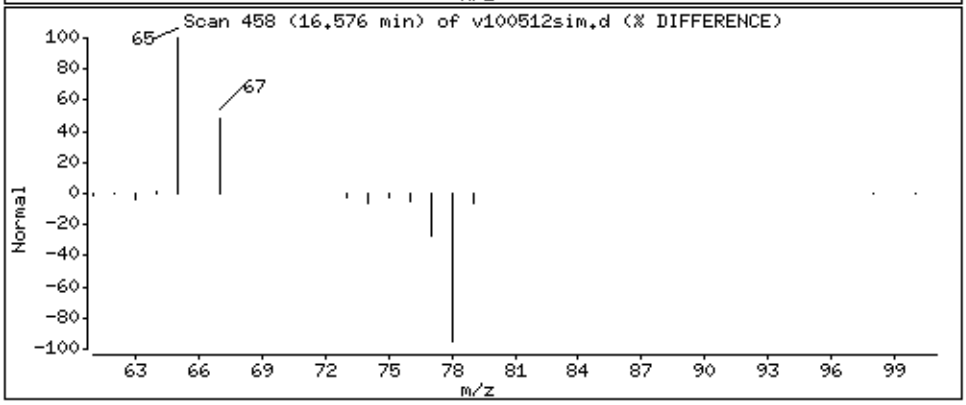












Data File: /chem/msdv.i/05Oct2015.b/v100512sim.d

Date : 05-OCT-2015 18:04

Client ID:

Instrument: msdv.i

Sample Info: 100mL #34356

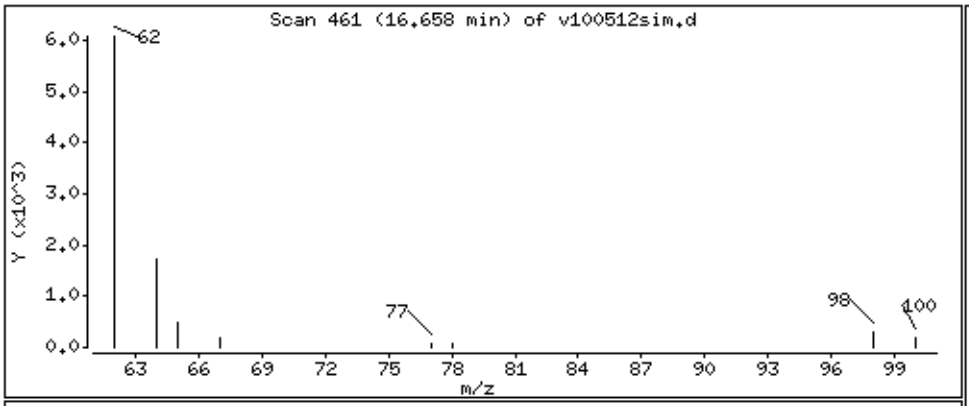
Operator: gh

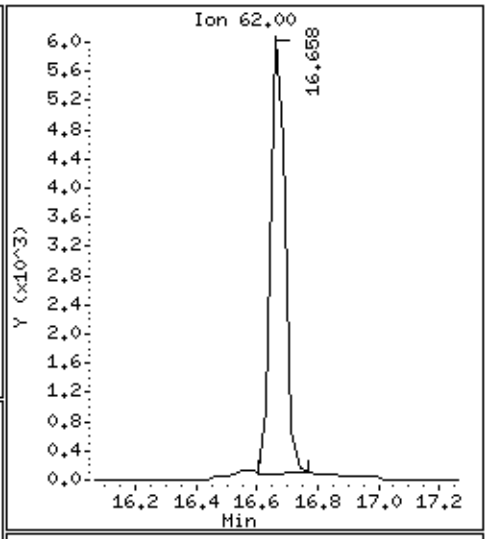
Column phase: RTx-624

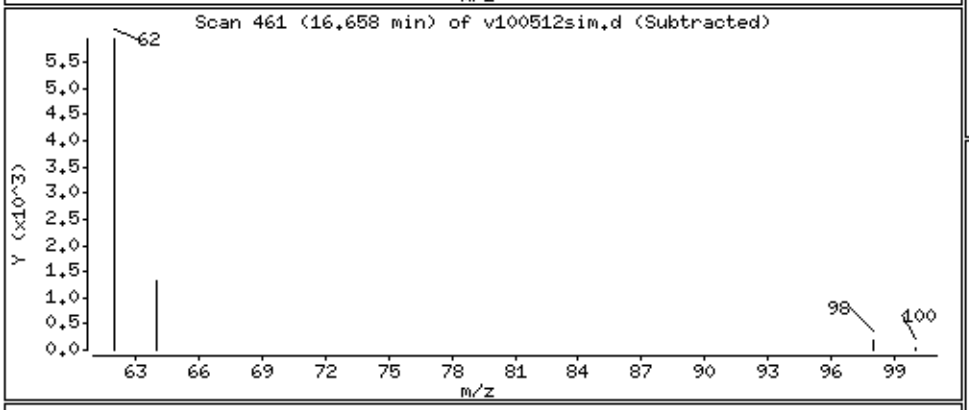
Column diameter: 0.32

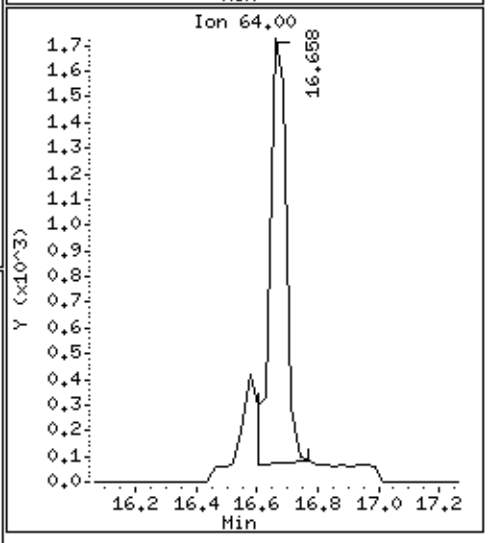
38 1,2-Dichloroethane

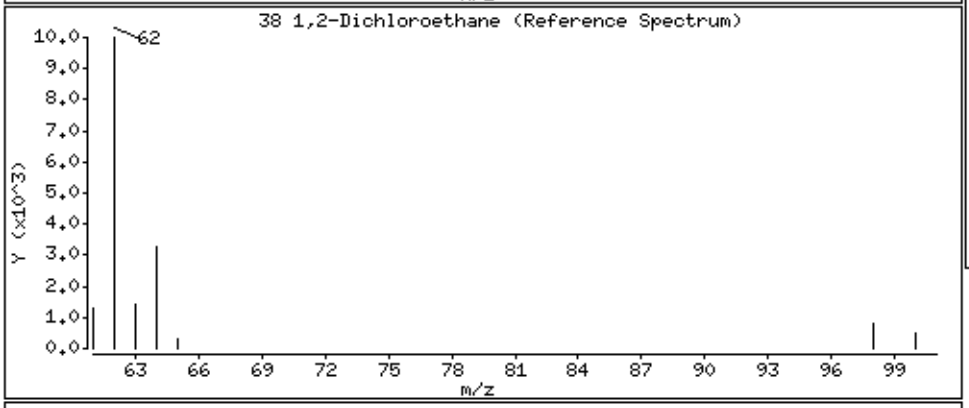
Concentration: 1.730 PPBV

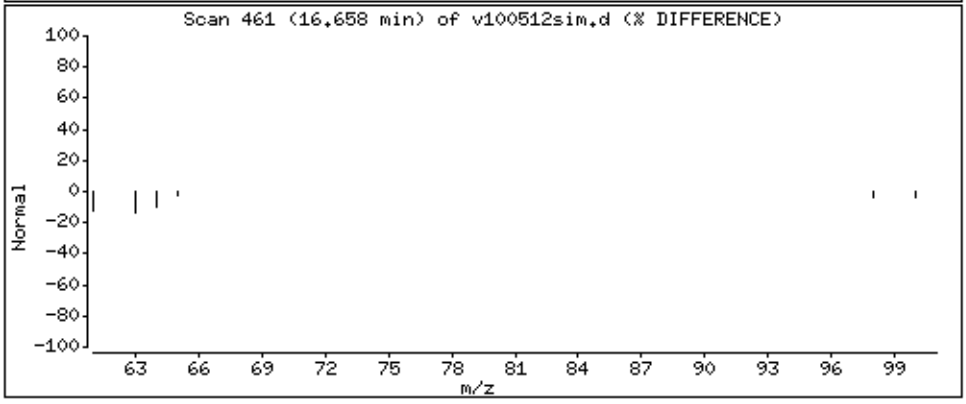












Data File: /chem/msdv.i/05Oct2015.b/v100512sim.d

Date : 05-OCT-2015 18:04

Client ID:

Instrument: msdv.i

Sample Info: 100mL #34356

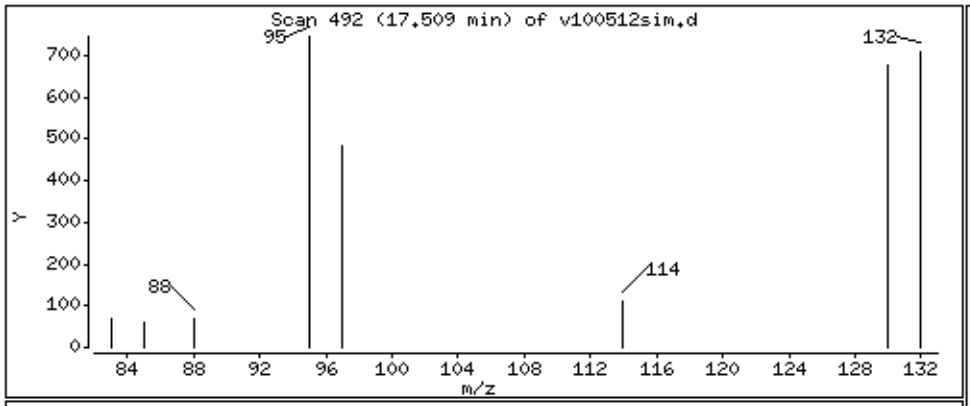
Operator: gh

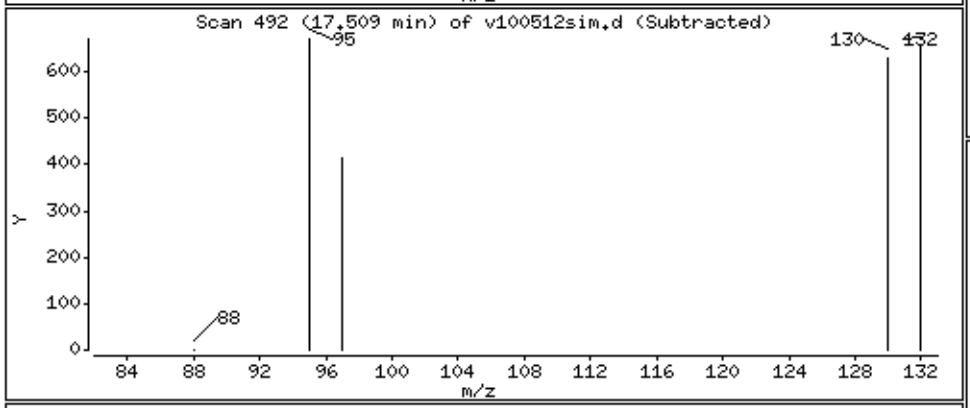
Column phase: RTx-624

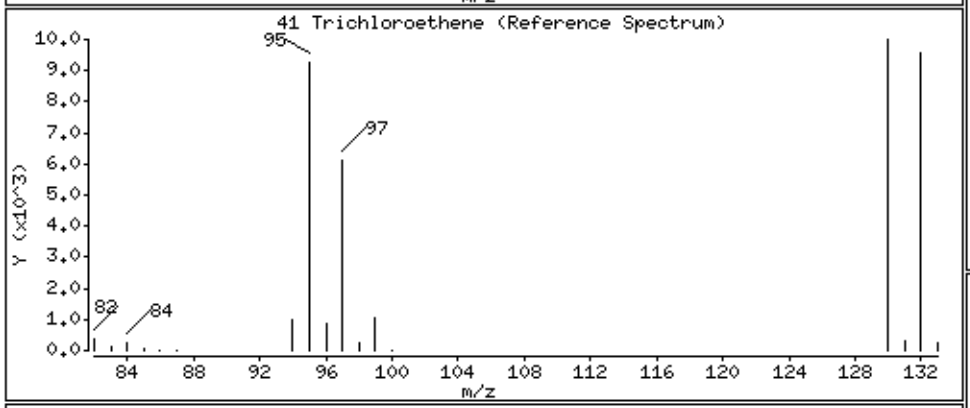
Column diameter: 0.32

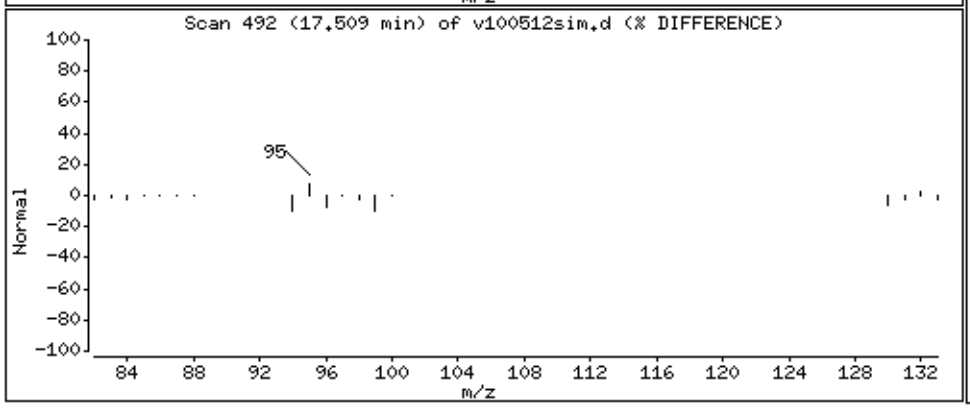
41 Trichloroethene

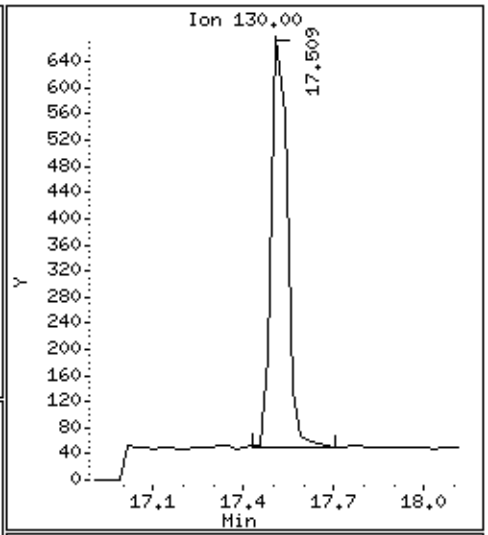
Concentration: 0.2005 PPBV

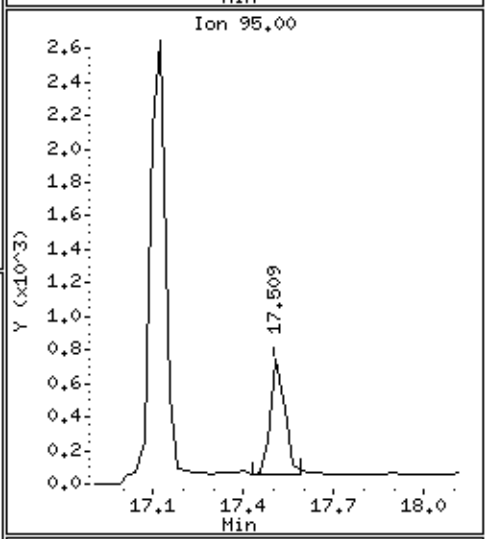


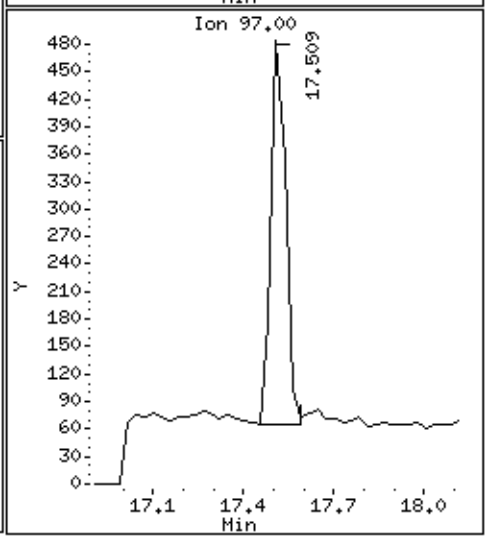












Data File: /chem/msdv.i/05Oct2015.b/v100512sim.d

Date : 05-OCT-2015 18:04

Client ID:

Instrument: msdv.i

Sample Info: 100mL #34356

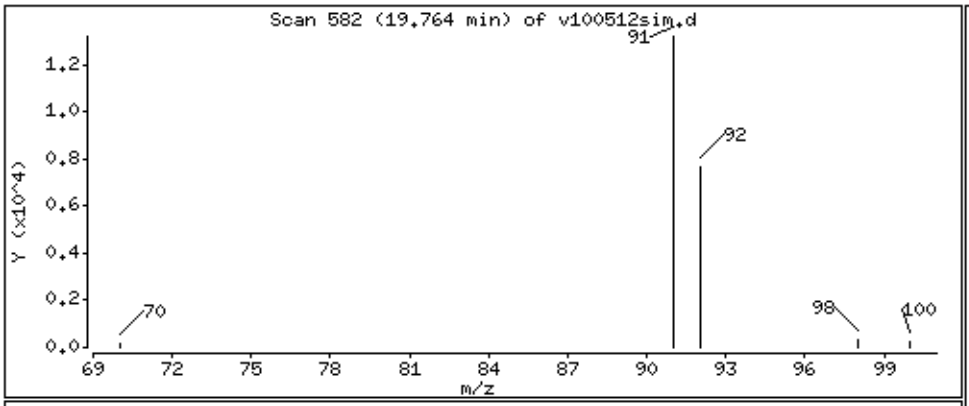
Operator: gh

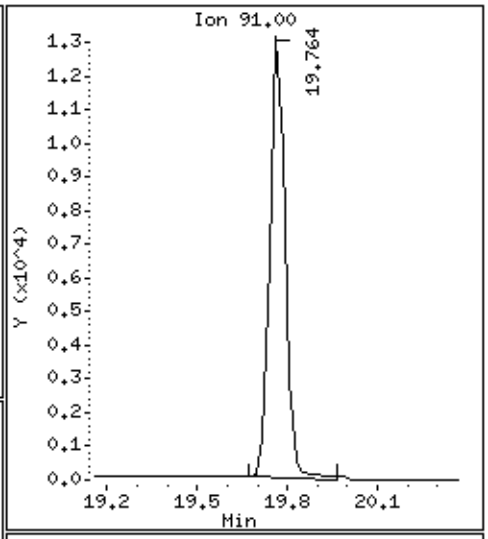
Column phase: RTx-624

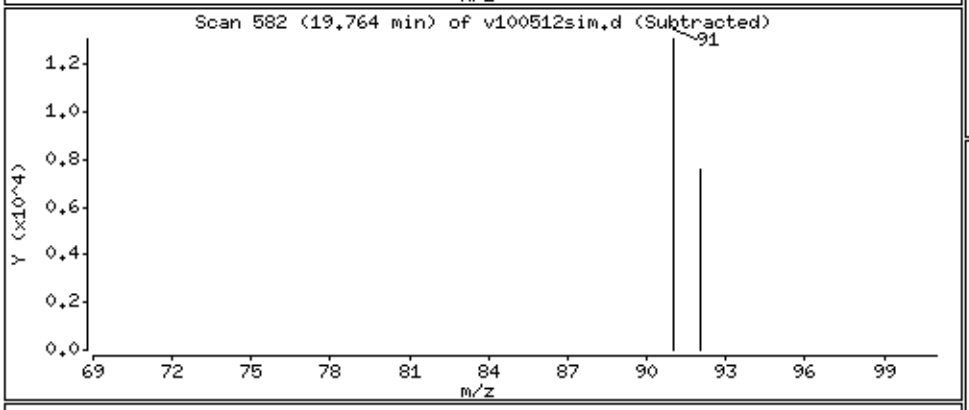
Column diameter: 0.32

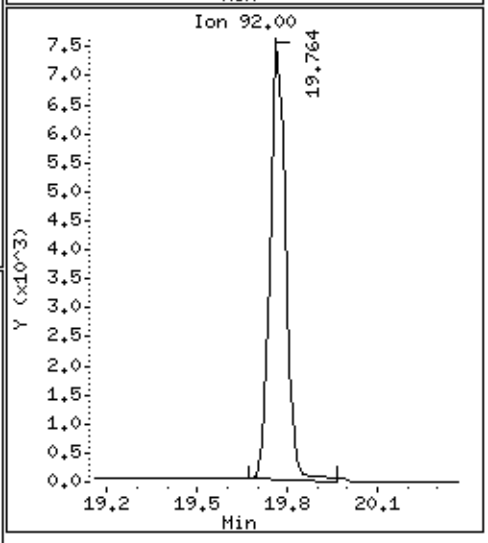
48 Toluene

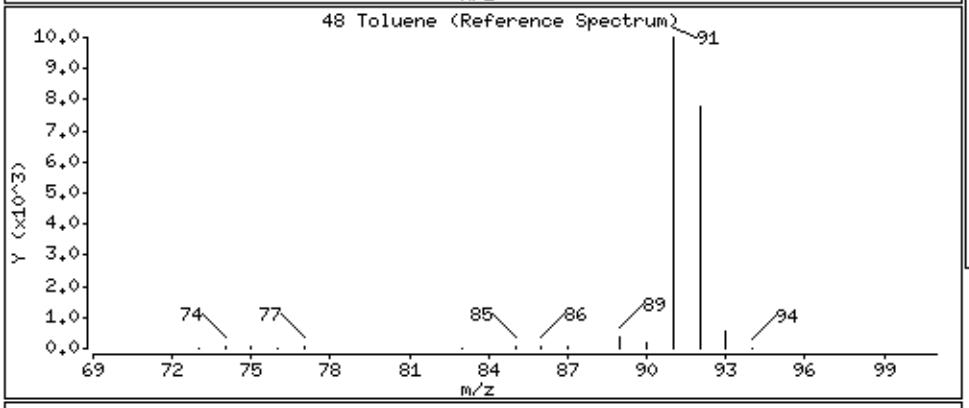
Concentration: 2.098 PPBV

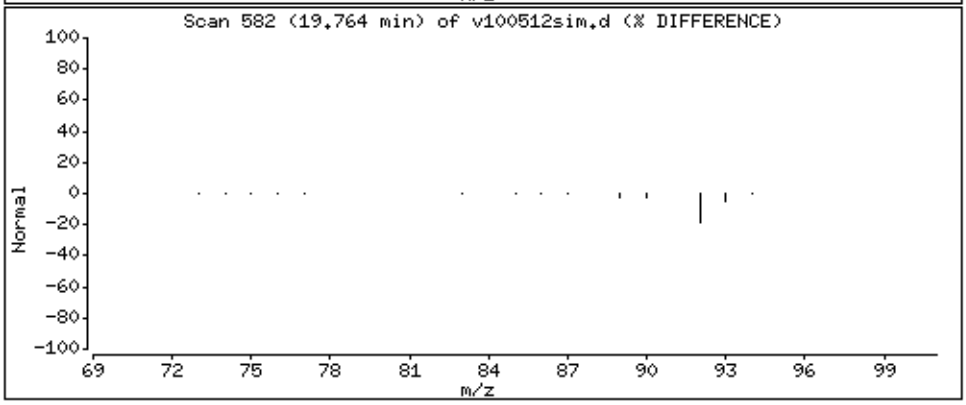












Data File: /chem/msdv.i/05Oct2015.b/v100512sim.d

Date : 05-OCT-2015 18:04

Client ID:

Instrument: msdv.i

Sample Info: 100mL #34356

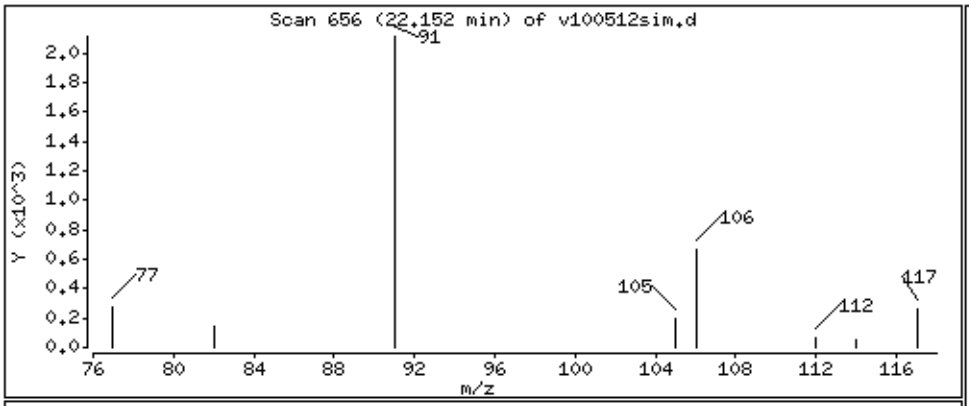
Operator: gh

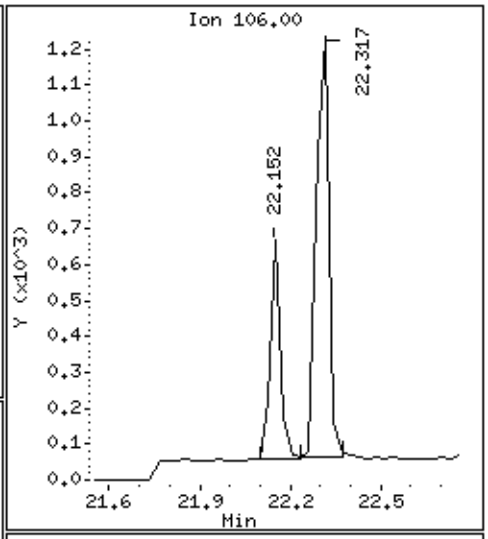
Column phase: RTx-624

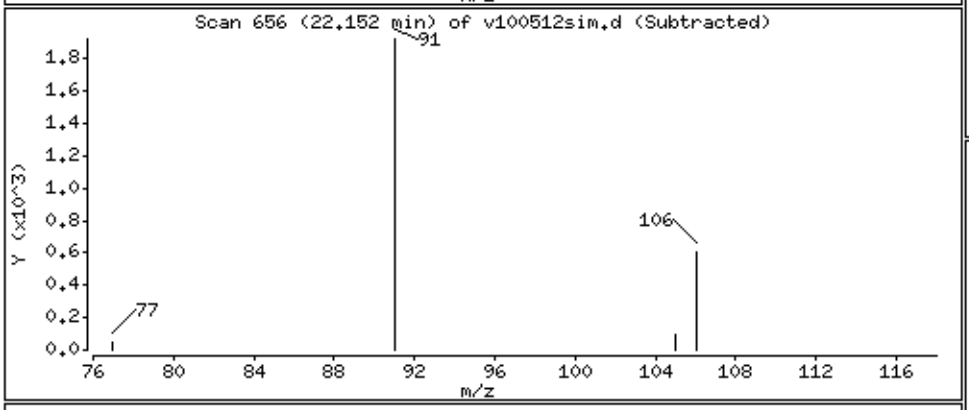
Column diameter: 0.32

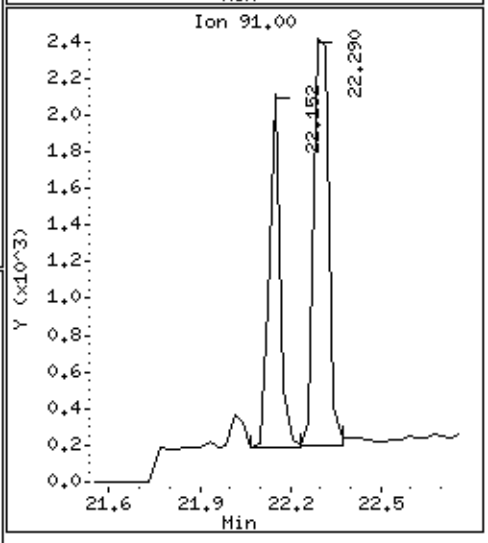
58 Ethyl Benzene

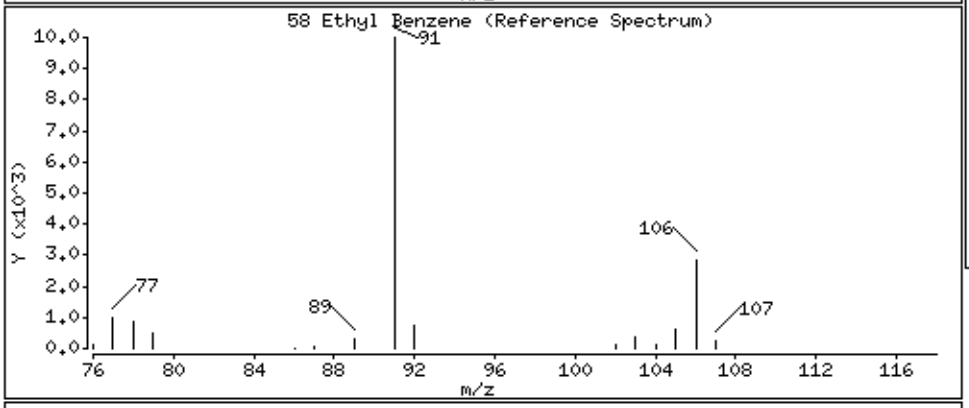
Concentration: 0.1953 PPBV

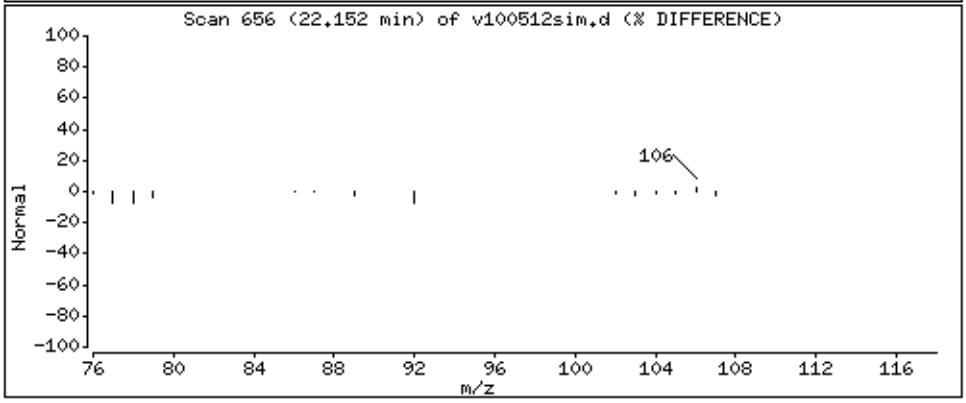












Data File: /chem/msdv.i/05Oct2015.b/v100512sim.d

Date : 05-OCT-2015 18:04

Client ID:

Instrument: msdv.i

Sample Info: 100mL #34356

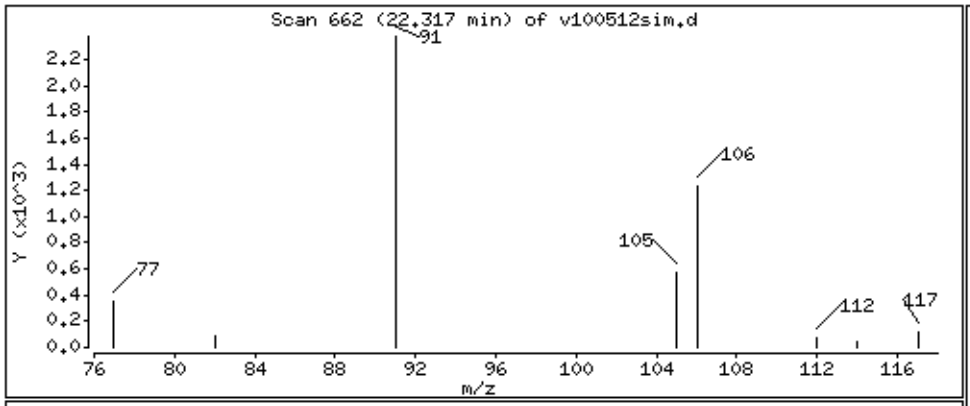
Operator: gh

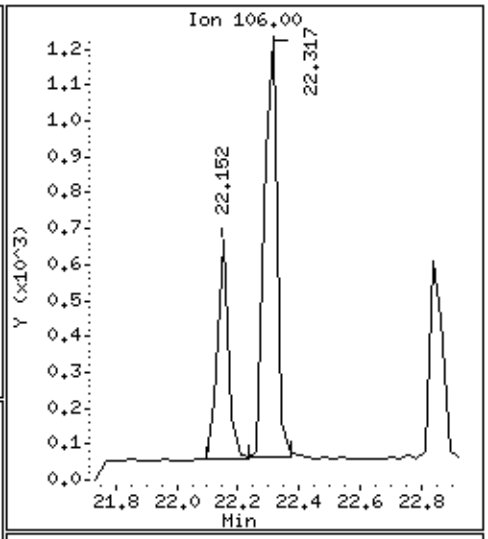
Column phase: RTx-624

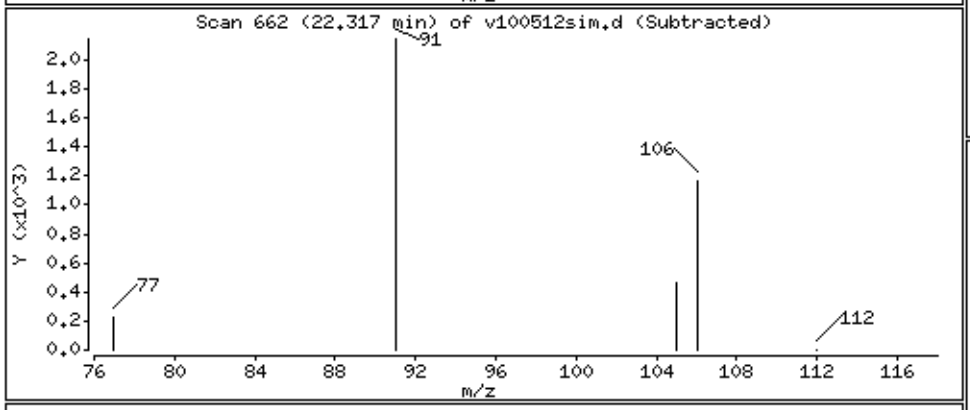
Column diameter: 0.32

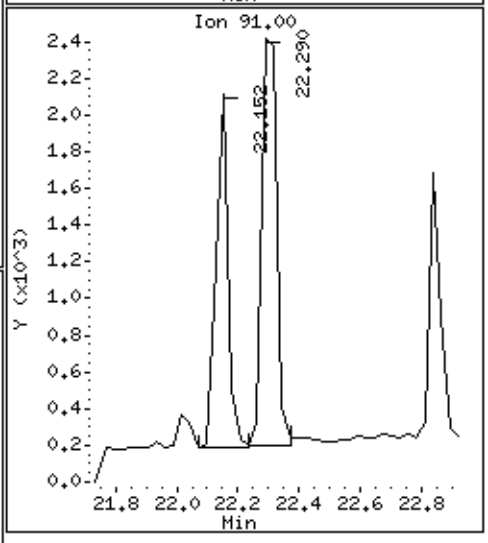
59 m,p-Xylene

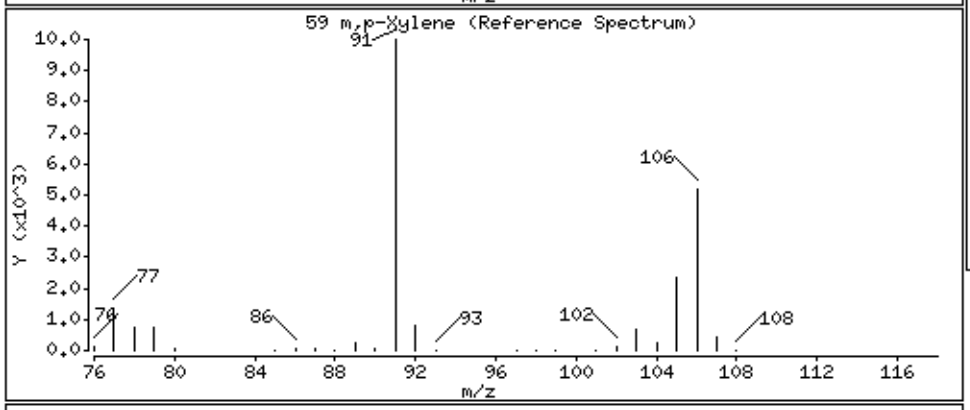
Concentration: 0.4329 PPBV

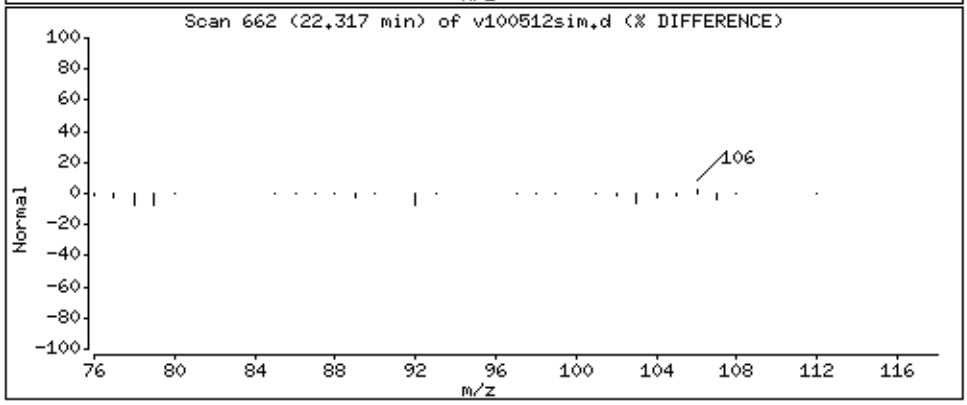












Data File: /chem/msdv.i/05Oct2015.b/v100512sim.d

Date : 05-OCT-2015 18:04

Client ID:

Instrument: msdv.i

Sample Info: 100mL #34356

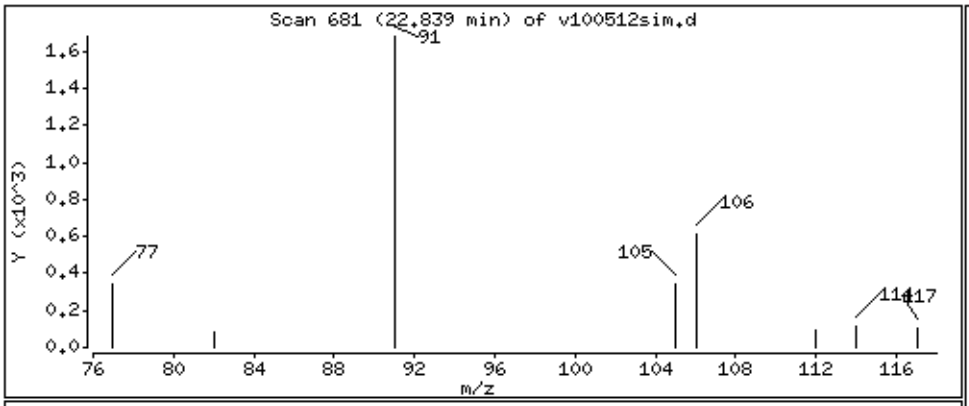
Operator: gh

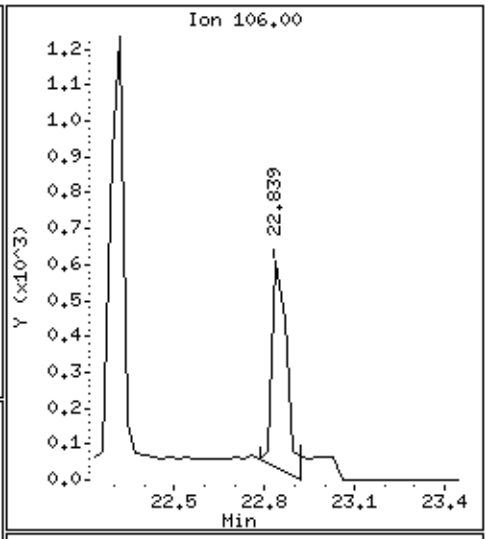
Column phase: RTx-624

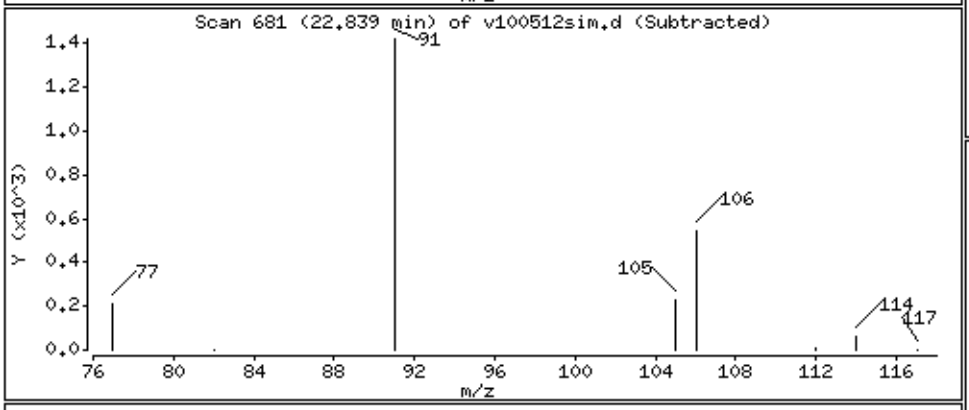
Column diameter: 0.32

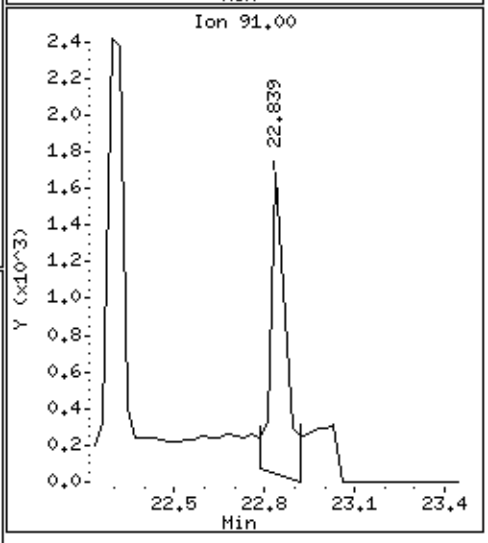
61 o-Xylene

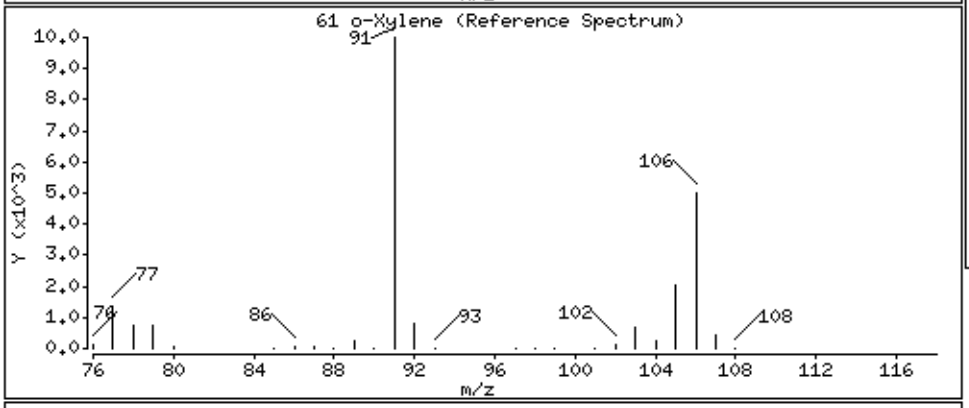
Concentration: 0.2503 PPBV

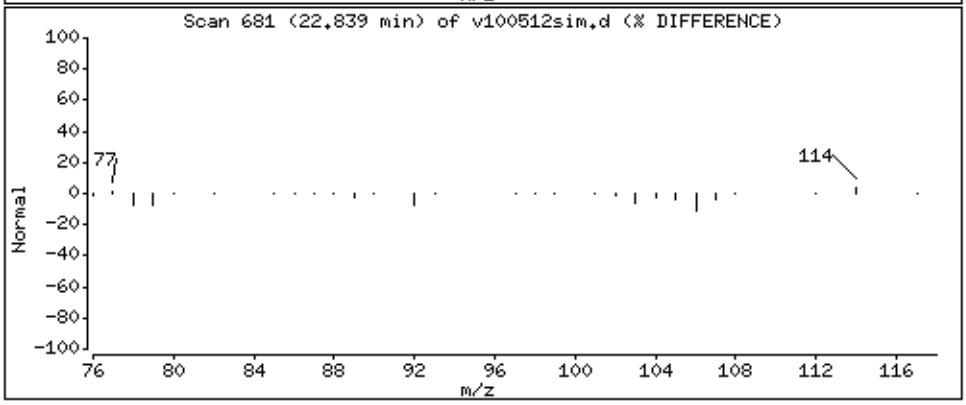












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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: 3-IA(092215)

Lab ID#: 1509512-07A

No Detections Were Found.

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Client Sample ID: 3-IA(092215)

Lab ID#: 1509512-07A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100513**	**Date of Collection: 9/23/15 3:33:00 PM**	
Dil. Factor:	**17.5**	**Date of Analysis: 10/5/15 06:49 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	3.5	Not Detected	12	Not Detected
1,2,4-Trimethylbenzene	1.8	Not Detected	8.6	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	98	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/05Oct2015.b/v100513.d
Lab Smp Id: 1509512-07A
Inj Date : 05-OCT-2015 18:49
Operator : gh Inst ID: msdv.i
Smp Info : 25mL #33980
Misc Info : 7.0"Hg ->5.0psi
Comment : Low Level GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m
Meth Date : 05-Oct-2015 11:52 mskidmor Quant Type: ISTD
Cal Date : 29-SEP-2015 21:58 Cal File: v092913.d
Als bottle: 1
Dil Factor: 17.50000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 54 Bromochloromethane						CAS #: 74-97-5	
15.743	15.743 (1.000)	130	71046	5.00000		80.00- 120.00	100.00
15.743	15.743 (1.000)	128	54353			48.04- 108.04	76.50
15.743	15.743 (1.000)	49	204558			284.77- 344.77	287.92
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.111	17.111 (1.000)	114	319904	5.00000		80.00- 120.00	100.00
17.111	17.111 (1.000)	88	43567			0.00- 44.16	13.62
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.029	22.029 (1.000)	117	290767	5.00000		80.00- 120.00	100.00
22.029	22.029 (1.000)	82	139654			18.70- 78.70	48.03
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.562	16.562 (1.052)	65	122537	4.89058	4.890	80.00- 120.00	100.00
16.562	16.562 (1.052)	67	53126			19.41- 79.41	43.35
$ 80 Toluene-d8						CAS #: 2037-26-5	
19.638	19.615 (1.148)	98	302955	5.02385	5.024	80.00- 120.00	100.00
19.638	19.615 (1.148)	70	29563			0.00- 40.74	9.76

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.638	19.615 (1.148)	100	191092			34.93- 94.93	63.08
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.535	23.535 (1.068)	174	145638	4.87529	4.875	80.00- 120.00	100.00
23.535	23.535 (1.068)	95	172772			94.06- 154.06	118.63
23.535	23.535 (1.068)	176	142526			68.95- 128.95	97.86

Report Date: 12-Oct-2015 12:22

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100513.d
Lab Smp Id: 1509512-07A
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: 7.0"Hg ->5.0psi

Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	78102	46861	109343	71046	-9.03
71 1,4-Difluorobenze	340477	204286	476668	319904	-6.04
92 Chlorobenzene-d5	294231	176539	411923	290767	-1.18

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.74	15.41	16.07	15.74	0.00
71 1,4-Difluorobenze	17.11	16.78	17.44	17.11	0.00
92 Chlorobenzene-d5	22.03	21.70	22.36	22.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Oct-2015 12:22

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509512-07A
Level: LOW Operator: gh
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: 7.0"Hg ->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	4.890	97.81	70-130
$ 80 Toluene-d8	5.000	5.024	100.48	70-130
$ 106 Bromofluorobenzene	5.000	4.875	97.51	70-130

Data File: /chem/msdv.i/05Oct2015.b/v100513.d

Date : 05-OCT-2015 18:49

Client ID:

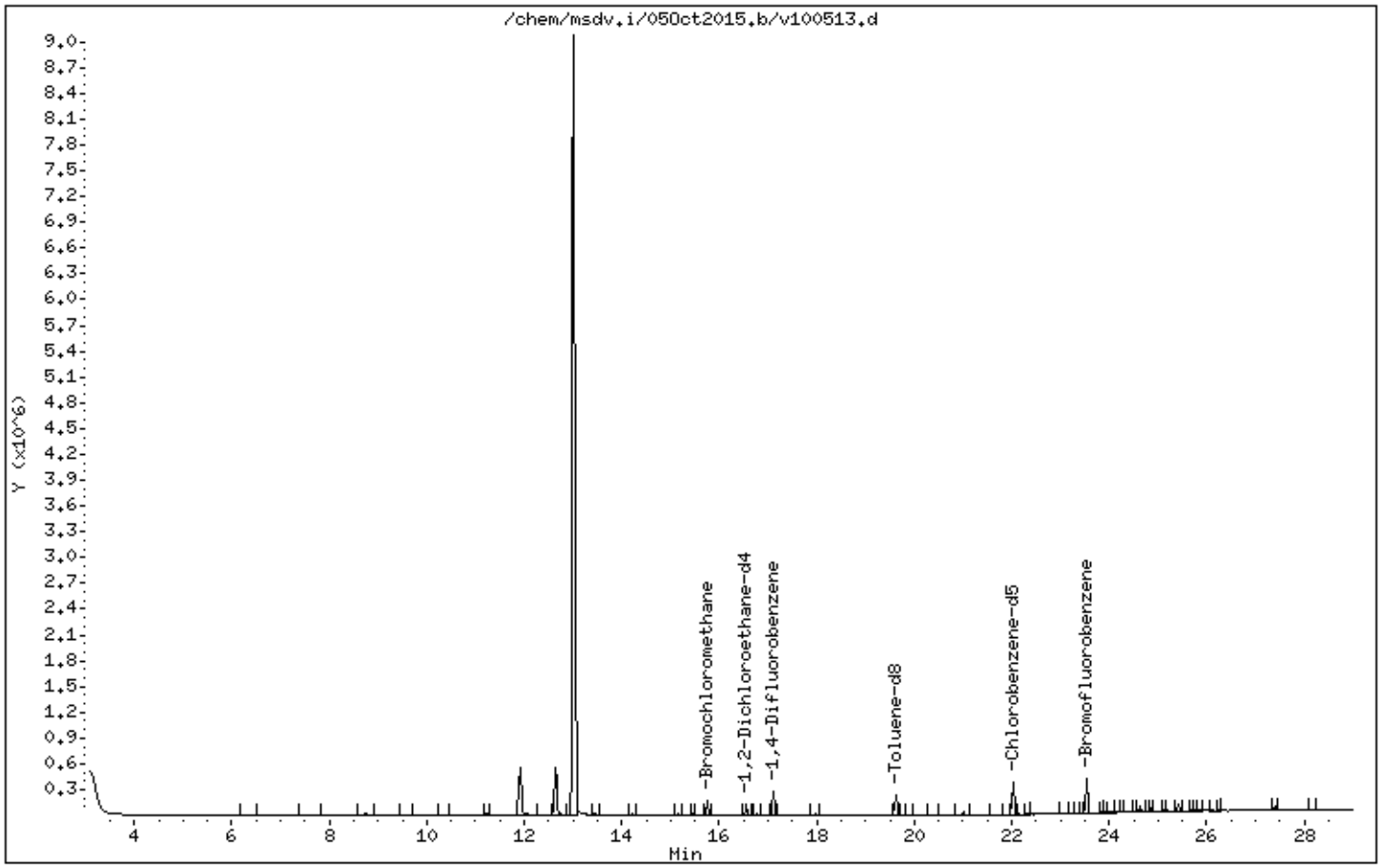
Instrument: msdv.i

Sample Info: 25mL #33980

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: 3-IA(092215)

Lab ID#: 1509512-07B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	0.35	0.86	1.7	4.2
Toluene	0.35	1.5	1.3	5.6

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Client Sample ID: 3-IA(092215)

Lab ID#: 1509512-07B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100513sim**	**Date of Collection: 9/23/15 3:33:00 PM**	
Dil. Factor:	**17.5**	**Date of Analysis: 10/5/15 06:49 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.18	Not Detected	0.45	Not Detected
1,1-Dichloroethene	0.18	Not Detected	0.69	Not Detected
trans-1,2-Dichloroethene	1.8	Not Detected	6.9	Not Detected
cis-1,2-Dichloroethene	0.35	Not Detected	1.4	Not Detected
Chloroform	0.35	0.86	1.7	4.2
Benzene	0.88	Not Detected	2.8	Not Detected
1,2-Dichloroethane	0.35	Not Detected	1.4	Not Detected
Trichloroethene	0.35	Not Detected	1.9	Not Detected
Toluene	0.35	1.5	1.3	5.6
1,1,2-Trichloroethane	0.35	Not Detected	1.9	Not Detected
Tetrachloroethene	0.35	Not Detected	2.4	Not Detected
Ethyl Benzene	0.35	Not Detected	1.5	Not Detected
m,p-Xylene	0.70	Not Detected	3.0	Not Detected
o-Xylene	0.35	Not Detected	1.5	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/05Oct2015.b/v100513sim.d
Lab Smp Id: 1509512-07B
Inj Date : 05-OCT-2015 18:49
Operator : gh Inst ID: msdv.i
Smp Info : 25mL #33980
Misc Info : 7.0"Hg ->5.0psi
Comment : SIM GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 05-Oct-2015 12:58 mskidmor Quant Type: ISTD
Cal Date : 29-SEP-2015 14:34 Cal File: v092903sim.d
Als bottle: 1
Dil Factor: 17.50000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
RT	EXP RT (REL RT)	MASS	RESPONSE				
* 31 Bromochloromethane					CAS #: 74-97-5		
15.757	15.757 (1.000)	130	77278	5.00000		80.00- 120.00	100.00
15.757	15.757 (1.000)	128	59884			48.13- 108.13	77.49
15.757	15.757 (1.000)	49	216518			238.09- 298.09	280.18
* 40 1,4-Difluorobenzene					CAS #: 540-36-3		
17.125	17.125 (1.000)	114	322977	5.00000		80.00- 120.00	100.00
17.125	17.125 (1.000)	88	46097			0.00- 44.50	14.27
* 56 Chlorobenzene-d5					CAS #: 3114-55-4		
22.042	22.042 (1.000)	117	280308	5.00000		80.00- 120.00	100.00
22.015	22.042 (1.000)	82	129326			16.61- 76.61	46.14
$ 37 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.576	16.548 (1.052)	65	128548	5.04029	5.040	80.00- 120.00	100.00
16.576	16.548 (1.052)	67	56903			19.91- 79.91	44.27
$ 47 Toluene-d8					CAS #: 2037-26-5		
19.629	19.629 (1.146)	98	261663	5.01417	5.014	80.00- 120.00	100.00
19.629	19.629 (1.146)	70	29203			0.00- 41.04	11.16

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.629	19.629 (1.146)	100	164736			32.99- 92.99	62.96
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	154795	4.95704	4.957	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	174013			84.02- 144.02	112.42
23.548	23.548 (1.068)	176	150742			67.56- 127.56	97.38
32 Chloroform					CAS #: 67-66-3		
15.819	15.819 (1.004)	83	2775	0.04930	0.8628	80.00- 120.00	100.00
15.819	15.819 (1.004)	85	1910			34.82- 94.82	68.82
48 Toluene					CAS #: 108-88-3		
19.763	19.764 (1.154)	91	8372	0.08552	1.496	80.00- 120.00	100.00
19.763	19.764 (1.154)	92	4364			28.99- 88.99	52.13

Report Date: 12-Oct-2015 12:41

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100513sim.d
Lab Smp Id: 1509512-07B
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Level: LOW
Sample Type: AIR
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 7.0"Hg ->5.0psi

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	81342	48805	113879	77278	-5.00
40 1,4-Difluorobenze	339188	203513	474863	322977	-4.78
56 Chlorobenzene-d5	289088	173453	404723	280308	-3.04

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Oct-2015 12:41

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509512-07B
Level: LOW Operator: gh
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 7.0"Hg ->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 37 1,2-Dichloroethane	5.000	5.040	100.81	70-130
$ 47 Toluene-d8	5.000	5.014	100.28	70-130
$ 66 Bromofluorobenzene	5.000	4.957	99.14	70-130

Data File: /chem/msdv.i/05Oct2015.b/v100513sim.d

Date : 05-OCT-2015 18:49

Client ID:

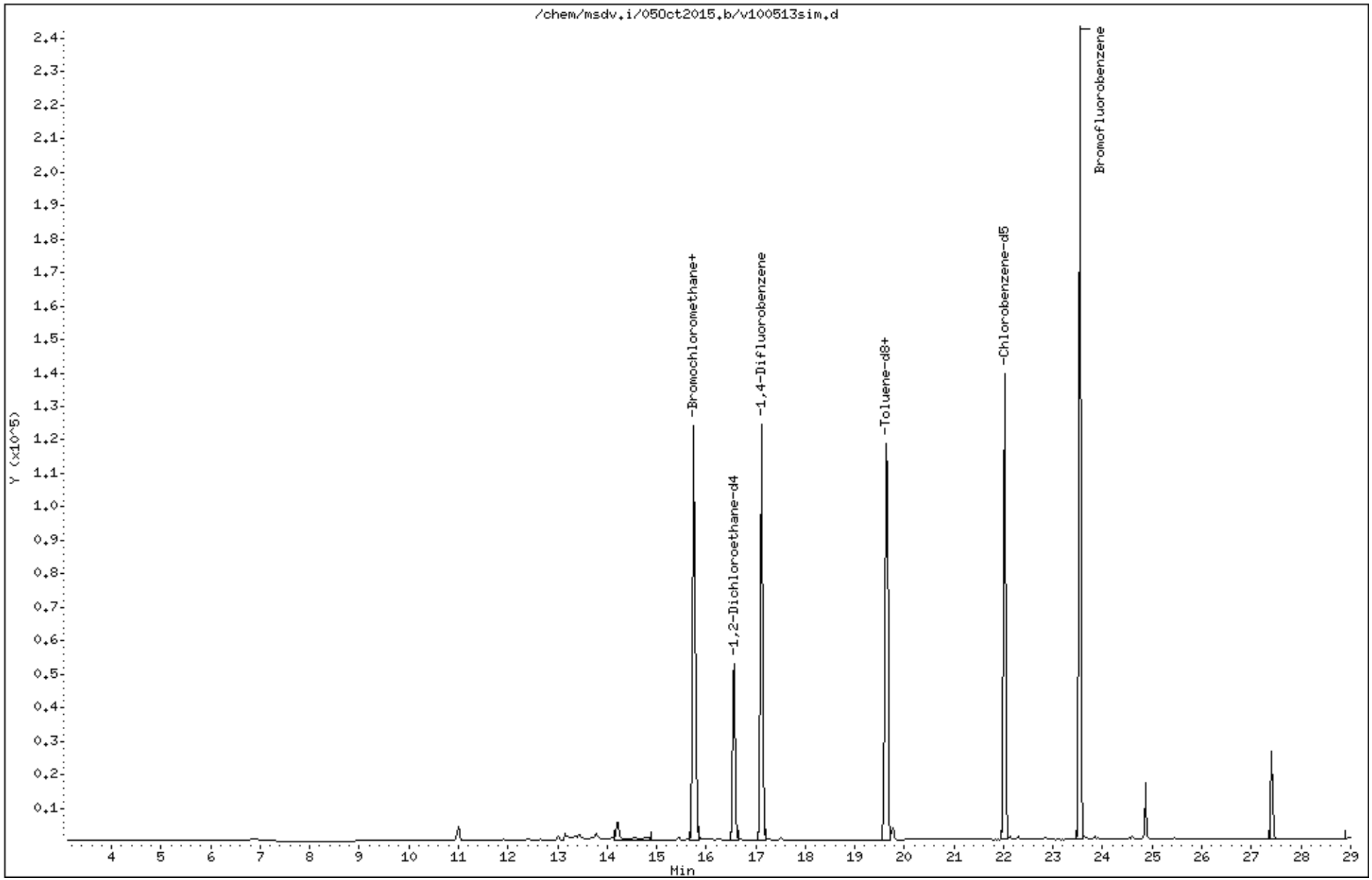
Instrument: msdv.i

Sample Info: 25mL #33980

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/05Oct2015.b/v100513sim.d

Date : 05-OCT-2015 18:49

Client ID:

Instrument: msdv.i

Sample Info: 25mL #33980

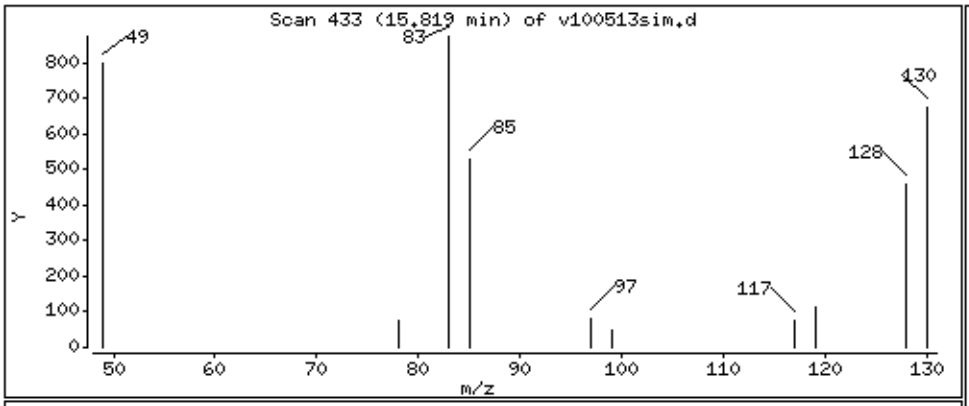
Operator: gh

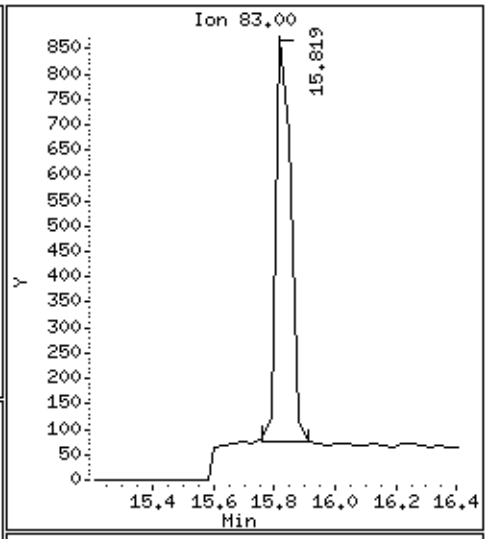
Column phase: RTx-624

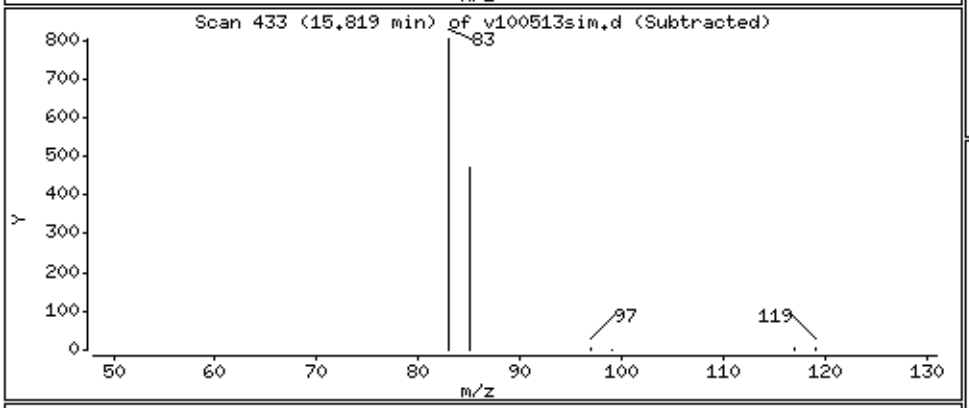
Column diameter: 0.32

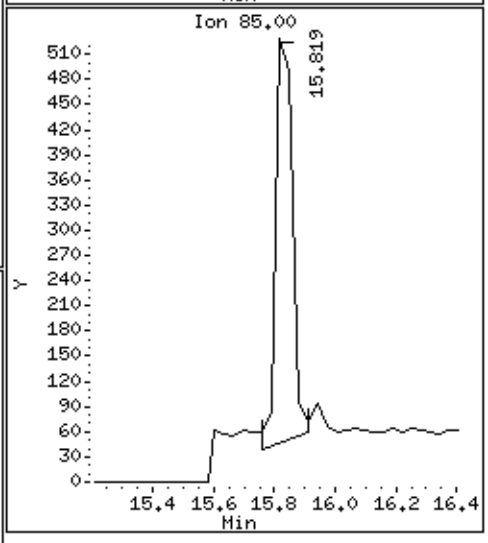
32 Chloroform

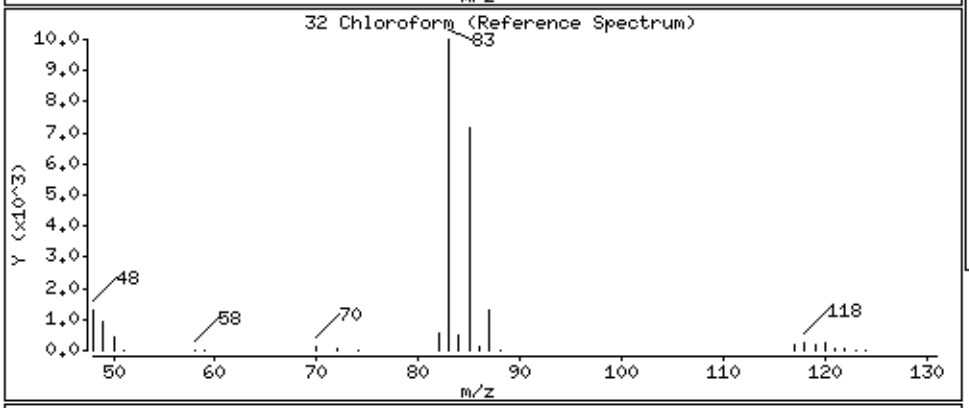
Concentration: 0.8628 PPBV

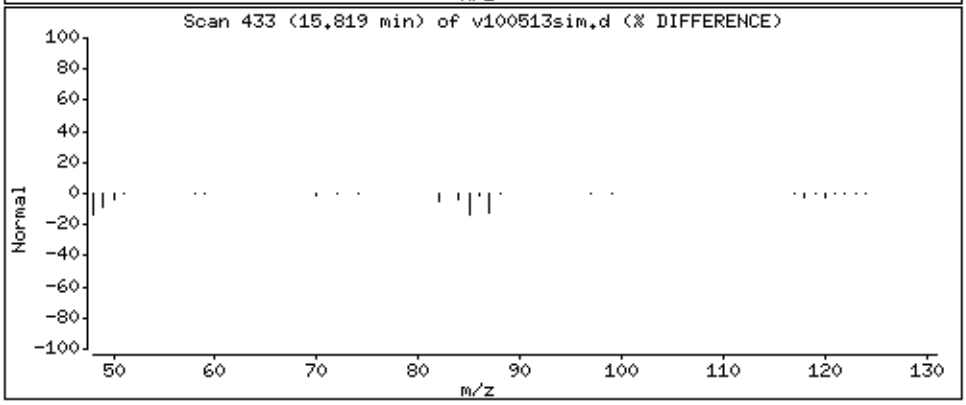












Data File: /chem/msdv.i/05Oct2015.b/v100513sim.d

Date : 05-OCT-2015 18:49

Client ID:

Instrument: msdv.i

Sample Info: 25mL #33980

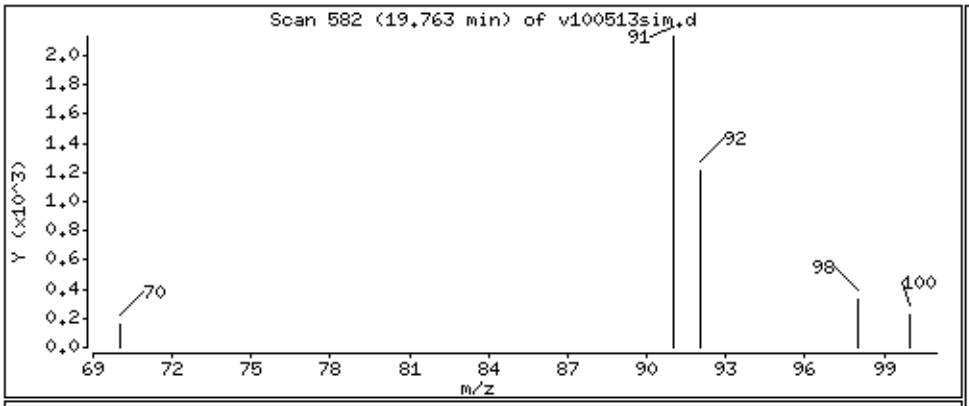
Operator: gh

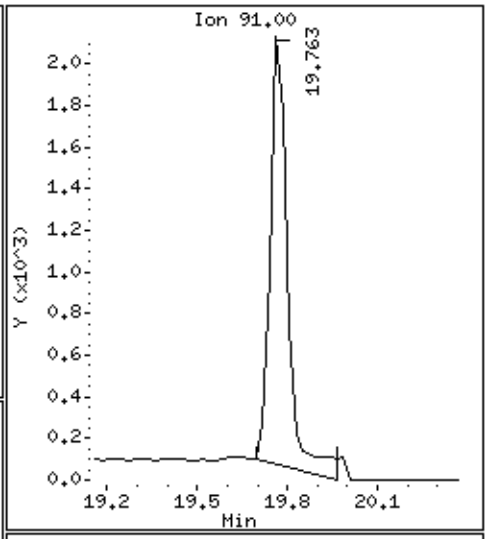
Column phase: RTx-624

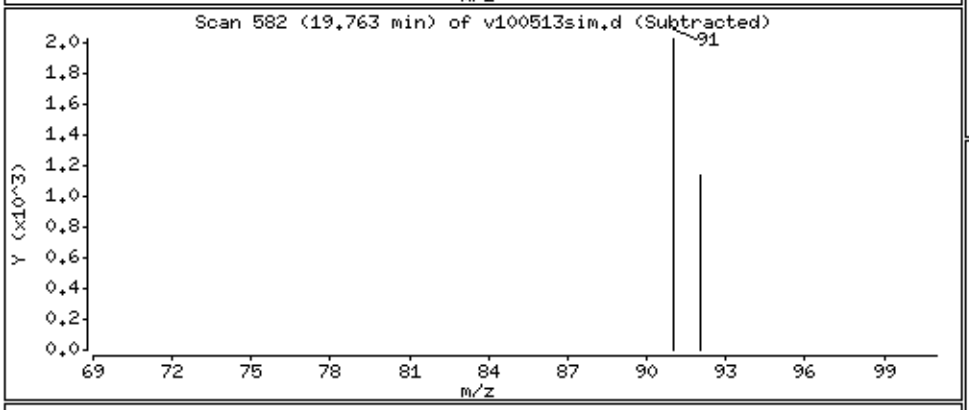
Column diameter: 0.32

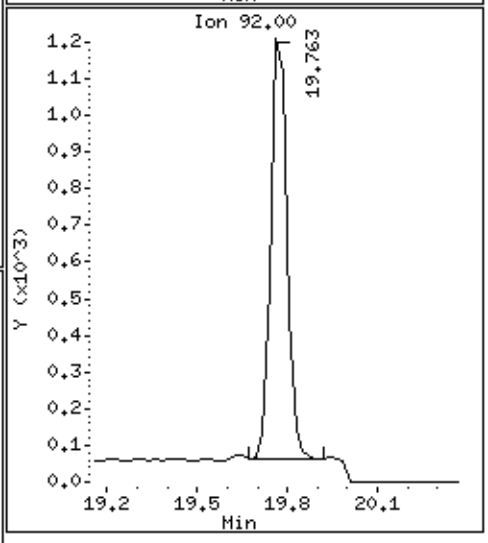
48 Toluene

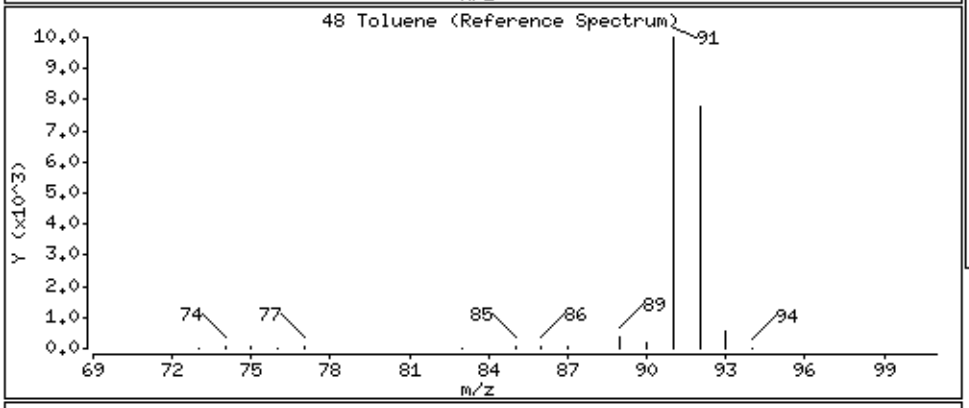
Concentration: 1.496 PPBV

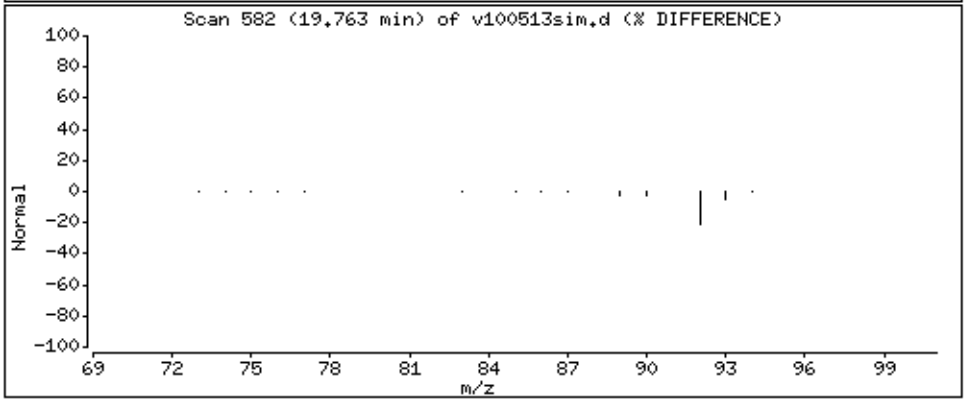












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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: 4-IA(092215)

Lab ID#: 1509512-08A

No Detections Were Found.

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Client Sample ID: 4-IA(092215)

Lab ID#: 1509512-08A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100514**	**Date of Collection: 9/23/15 4:47:00 PM**	
Dil. Factor:	**1.79**	**Date of Analysis: 10/5/15 07:52 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.36	Not Detected	1.2	Not Detected
1,2,4-Trimethylbenzene	0.18	Not Detected	0.88	Not Detected

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	96	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/05Oct2015.b/v100514.d
Lab Smp Id: 1509512-08A
Inj Date : 05-OCT-2015 19:52
Operator : gh Inst ID: msdv.i
Smp Info : 250mL #33877
Misc Info : 7.5"Hg ->5.0psi
Comment : Low Level GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m
Meth Date : 05-Oct-2015 11:52 mskidmor Quant Type: ISTD
Cal Date : 29-SEP-2015 21:58 Cal File: v092913.d
Als bottle: 1
Dil Factor: 1.79000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 54 Bromochloromethane						CAS #: 74-97-5	
15.743	15.743 (1.000)	130	72446	5.00000		80.00- 120.00	100.00
15.743	15.743 (1.000)	128	52036			48.04- 108.04	71.83
15.743	15.743 (1.000)	49	202707			284.77- 344.77	279.80
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.111	17.111 (1.000)	114	323339	5.00000		80.00- 120.00	100.00
17.111	17.111 (1.000)	88	44467			0.00- 44.16	13.75
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.029	22.029 (1.000)	117	282119	5.00000		80.00- 120.00	100.00
22.029	22.029 (1.000)	82	138143			18.70- 78.70	48.97
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.562	16.562 (1.052)	65	122853	4.80845	4.808	80.00- 120.00	100.00
16.562	16.562 (1.052)	67	52881			19.41- 79.41	43.04
$ 80 Toluene-d8						CAS #: 2037-26-5	
19.638	19.615 (1.148)	98	291812	4.78767	4.788	80.00- 120.00	100.00
19.615	19.615 (1.146)	70	33037			0.00- 40.74	11.32

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.638	19.615 (1.148)	100	197423			34.93- 94.93	67.65
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.534	23.535 (1.068)	174	139516	4.81351	4.814	80.00- 120.00	100.00
23.534	23.535 (1.068)	95	173251			94.06- 154.06	124.18
23.534	23.535 (1.068)	176	134490			68.95- 128.95	96.40

Report Date: 12-Oct-2015 12:24

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100514.d
Lab Smp Id: 1509512-08A
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: 7.5"Hg ->5.0psi

Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	78102	46861	109343	72446	-7.24
71 1,4-Difluorobenze	340477	204286	476668	323339	-5.03
92 Chlorobenzene-d5	294231	176539	411923	282119	-4.12

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.74	15.41	16.07	15.74	0.00
71 1,4-Difluorobenze	17.11	16.78	17.44	17.11	0.00
92 Chlorobenzene-d5	22.03	21.70	22.36	22.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Oct-2015 12:24

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509512-08A
Level: LOW Operator: gh
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: 7.5"Hg ->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	4.808	96.17	70-130
$ 80 Toluene-d8	5.000	4.788	95.75	70-130
$ 106 Bromofluorobenzene	5.000	4.814	96.27	70-130

Data File: /chem/msdv.i/05Oct2015.b/v100514.d

Date : 05-OCT-2015 19:52

Client ID:

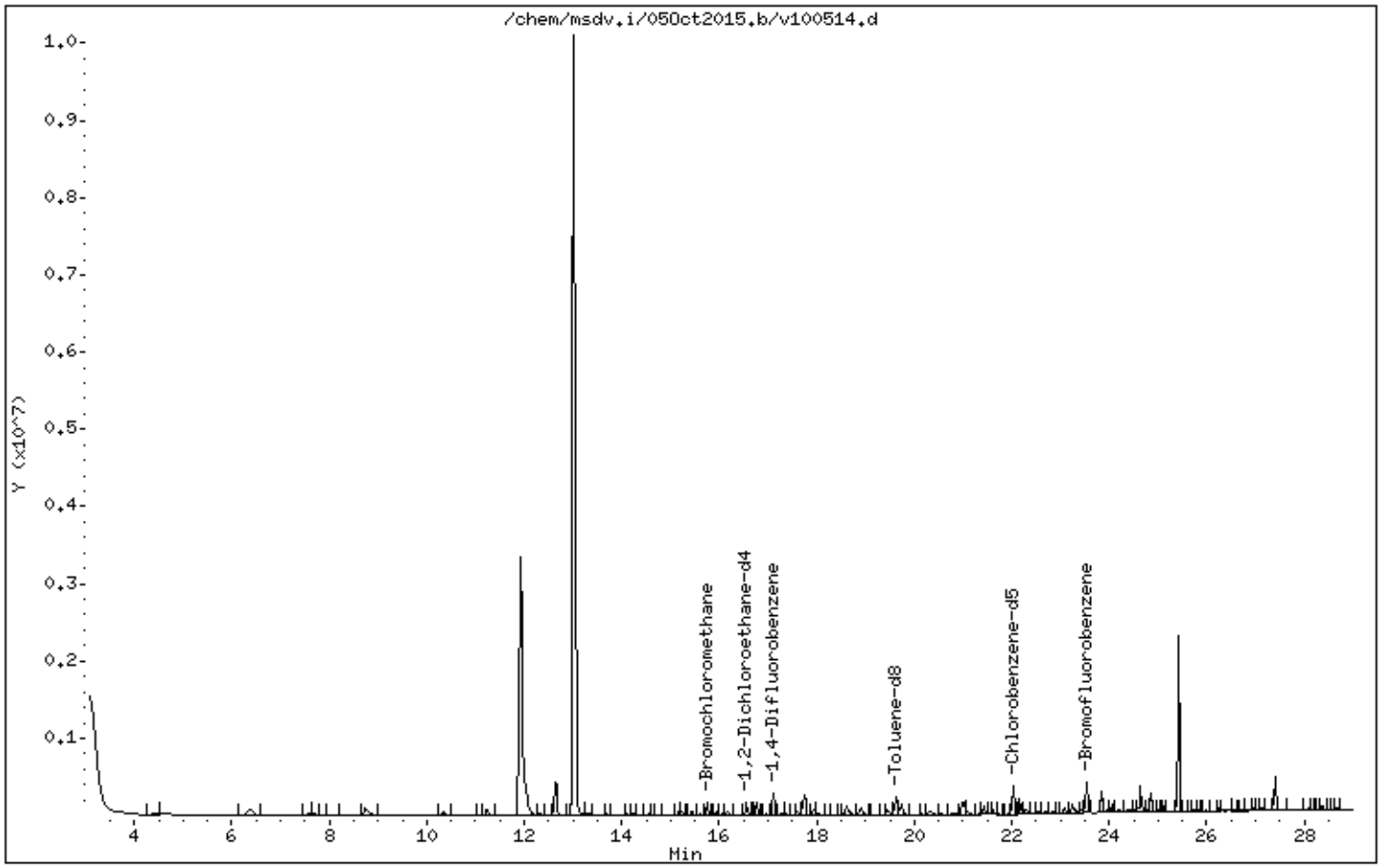
Instrument: msdv.i

Sample Info: 250mL #33877

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

Client Sample ID: 4-IA(092215)

Lab ID#: 1509512-08B

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	0.031	0.046	0.079
cis-1,2-Dichloroethene	0.036	0.14	0.14	0.58
Chloroform	0.036	0.19	0.17	0.94
Benzene	0.090	0.58	0.28	1.8
1,2-Dichloroethane	0.036	0.30	0.14	1.2
Trichloroethene	0.036	0.18	0.19	0.99
Toluene	0.036	0.72	0.13	2.7
Ethyl Benzene	0.036	0.10	0.16	0.43
m,p-Xylene	0.072	0.26	0.31	1.1
o-Xylene	0.036	0.13	0.16	0.56

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Client Sample ID: 4-IA(092215)

Lab ID#: 1509512-08B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100514sim**	**Date of Collection: 9/23/15 4:47:00 PM**	
Dil. Factor:	**1.79**	**Date of Analysis: 10/5/15 07:52 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.018	0.031	0.046	0.079
1,1-Dichloroethene	0.018	Not Detected	0.071	Not Detected
trans-1,2-Dichloroethene	0.18	Not Detected	0.71	Not Detected
cis-1,2-Dichloroethene	0.036	0.14	0.14	0.58
Chloroform	0.036	0.19	0.17	0.94
Benzene	0.090	0.58	0.28	1.8
1,2-Dichloroethane	0.036	0.30	0.14	1.2
Trichloroethene	0.036	0.18	0.19	0.99
Toluene	0.036	0.72	0.13	2.7
1,1,2-Trichloroethane	0.036	Not Detected	0.20	Not Detected
Tetrachloroethene	0.036	Not Detected	0.24	Not Detected
Ethyl Benzene	0.036	0.10	0.16	0.43
m,p-Xylene	0.072	0.26	0.31	1.1
o-Xylene	0.036	0.13	0.16	0.56

Container Type: 6 Liter Summa Canister (SIM Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	99	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/05Oct2015.b/v100514sim.d
Lab Smp Id: 1509512-08B
Inj Date : 05-OCT-2015 19:52
Operator : gh Inst ID: msdv.i
Smp Info : 250mL #33877
Misc Info : 7.5"Hg ->5.0psi
Comment : SIM GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 05-Oct-2015 12:58 mskidmor Quant Type: ISTD
Cal Date : 29-SEP-2015 14:34 Cal File: v092903sim.d
Als bottle: 1
Dil Factor: 1.79000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 31 Bromochloromethane					CAS #: 74-97-5		
15.757	15.757 (1.000)	130	77182	5.00000		80.00- 120.00	100.00
15.757	15.757 (1.000)	128	60027			48.13- 108.13	77.77
15.757	15.757 (1.000)	49	218752			238.09- 298.09	283.42
* 40 1,4-Difluorobenzene					CAS #: 540-36-3		
17.125	17.125 (1.000)	114	326015	5.00000		80.00- 120.00	100.00
17.125	17.125 (1.000)	88	46686			0.00- 44.50	14.32
* 56 Chlorobenzene-d5					CAS #: 3114-55-4		
22.042	22.042 (1.000)	117	274388	5.00000		80.00- 120.00	100.00
22.015	22.042 (1.000)	82	129412			16.61- 76.61	47.16
$ 37 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.576	16.548 (1.052)	65	132518	5.20242	5.202	80.00- 120.00	100.00
16.576	16.548 (1.052)	67	59204			19.91- 79.91	44.68
$ 47 Toluene-d8					CAS #: 2037-26-5		
19.629	19.629 (1.146)	98	259956	4.93504	4.935	80.00- 120.00	100.00
19.629	19.629 (1.146)	70	31424			0.00- 41.04	12.09

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.651	19.629 (1.148)	100	161799			32.99- 92.99	62.24
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	151339	4.95093	4.951	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	170174			84.02- 144.02	112.45
23.548	23.548 (1.068)	176	146862			67.56- 127.56	97.04
5 Vinyl Chloride					CAS #: 75-01-4		
7.840	7.809 (0.498)	62	636	0.01727	0.03091	80.00- 120.00	100.00
7.871	7.809 (0.500)	64	284			0.00- 57.67	44.74
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.437	15.437 (0.980)	98	1594	0.08131	0.1455	80.00- 120.00	100.00
15.437	15.437 (0.980)	61	20499			264.63- 324.63	1285.68
15.437	15.437 (0.980)	96	2794			126.49- 186.49	175.27
32 Chloroform					CAS #: 67-66-3		
15.819	15.819 (1.004)	83	6019	0.10707	0.1917	80.00- 120.00	100.00
15.819	15.819 (1.004)	85	3844			34.82- 94.82	63.86
36 Benzene					CAS #: 71-43-2		
16.576	16.576 (0.968)	78	27889	0.32293	0.5780	80.00- 120.00	100.00
16.576	16.576 (0.968)	77	7047			0.00- 52.79	25.27
38 1,2-Dichloroethane					CAS #: 107-06-2		
16.658	16.658 (0.973)	62	8441	0.16553	0.2963	80.00- 120.00	100.00
16.686	16.658 (0.974)	64	2732			0.00- 59.27	32.37
41 Trichloroethene					CAS #: 79-01-6		
17.509	17.509 (1.022)	130	5229	0.10255	0.1836	80.00- 120.00	100.00
17.509	17.509 (1.022)	95	5231			64.71- 124.71	100.03
17.509	17.509 (1.022)	97	3285			31.19- 91.19	62.82
48 Toluene					CAS #: 108-88-3		
19.763	19.764 (1.154)	91	39719	0.40194	0.7195	80.00- 120.00	100.00
19.763	19.764 (1.154)	92	23962			28.99- 88.99	60.33
58 Ethyl Benzene					CAS #: 100-41-4		
22.152	22.152 (1.005)	106	1874	0.05570	0.09970	80.00- 120.00	100.00
22.152	22.152 (1.005)	91	6715			301.49- 361.49	358.20
59 m,p-Xylene					CAS #: 108-38-3		
22.317	22.317 (1.012)	106	5160	0.14603	0.2614	80.00- 120.00	100.00
22.317	22.317 (1.012)	91	11326			185.00- 245.00	219.47

RT	EXP RT	(REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
61 o-Xylene						CAS #: 95-47-6		
22.838	22.839	(1.036)	106	2429	0.07278	0.1303	80.00- 120.00	100.00
22.838	22.839	(1.036)	91	6946			198.20- 258.20	285.90

Report Date: 12-Oct-2015 12:42

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100514sim.d
Lab Smp Id: 1509512-08B
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Level: LOW
Sample Type: AIR
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 7.5"Hg ->5.0psi

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	81342	48805	113879	77182	-5.11
40 1,4-Difluorobenze	339188	203513	474863	326015	-3.88
56 Chlorobenzene-d5	289088	173453	404723	274388	-5.08

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 12-Oct-2015 12:42

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1509512-08B
Level: LOW Operator: gh
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 7.5"Hg ->5.0psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 37 1,2-Dichloroethane	5.000	5.202	104.05	70-130
$ 47 Toluene-d8	5.000	4.935	98.70	70-130
$ 66 Bromofluorobenzene	5.000	4.951	99.02	70-130

Data File: /chem/msdv.i/05Oct2015.b/v100514sim.d

Date : 05-OCT-2015 19:52

Client ID:

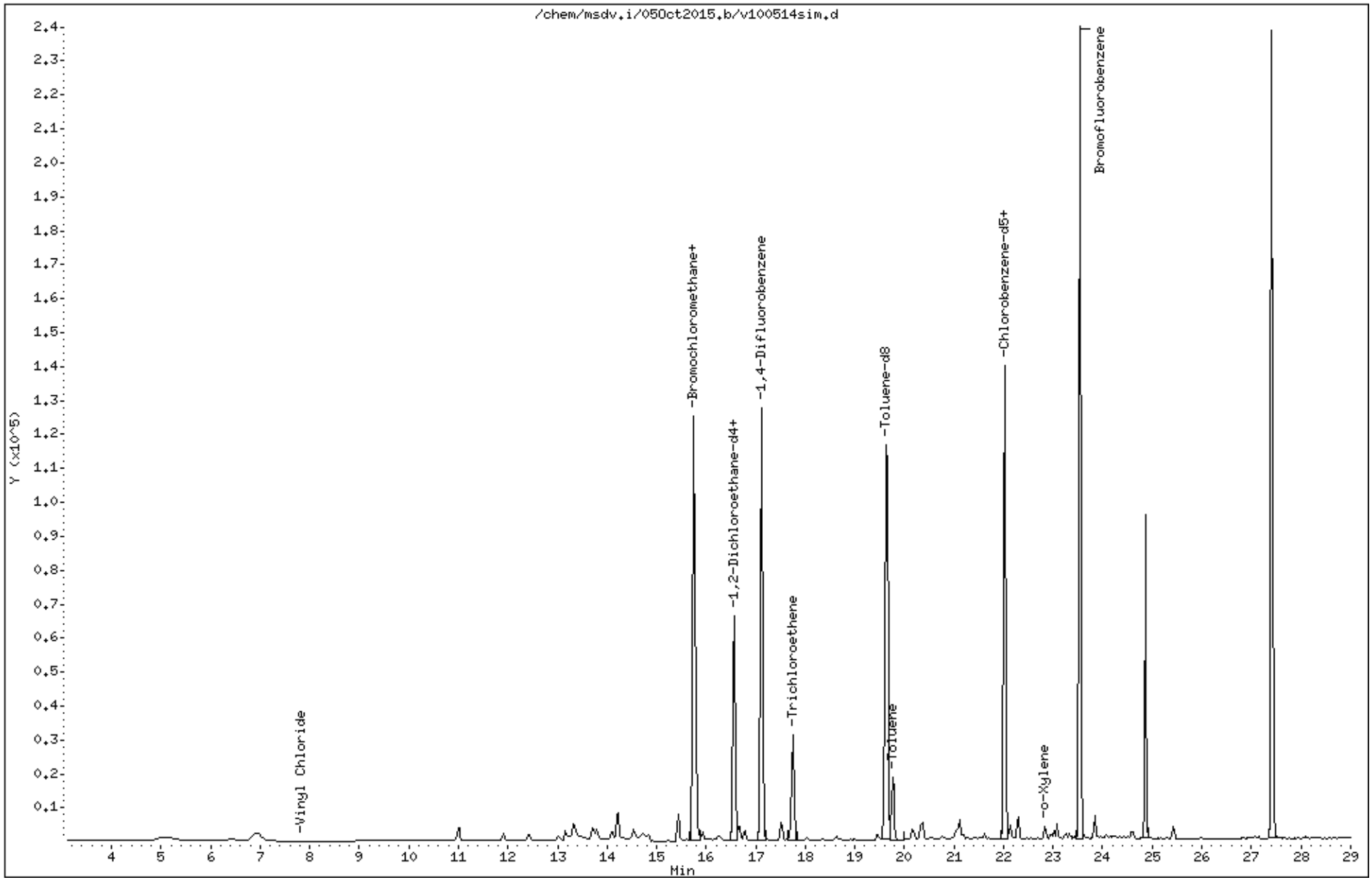
Instrument: msdv.i

Sample Info: 250mL #33877

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Data File: /chem/msdv.i/05Oct2015.b/v100514sim.d

Date : 05-OCT-2015 19:52

Client ID:

Instrument: msdv.i

Sample Info: 250mL #33877

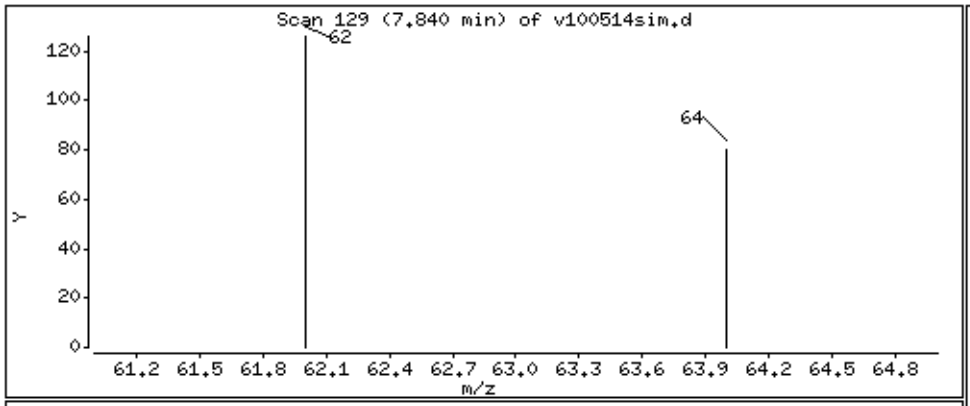
Operator: gh

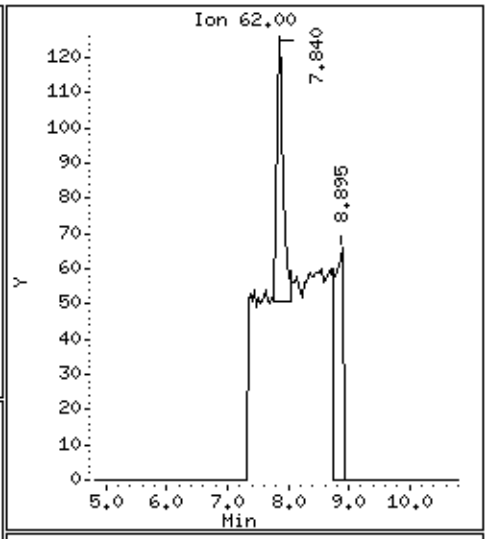
Column phase: RTx-624

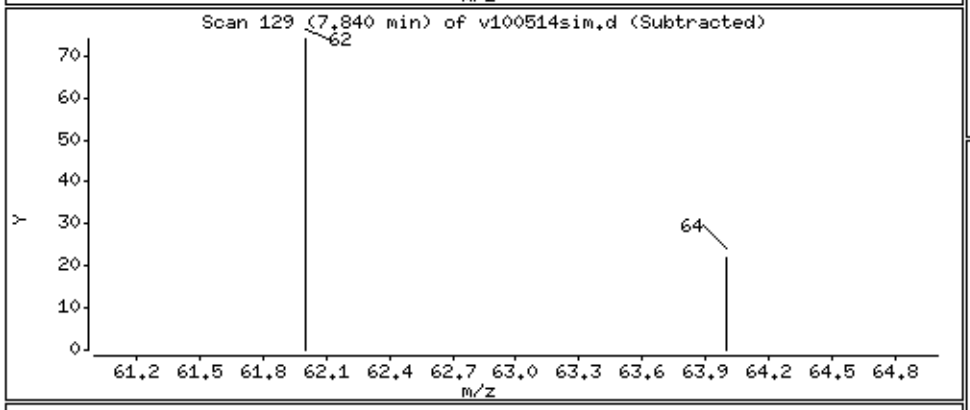
Column diameter: 0.32

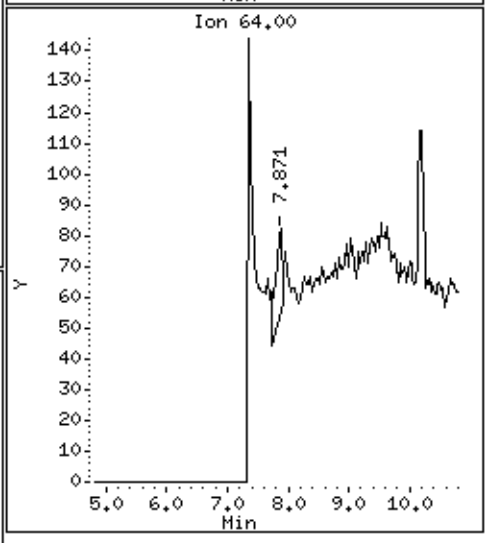
5 Vinyl Chloride

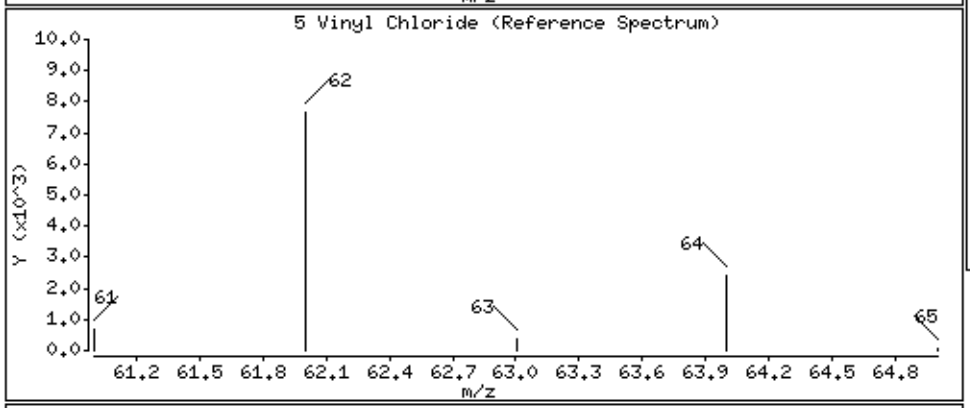
Concentration: 0.03091 PPBV

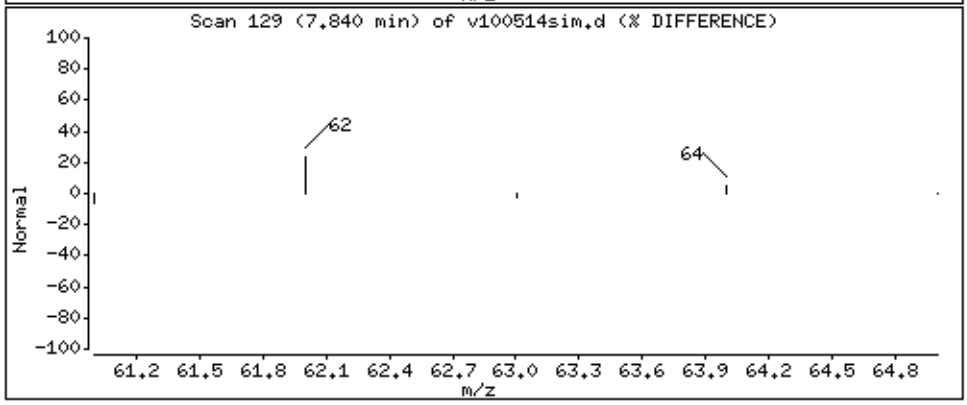












Data File: /chem/msdv.i/05Oct2015.b/v100514sim.d

Date : 05-OCT-2015 19:52

Client ID:

Instrument: msdv.i

Sample Info: 250mL #33877

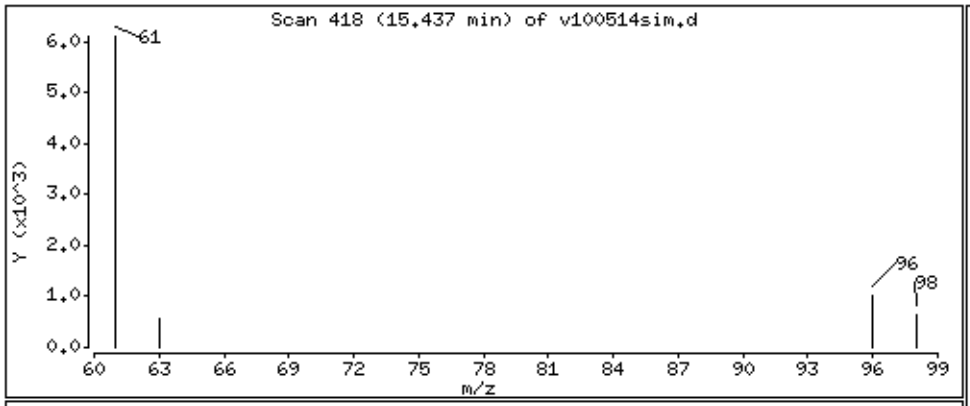
Operator: gh

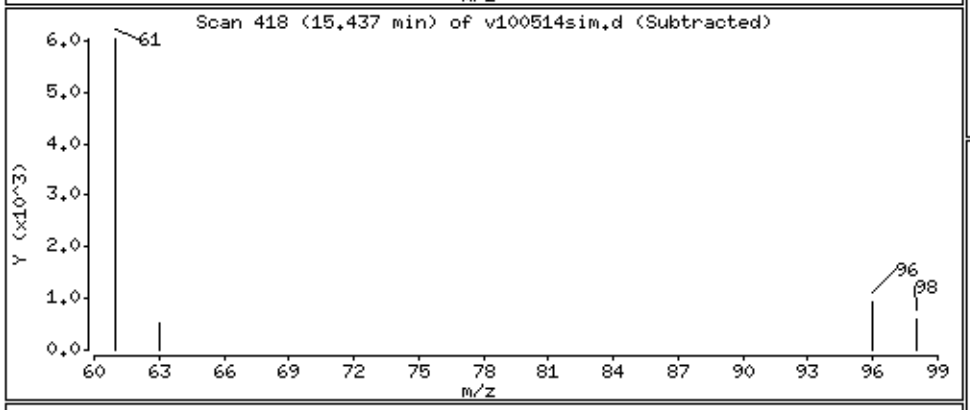
Column phase: RTx-624

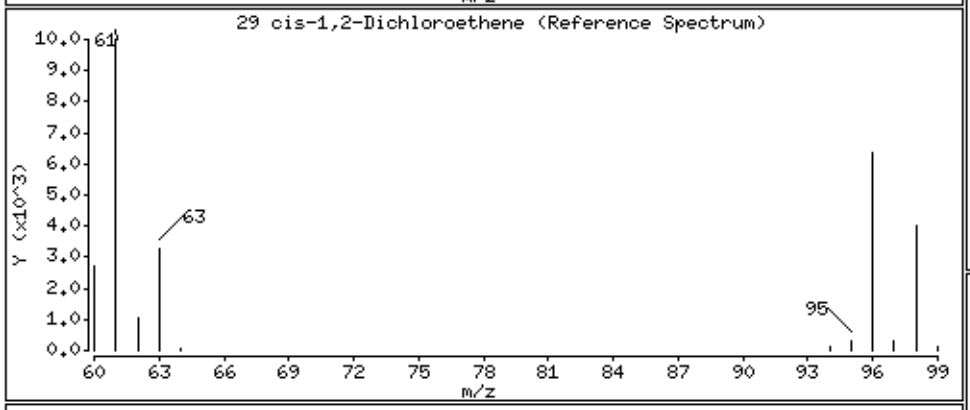
Column diameter: 0.32

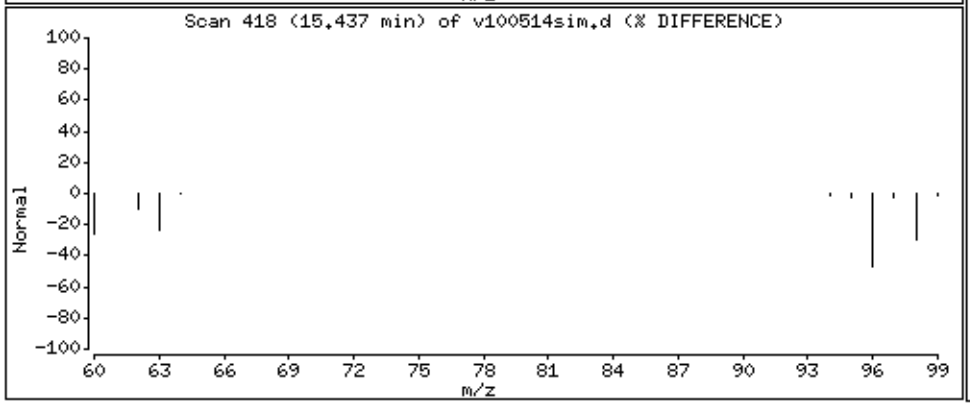
29 cis-1,2-Dichloroethene

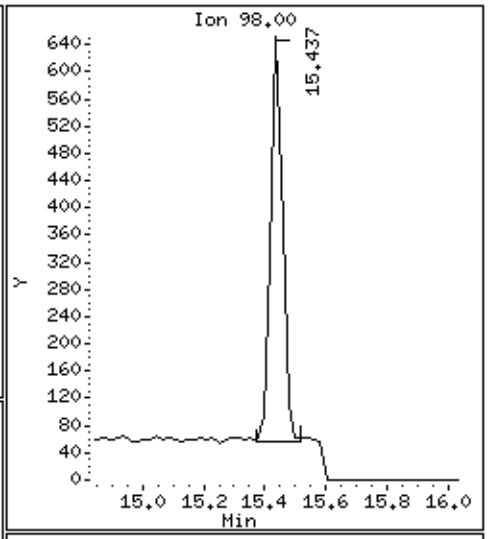
Concentration: 0.1455 PPBV

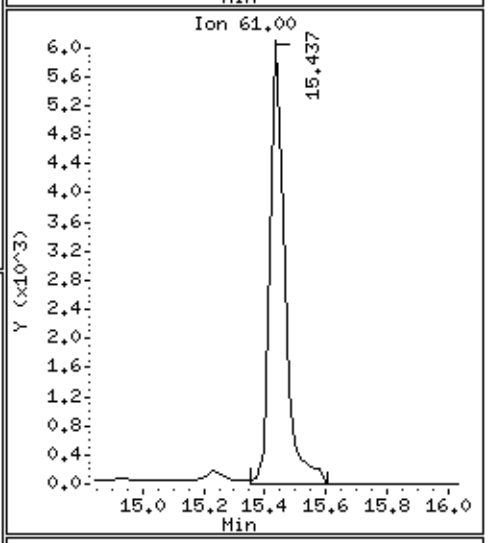


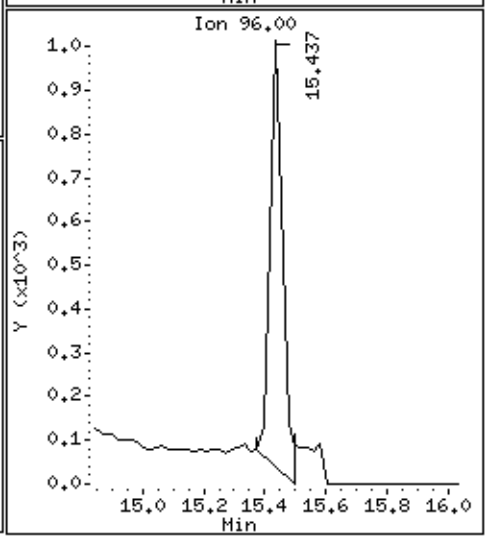












Data File: /chem/msdv.i/05Oct2015.b/v100514sim.d

Date : 05-OCT-2015 19:52

Client ID:

Instrument: msdv.i

Sample Info: 250mL #33877

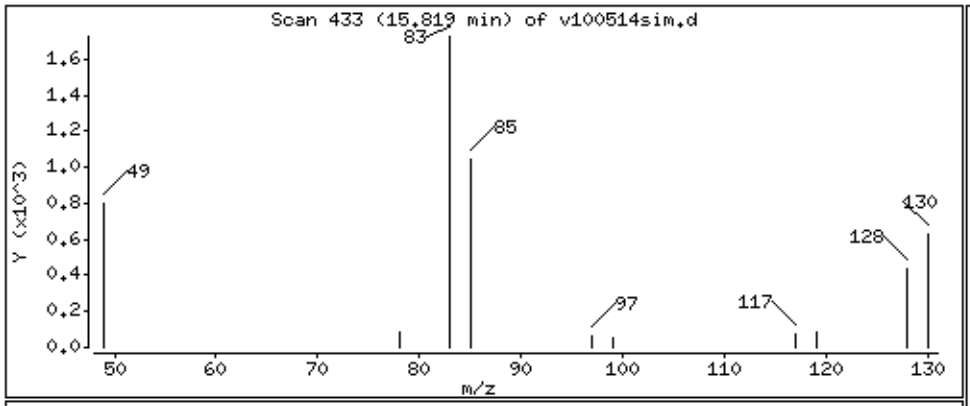
Operator: gh

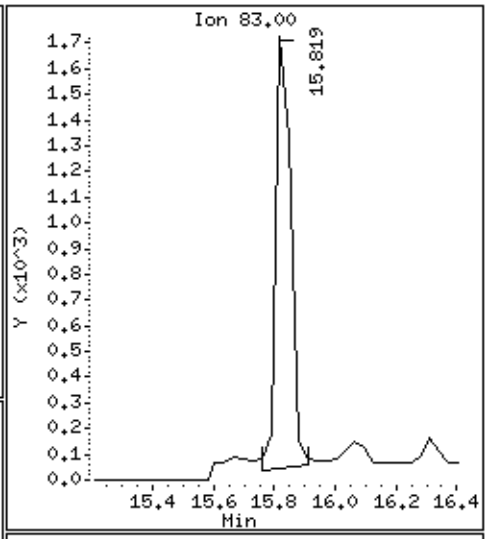
Column phase: RTx-624

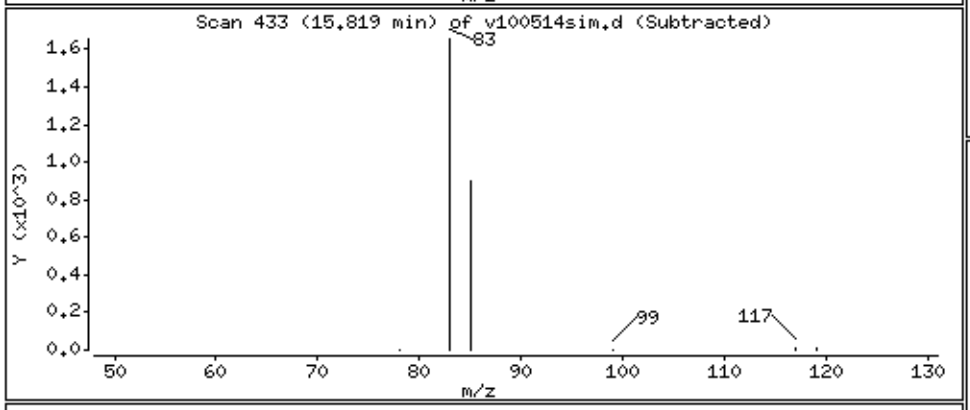
Column diameter: 0.32

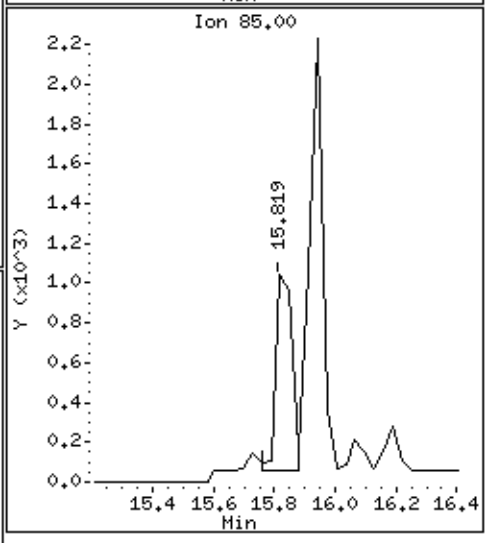
32 Chloroform

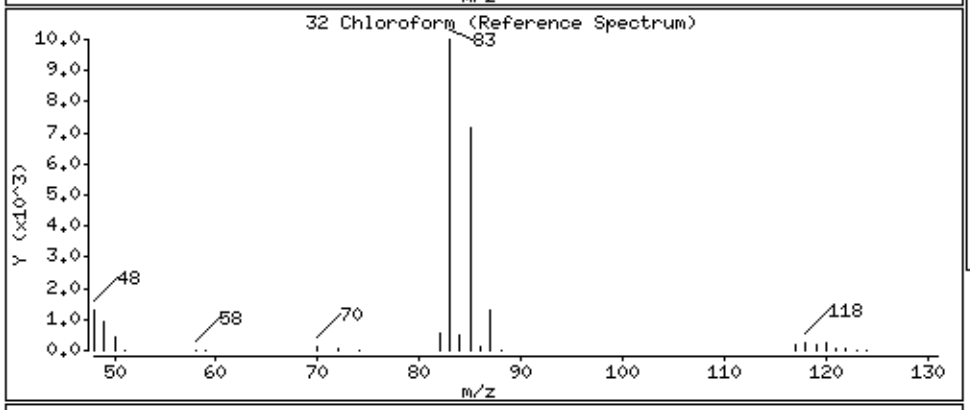
Concentration: 0.1917 PPBV

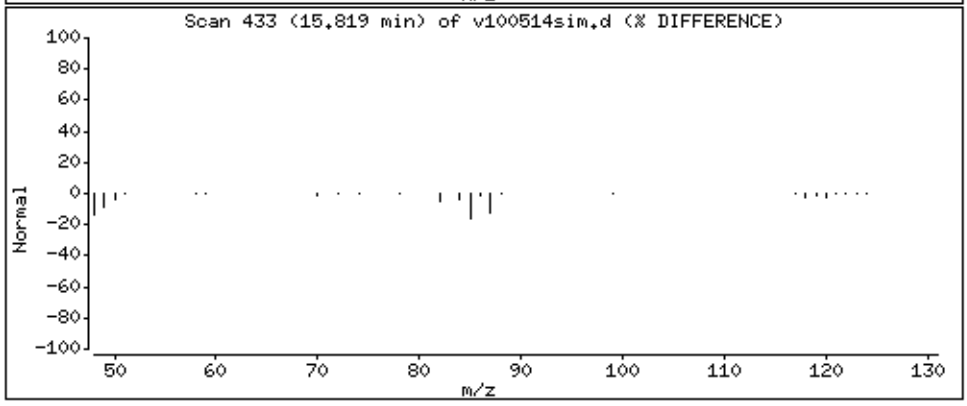












Data File: /chem/msdv.i/05Oct2015.b/v100514sim.d

Date : 05-OCT-2015 19:52

Client ID:

Instrument: msdv.i

Sample Info: 250mL #33877

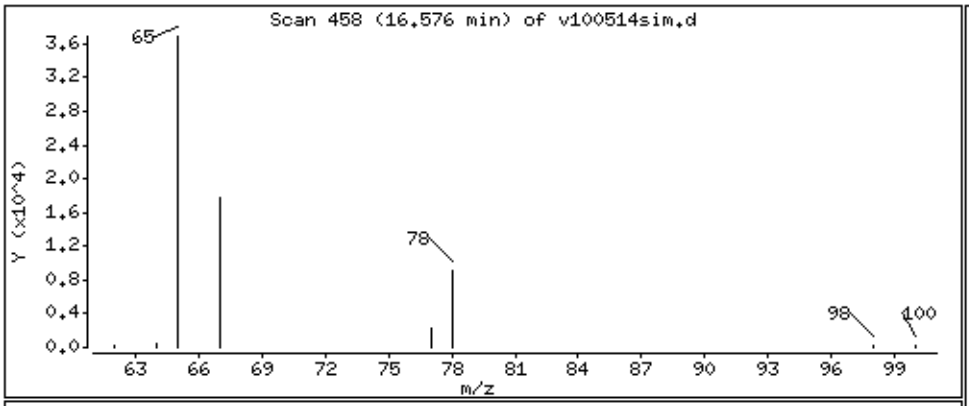
Operator: gh

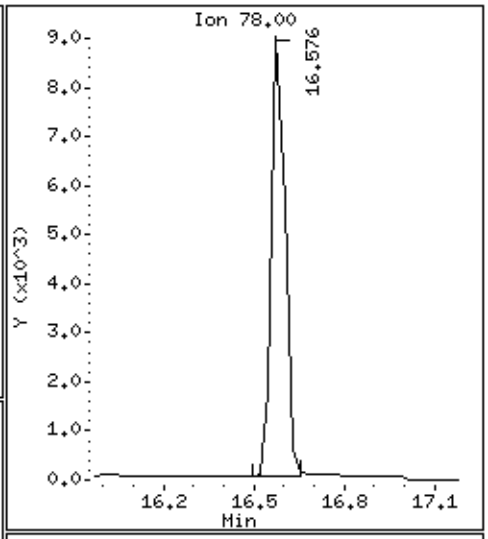
Column phase: RTx-624

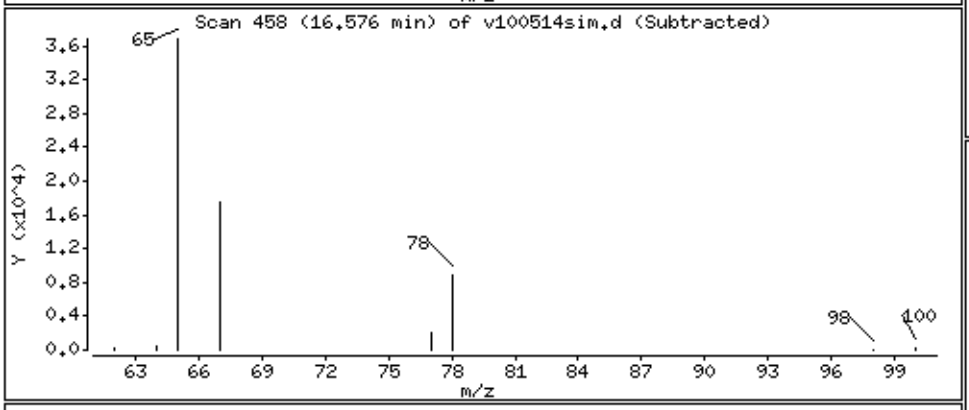
Column diameter: 0.32

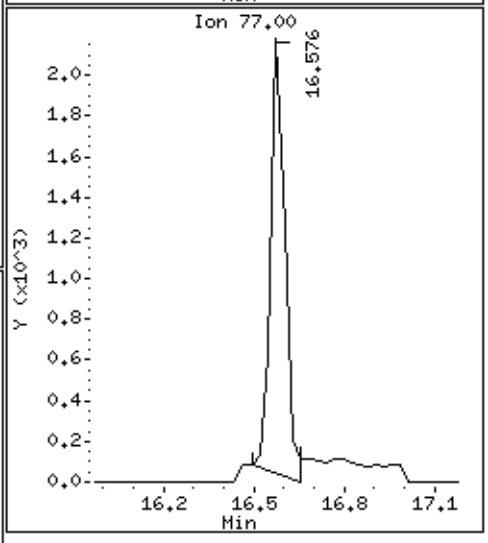
36 Benzene

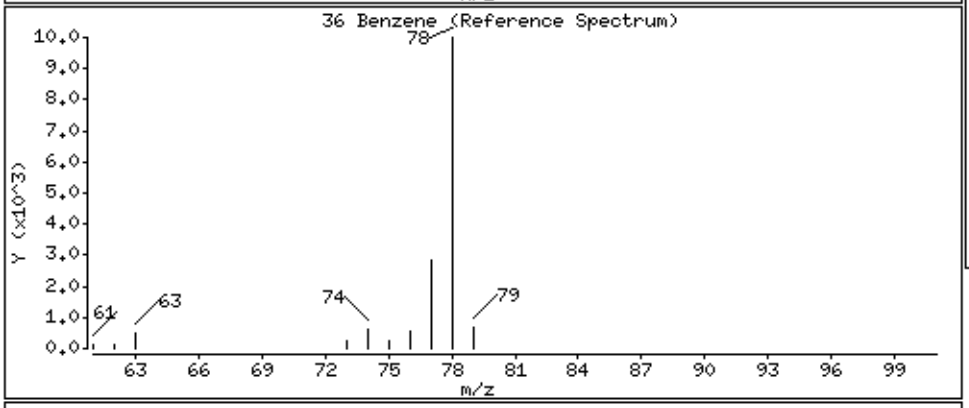
Concentration: 0.5780 PPBV

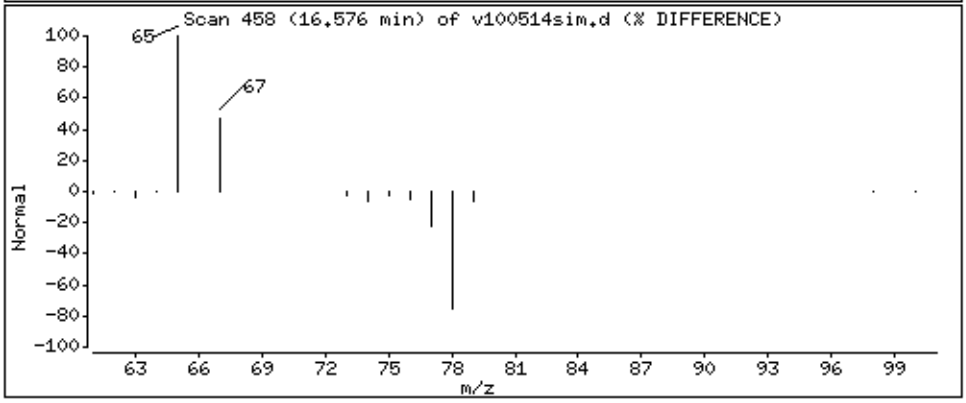












Data File: /chem/msdv.i/05Oct2015.b/v100514sim.d

Date : 05-OCT-2015 19:52

Client ID:

Instrument: msdv.i

Sample Info: 250mL #33877

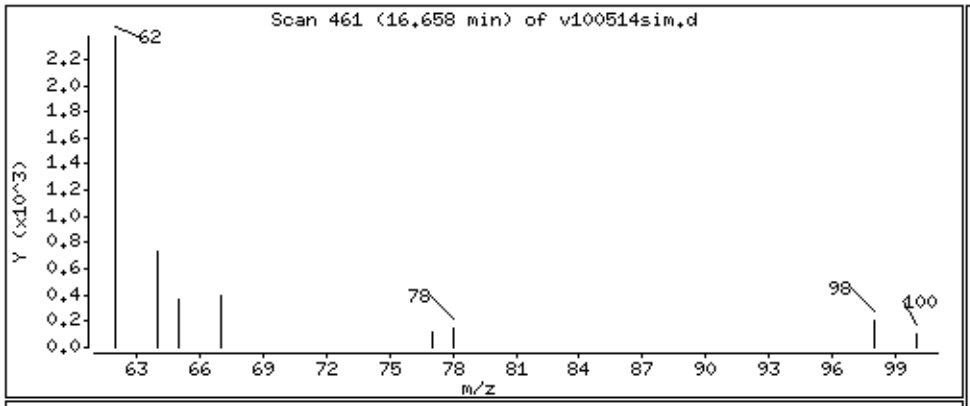
Operator: gh

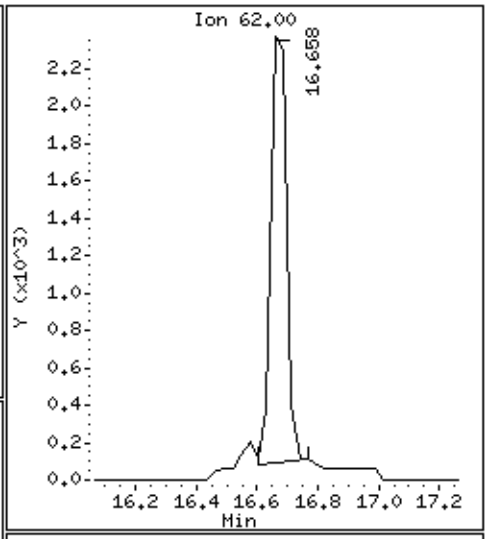
Column phase: RTx-624

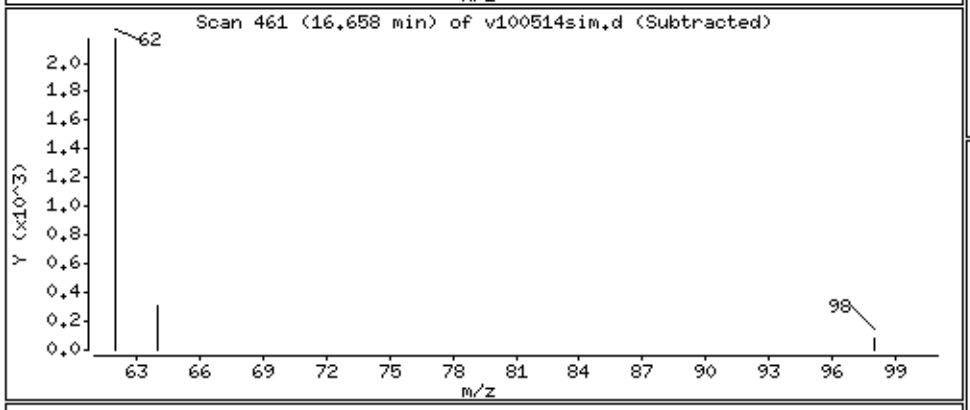
Column diameter: 0.32

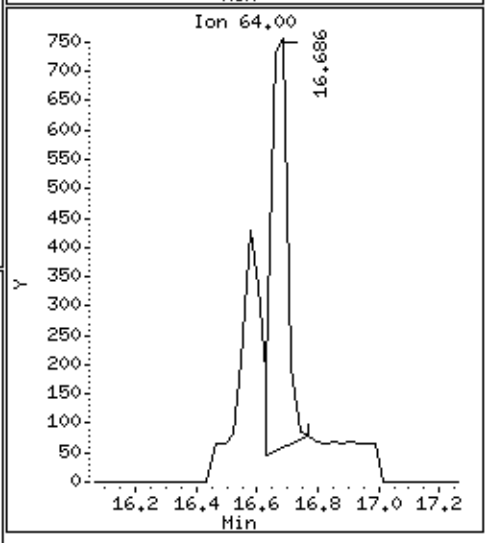
38 1,2-Dichloroethane

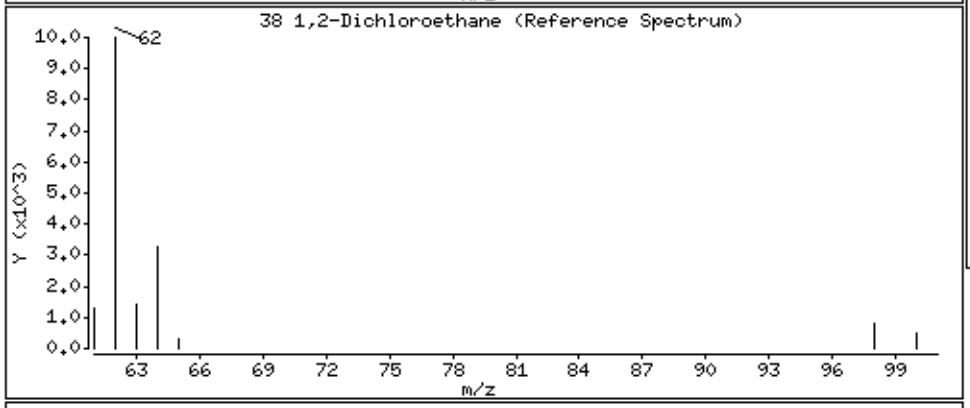
Concentration: 0.2963 PPBV

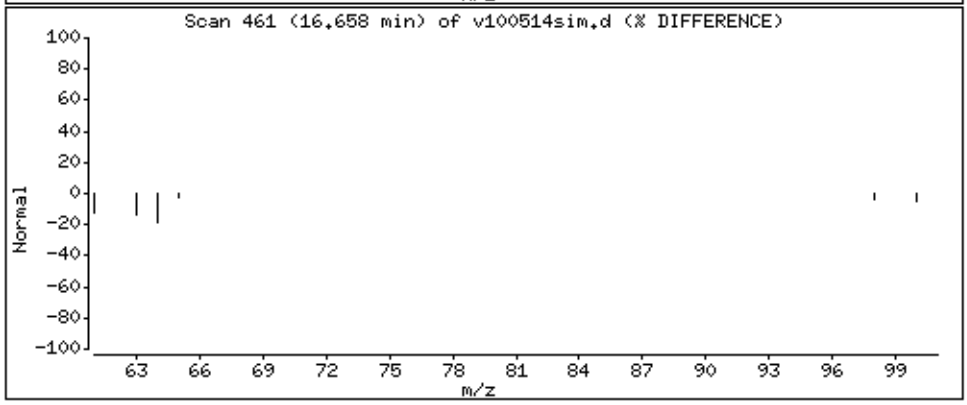












Data File: /chem/msdv.i/05Oct2015.b/v100514sim.d

Date : 05-OCT-2015 19:52

Client ID:

Instrument: msdv.i

Sample Info: 250mL #33877

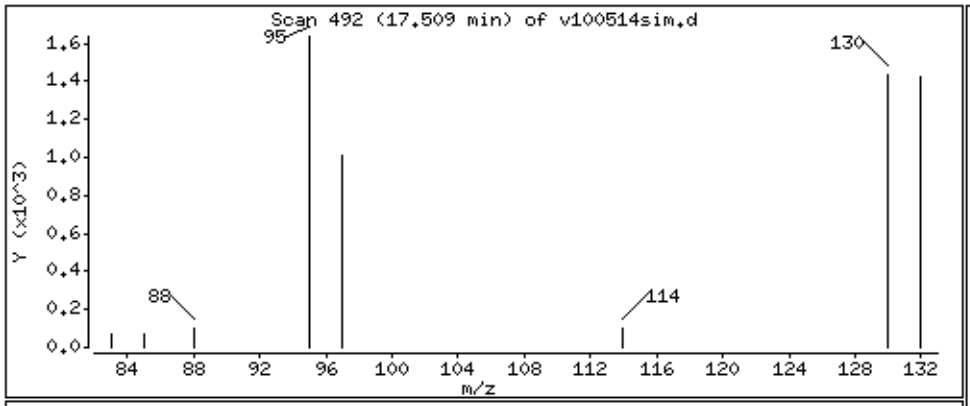
Operator: gh

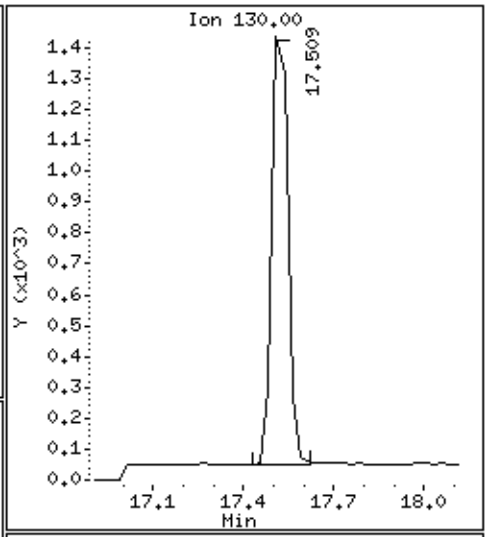
Column phase: RTx-624

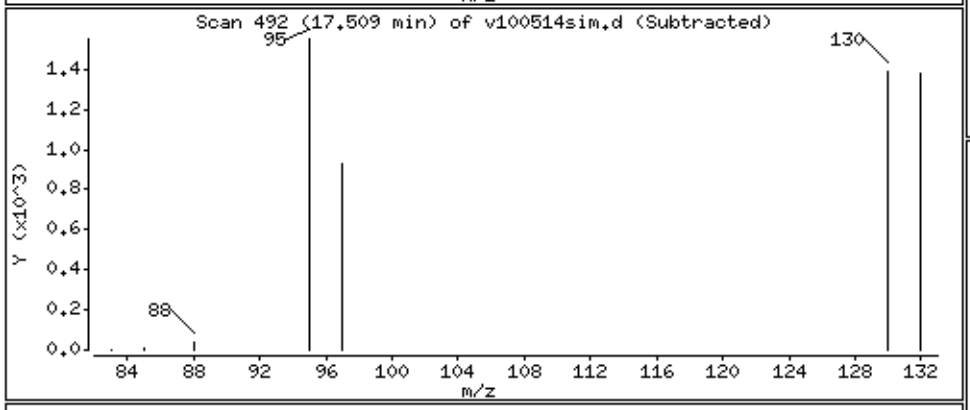
Column diameter: 0.32

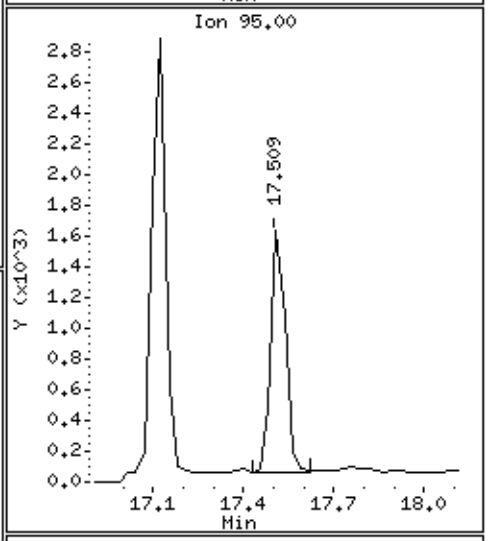
41 Trichloroethene

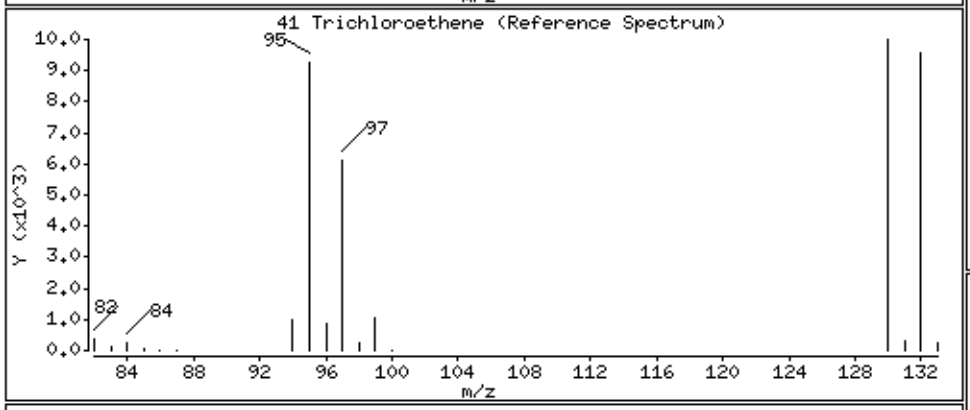
Concentration: 0.1836 PPBV

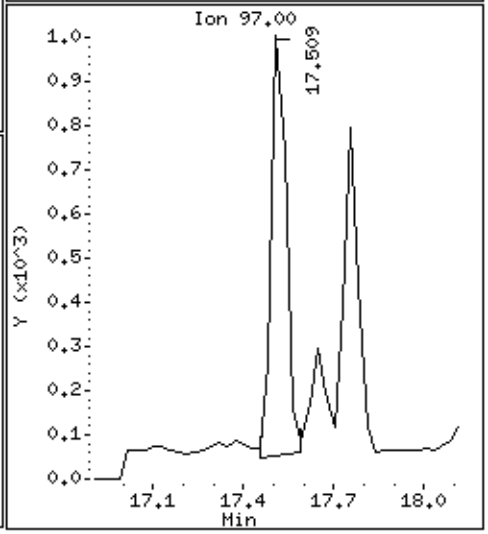


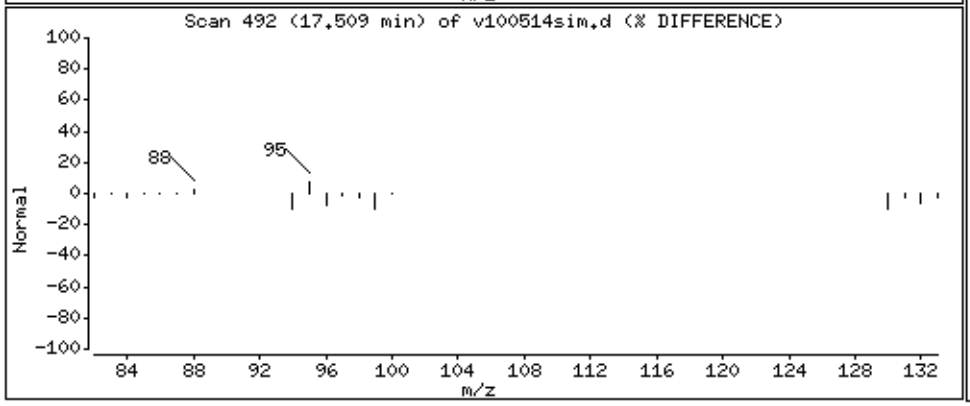












Data File: /chem/msdv.i/05Oct2015.b/v100514sim.d

Date : 05-OCT-2015 19:52

Client ID:

Instrument: msdv.i

Sample Info: 250mL #33877

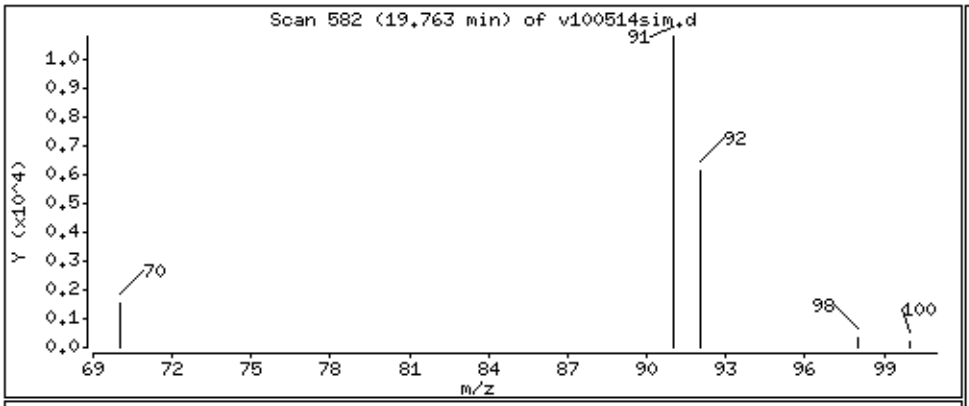
Operator: gh

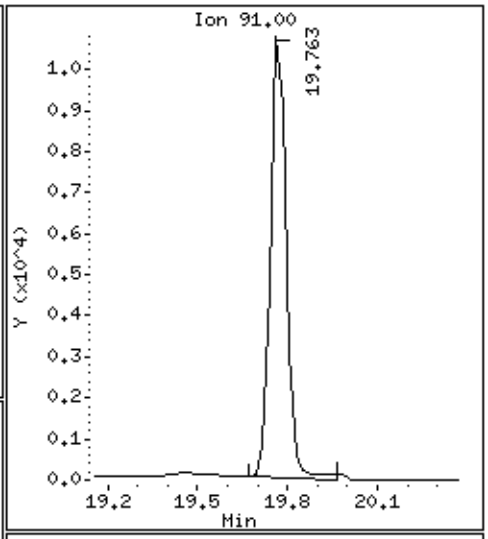
Column phase: RTx-624

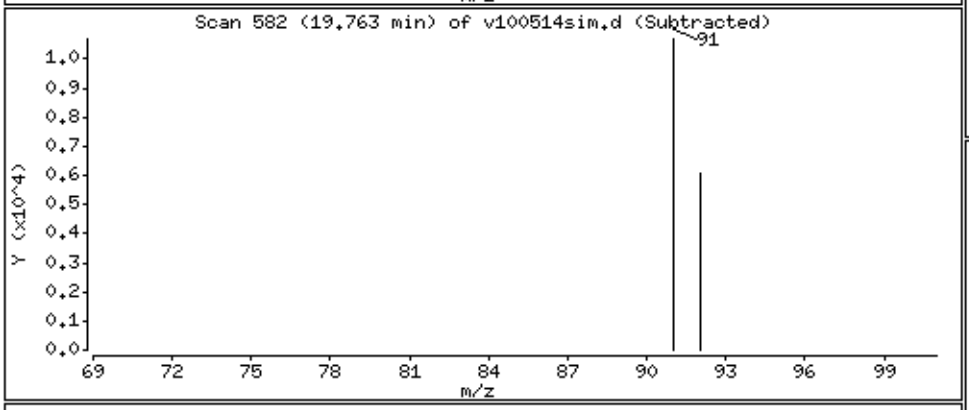
Column diameter: 0.32

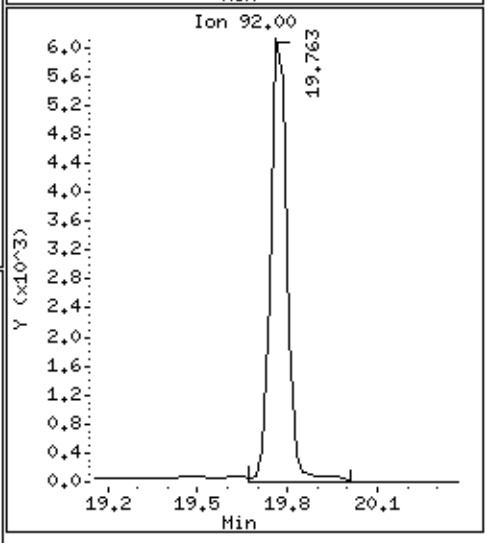
48 Toluene

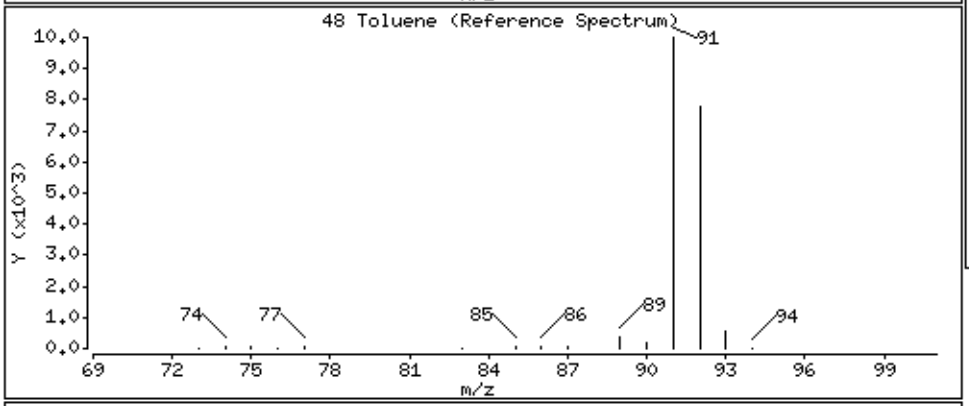
Concentration: 0.7195 PPBV

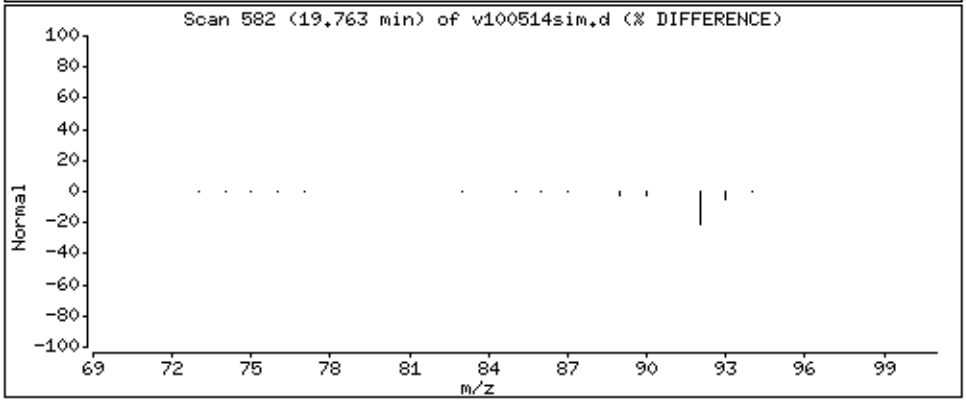












Data File: /chem/msdv.i/05Oct2015.b/v100514sim.d

Date : 05-OCT-2015 19:52

Client ID:

Instrument: msdv.i

Sample Info: 250mL #33877

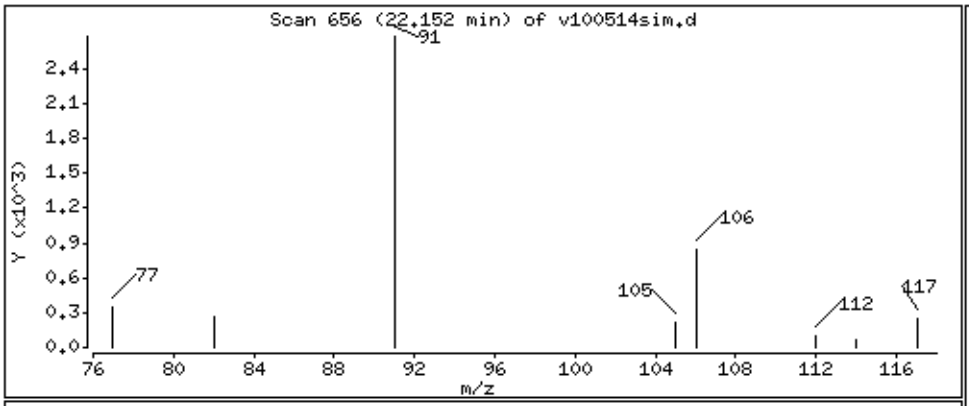
Operator: gh

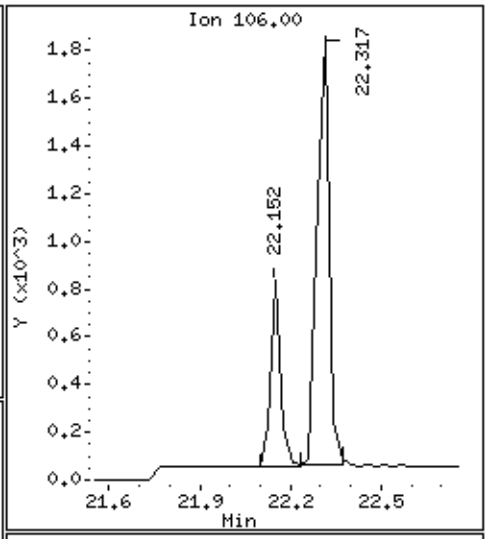
Column phase: RTx-624

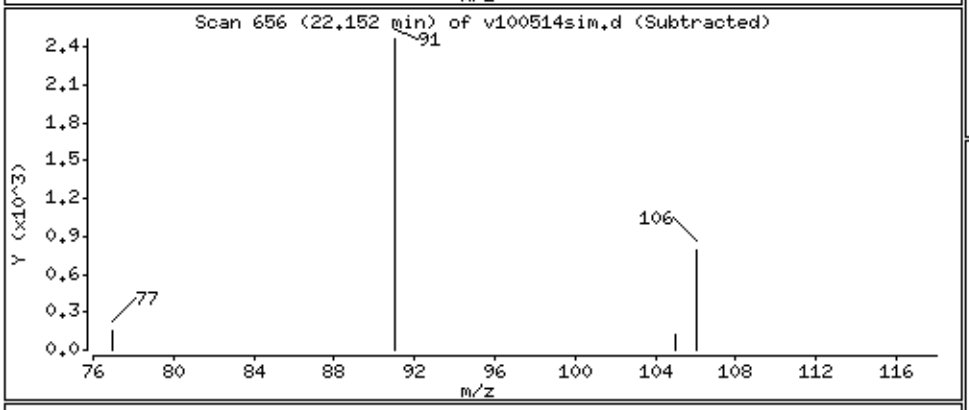
Column diameter: 0.32

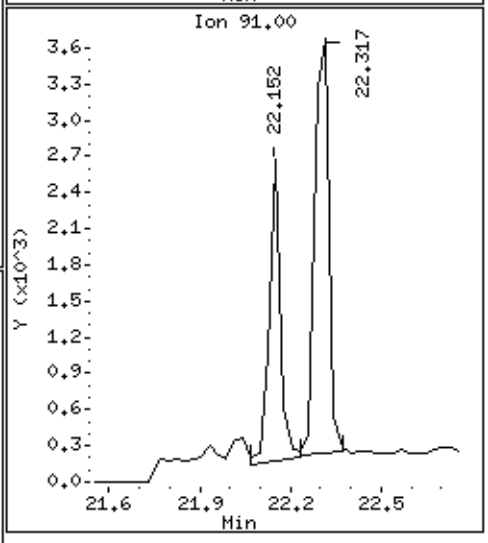
58 Ethyl Benzene

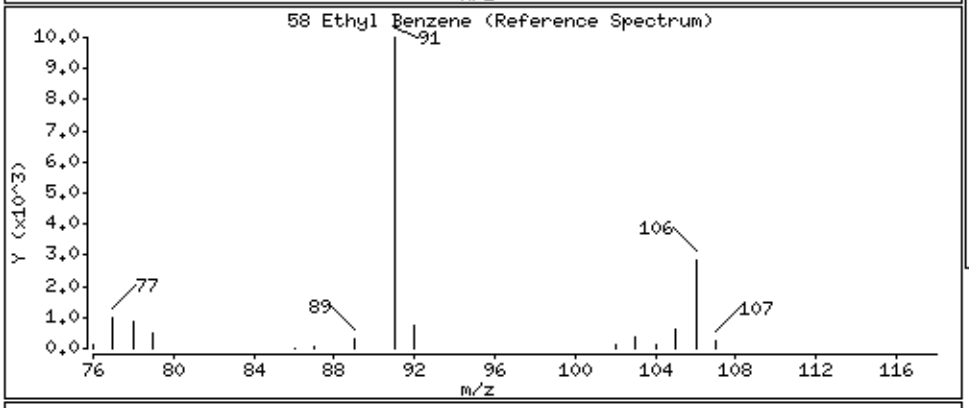
Concentration: 0.09970 PPBV

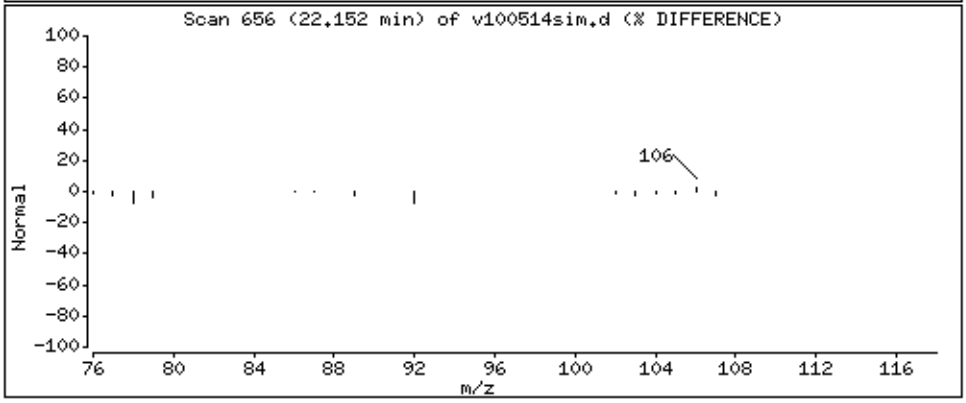












Data File: /chem/msdv.i/05Oct2015.b/v100514sim.d

Date : 05-OCT-2015 19:52

Client ID:

Instrument: msdv.i

Sample Info: 250mL #33877

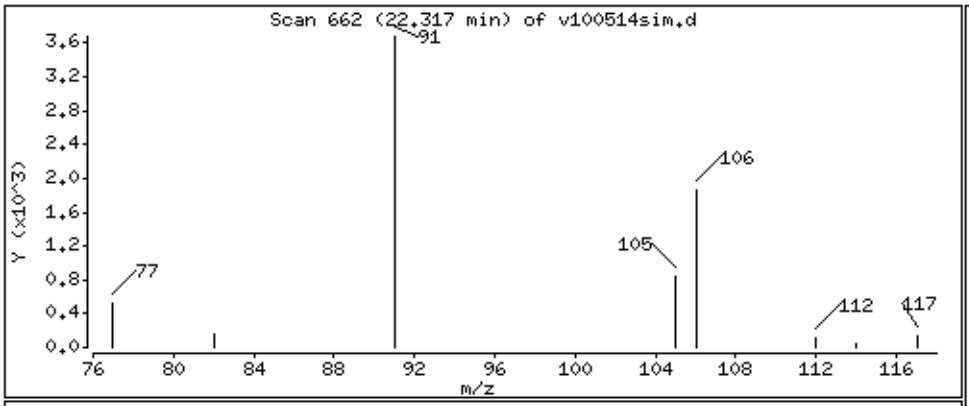
Operator: gh

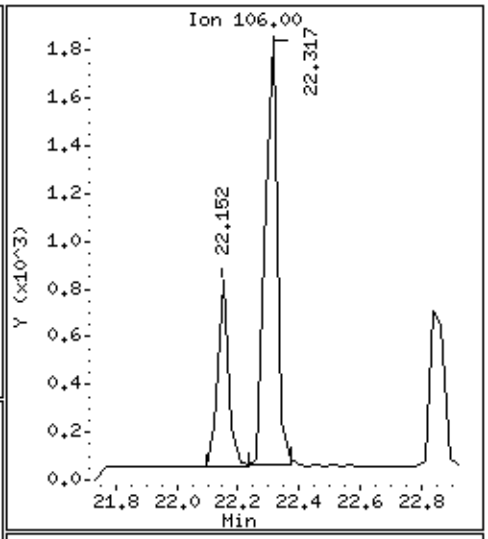
Column phase: RTx-624

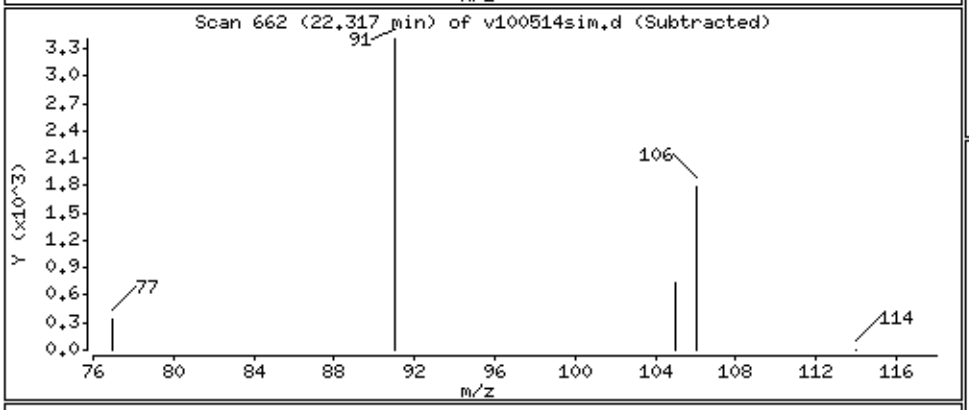
Column diameter: 0.32

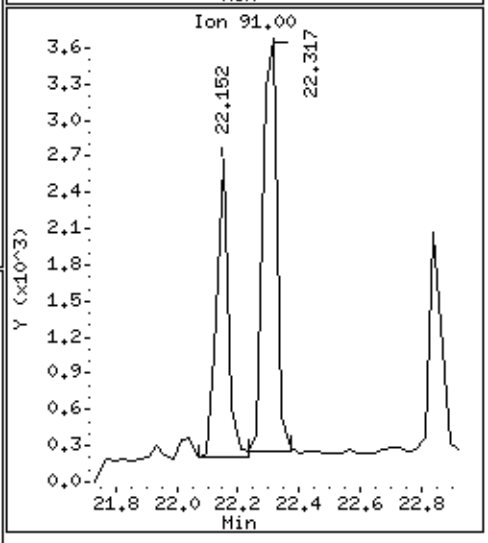
59 m,p-Xylene

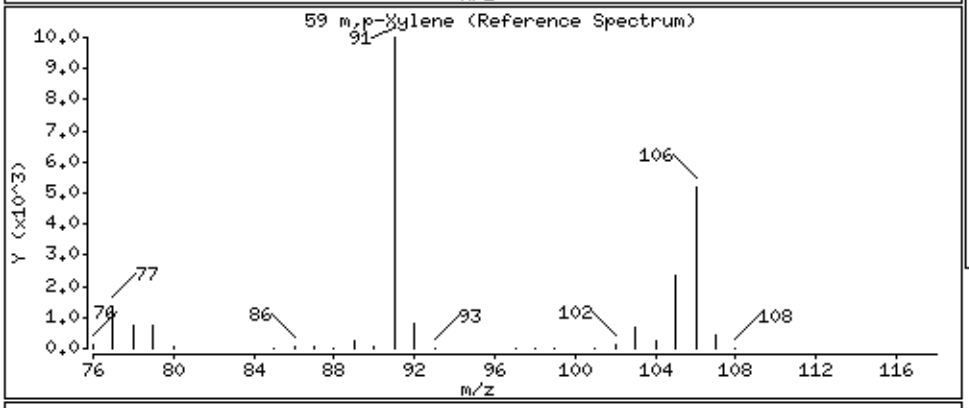
Concentration: 0.2614 PPBV

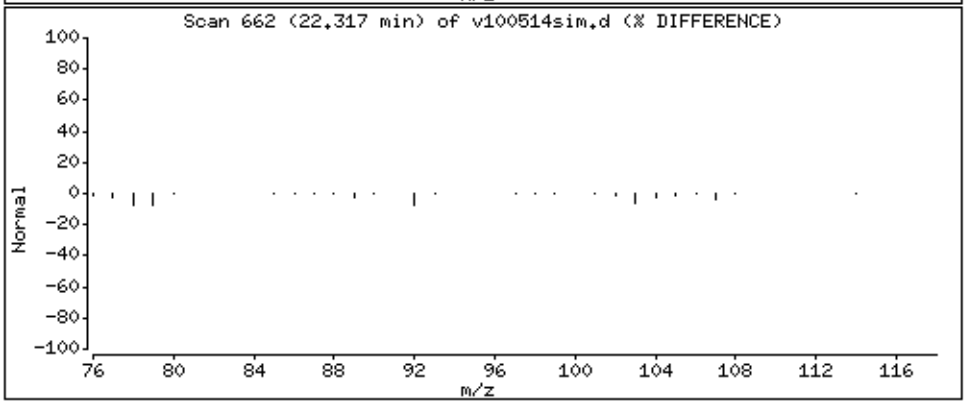












Data File: /chem/msdv.i/05Oct2015.b/v100514sim.d

Date : 05-OCT-2015 19:52

Client ID:

Instrument: msdv.i

Sample Info: 250mL #33877

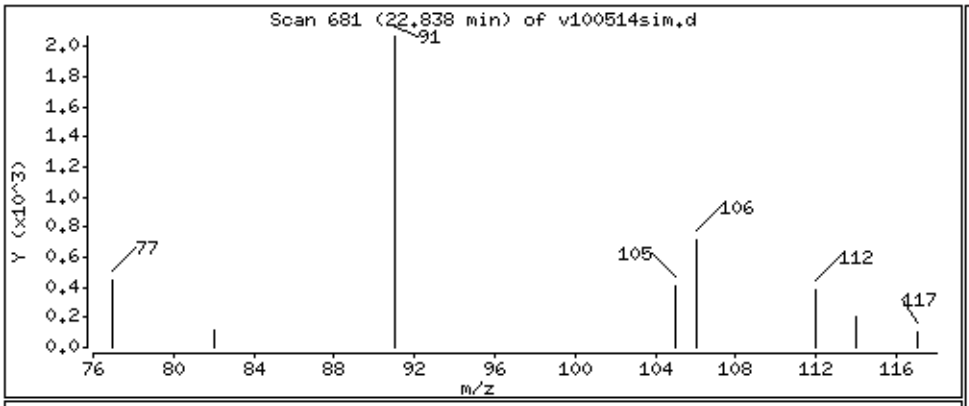
Operator: gh

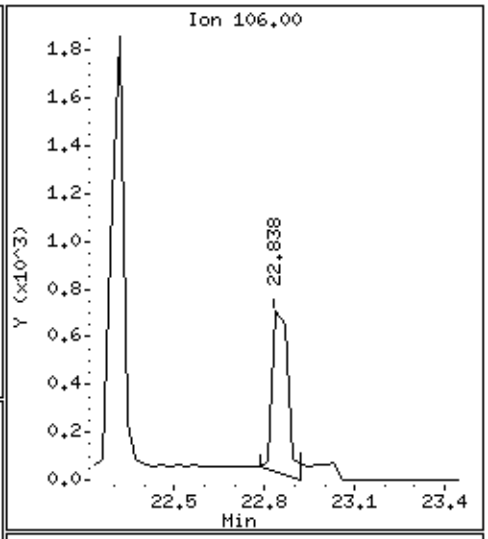
Column phase: RTx-624

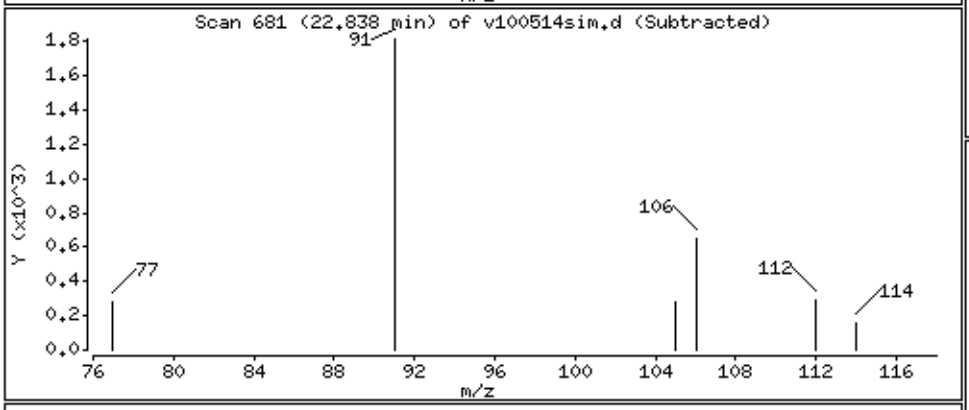
Column diameter: 0.32

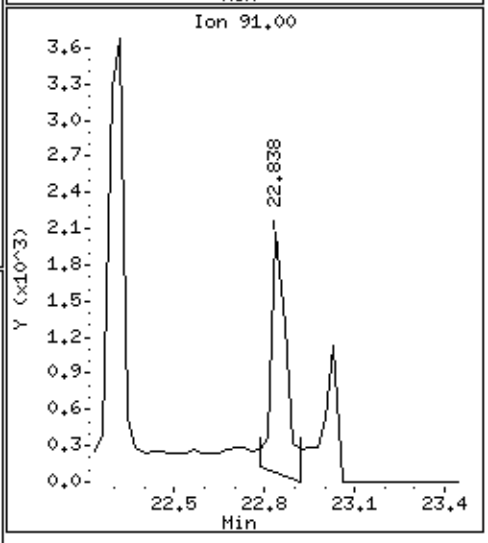
61 o-Xylene

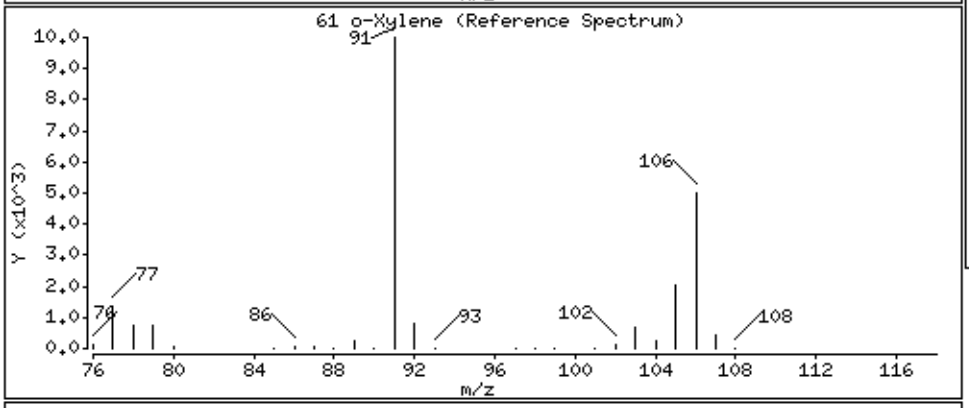
Concentration: 0.1303 PPBV

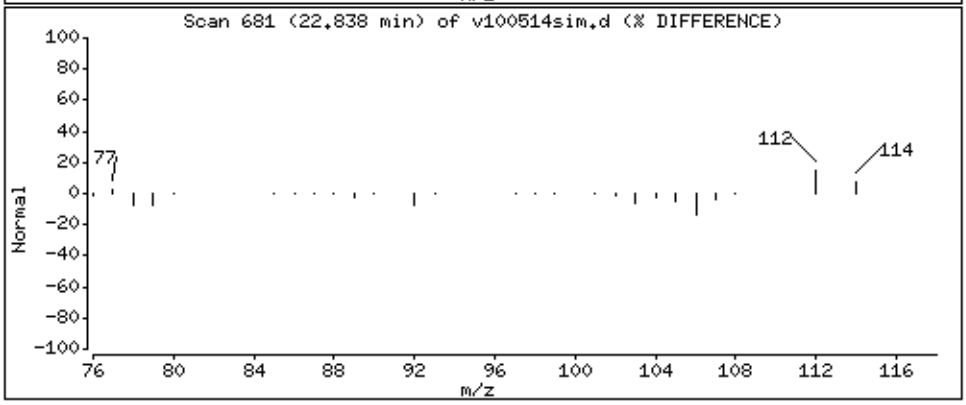












QC Results and Raw Data

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Client Sample ID: Lab Blank

Lab ID#: 1509512-09A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100506**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/5/15 12:51 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Methylene Chloride	0.20	Not Detected	0.69	Not Detected
1,2,4-Trimethylbenzene	0.10	Not Detected	0.49	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	100	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	93	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/05Oct2015.b/v100506.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 05-OCT-2015 12:51
Operator : mjs Inst ID: msdv.i
Smp Info : 250mL# 35248; Lab Blank; Lab Blank
Misc Info : Humid
Comment : Low Level GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m
Meth Date : 05-Oct-2015 11:52 mskidmor Quant Type: ISTD
Cal Date : 29-SEP-2015 21:58 Cal File: v092913.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 54 Bromochloromethane					CAS #: 74-97-5		
15.743	15.743 (1.000)	130	71290	5.00000		80.00- 120.00	100.00
15.743	15.743 (1.000)	128	56090			48.04- 108.04	78.68
15.743	15.743 (1.000)	49	198684			284.77- 344.77	278.70
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.111	17.111 (1.000)	114	334604	5.00000		80.00- 120.00	100.00
17.111	17.111 (1.000)	88	49184			0.00- 44.16	14.70
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.029	22.029 (1.000)	117	280639	5.00000		80.00- 120.00	100.00
22.029	22.029 (1.000)	82	141092			18.70- 78.70	50.28
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.562	16.562 (1.052)	65	125427	4.98880	4.989	80.00- 120.00	100.00
16.562	16.562 (1.052)	67	59117			19.41- 79.41	47.13
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.638	19.615 (1.148)	98	304013	4.81992	4.820	80.00- 120.00	100.00
19.615	19.615 (1.146)	70	32512			0.00- 40.74	10.69

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.615	19.615 (1.146)	100	203747			34.93- 94.93	67.02
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.534	23.535 (1.068)	174	133958	4.64612	4.646	80.00- 120.00	100.00
23.534	23.535 (1.068)	95	165998			94.06- 154.06	123.92
23.534	23.535 (1.068)	176	131581			68.95- 128.95	98.23

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100506.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: mjs
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: Humid

Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	78102	46861	109343	71290	-8.72
71 1,4-Difluorobenze	340477	204286	476668	334604	-1.72
92 Chlorobenzene-d5	294231	176539	411923	280639	-4.62

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.74	15.41	16.07	15.74	0.00
71 1,4-Difluorobenze	17.11	16.78	17.44	17.11	0.00
92 Chlorobenzene-d5	22.03	21.70	22.36	22.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 05-Oct-2015 13:36

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Level: LOW Operator: mjs
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	4.989	99.78	70-130
$ 80 Toluene-d8	5.000	4.820	96.40	70-130
$ 106 Bromofluorobenzene	5.000	4.646	92.92	70-130

Data File: /chem/msdv.i/05Oct2015.b/v100506.d

Date : 05-OCT-2015 12:51

Client ID: Lab Blank

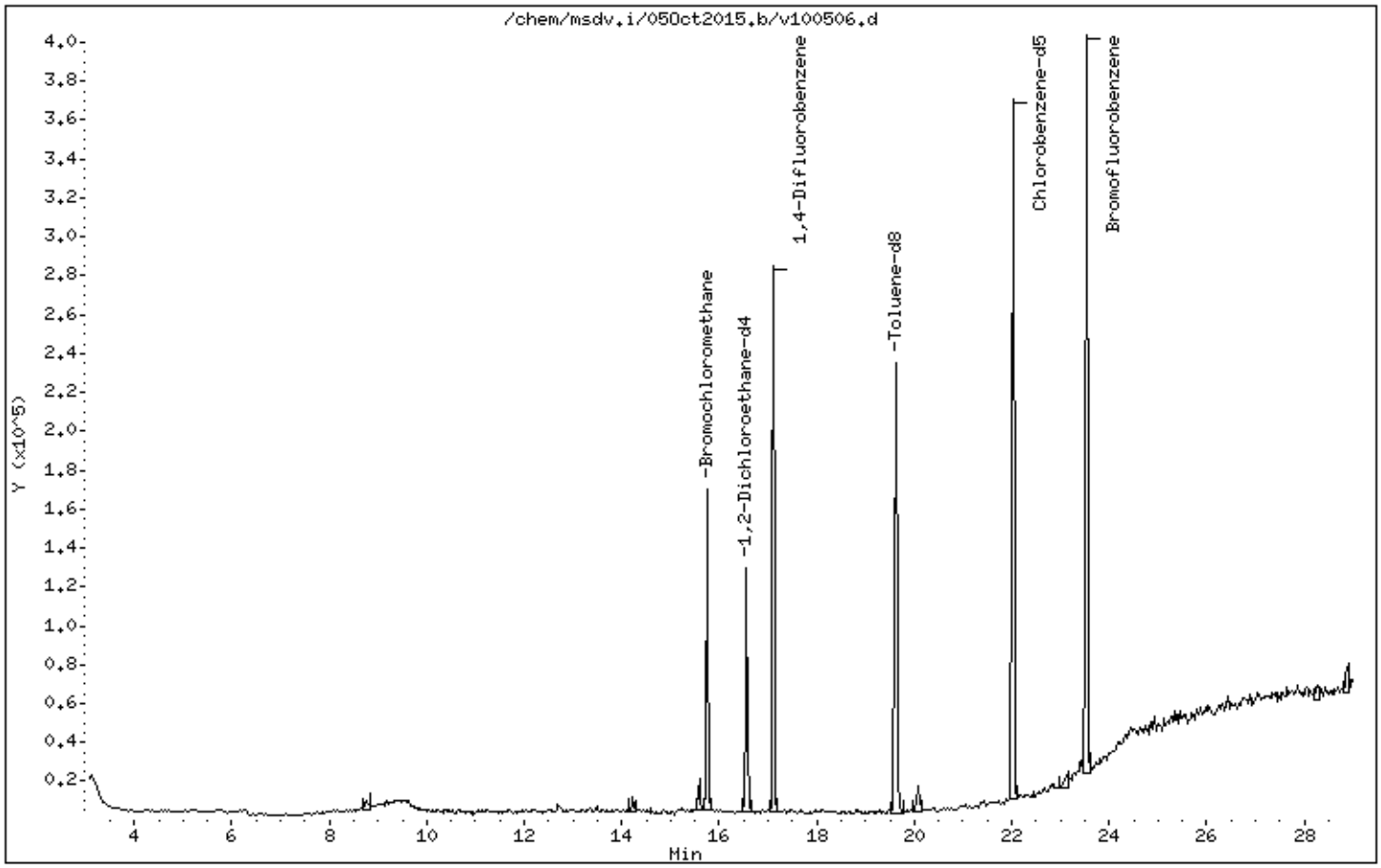
Instrument: msdv.i

Sample Info: 250mL# 35248; Lab Blank; Lab Blank

Operator: mjs

Column phase: RTx-624

Column diameter: 0.32



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Client Sample ID: Lab Blank

Lab ID#: 1509512-09B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100506sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/5/15 12:51 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.010	Not Detected	0.026	Not Detected
1,1-Dichloroethene	0.010	Not Detected	0.040	Not Detected
trans-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
cis-1,2-Dichloroethene	0.020	Not Detected	0.079	Not Detected
Chloroform	0.020	Not Detected	0.098	Not Detected
Benzene	0.050	Not Detected	0.16	Not Detected
1,2-Dichloroethane	0.020	Not Detected	0.081	Not Detected
Trichloroethene	0.020	Not Detected	0.11	Not Detected
Toluene	0.020	Not Detected	0.075	Not Detected
1,1,2-Trichloroethane	0.020	Not Detected	0.11	Not Detected
Tetrachloroethene	0.020	Not Detected	0.14	Not Detected
Ethyl Benzene	0.020	Not Detected	0.087	Not Detected
m,p-Xylene	0.040	Not Detected	0.17	Not Detected
o-Xylene	0.020	Not Detected	0.087	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	104	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	91	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/05Oct2015.b/v100506sim.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 05-OCT-2015 12:51
Operator : mjs Inst ID: msdv.i
Smp Info : 250mL# 35248; Lab Blank; Lab Blank
Misc Info : Humid
Comment : SIM GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 05-Oct-2015 12:58 mskidmor Quant Type: ISTD
Cal Date : 29-SEP-2015 14:34 Cal File: v092903sim.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 31 Bromochloromethane						CAS #: 74-97-5	
15.757	15.757 (1.000)	130	78721	5.00000		80.00- 120.00	100.00
15.757	15.757 (1.000)	128	61032			48.13- 108.13	77.53
15.757	15.757 (1.000)	49	213158			238.09- 298.09	270.78
* 40 1,4-Difluorobenzene						CAS #: 540-36-3	
17.125	17.125 (1.000)	114	336012	5.00000		80.00- 120.00	100.00
17.125	17.125 (1.000)	88	48062			0.00- 44.50	14.30
* 56 Chlorobenzene-d5						CAS #: 3114-55-4	
22.042	22.042 (1.000)	117	278080	5.00000		80.00- 120.00	100.00
22.015	22.042 (1.000)	82	130874			16.61- 76.61	47.06
$ 37 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.548	16.548 (1.050)	65	134625	5.18181	5.182	80.00- 120.00	100.00
16.548	16.548 (1.050)	67	60214			19.91- 79.91	44.73
$ 47 Toluene-d8						CAS #: 2037-26-5	
19.629	19.629 (1.146)	98	266173	4.90272	4.903	80.00- 120.00	100.00
19.629	19.629 (1.146)	70	29188			0.00- 41.04	10.97

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.629	19.629 (1.146)	100	166478			32.99- 92.99	62.55
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	141302	4.56120	4.561	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	158959			84.02- 144.02	112.50
23.548	23.548 (1.068)	176	138298			67.56- 127.56	97.87

Report Date: 05-Oct-2015 13:37

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100506sim.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: mjs
Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: Humid

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	81342	48805	113879	78721	-3.22
40 1,4-Difluorobenze	339188	203513	474863	336012	-0.94
56 Chlorobenzene-d5	289088	173453	404723	278080	-3.81

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Level: LOW Operator: mjs
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 37 1,2-Dichloroethane	5.000	5.182	103.64	70-130
$ 47 Toluene-d8	5.000	4.903	98.05	70-130
$ 66 Bromofluorobenzene	5.000	4.561	91.22	70-130

Data File: /chem/msdv.i/05Oct2015.b/v100506sim.d

Date : 05-OCT-2015 12:51

Client ID: Lab Blank

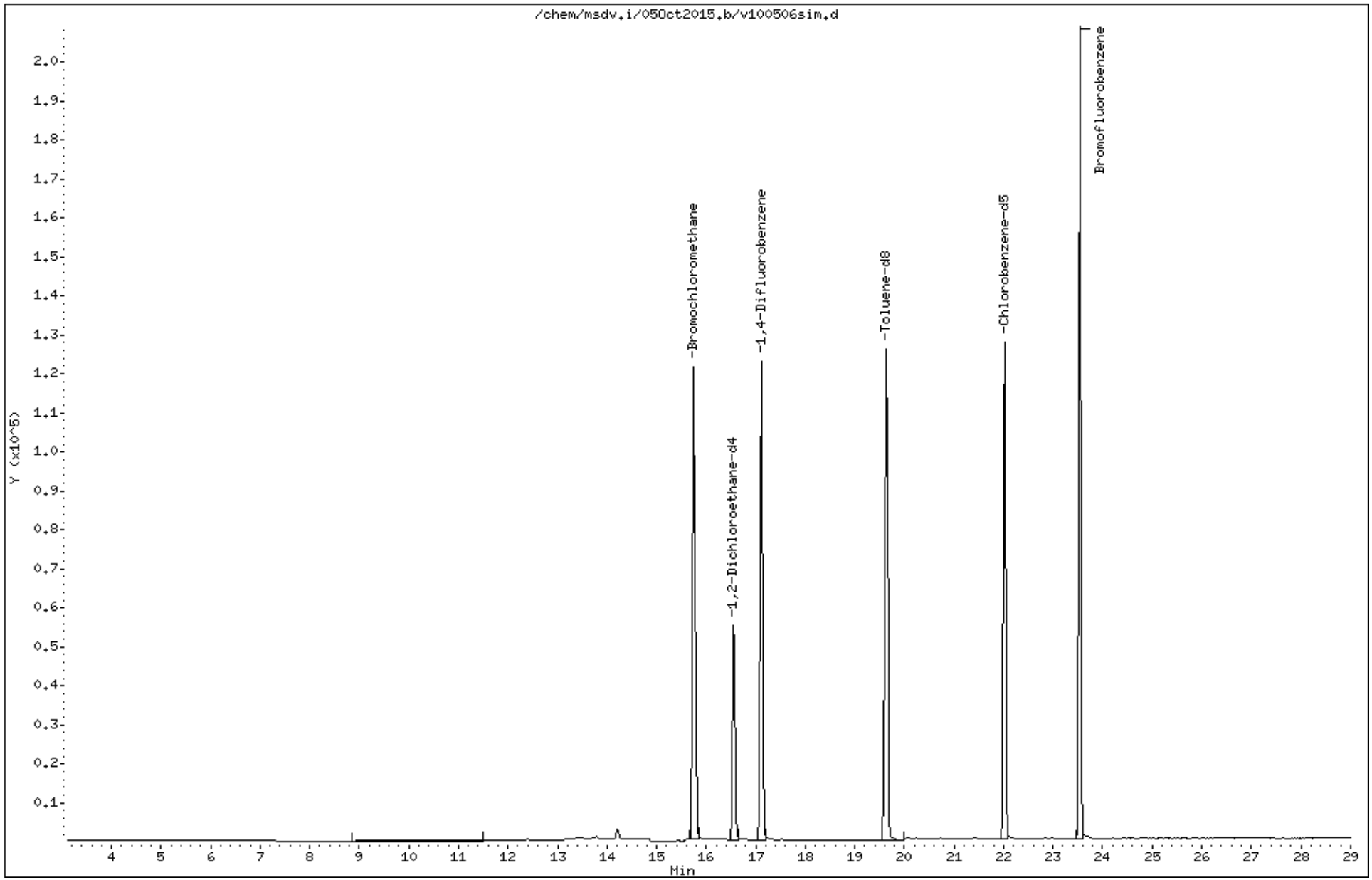
Instrument: msdv.i

Sample Info: 250mL# 35248; Lab Blank; Lab Blank

Operator: mjs

Column phase: RTx-624

Column diameter: 0.32



LEVEL-IV VALIDATABLE

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 1509512

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	TOTAL OUT
01	1-AA(092215)	99		99		97				0
02	1-AA(092215)	104		98		92				0
03	2-AA(092215)	106		102		93				0
04	2-AA(092215)	106		98		94				0
05	6-IA(092215)	100		96		101				0
06	6-IA(092215)	102		99		97				0
07	1-IA(092215)	98		95		95				0
08	1-IA(092215)	103		100		97				0
09	5-IA(092215)	104		97		98				0
10	5-IA(092215)	105		100		94				0
11	2-IA(092215)	104		102		103				0
12	2-IA(092215)	102		100		100				0
13	3-IA(092215)	98		100		98				0
14	3-IA(092215)	101		100		99				0
15	4-IA(092215)	96		96		96				0
16	4-IA(092215)	104		99		99				0
17	Lab Blank	100		96		93				0
18	Lab Blank	104		98		91				0
19	CCV	92		98		100				0
20	CCV	102		99		98				0
21	LCS	98		100		95				0
22	LCSD	96		97		93				0
23	LCS	101		100		99				0
24	LCSD	102		98		93				0

Surrogate Recovery Limits

1,2-Dichloroethane-d4 70 - 130
Toluene-d8 70 - 130
4-Bromofluorobenzene 70 - 130

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS SIM/Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD | SDG No: 1509512

Lab File ID: v100502.d | Date Analyzed: 10/05/2015

Instrument ID: msdv.i | Time Analyzed: 09:23 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	294231		22.03		340477		17.11		78102		15.74	
	UPPER LIMIT	411923		22.36		476668		17.44		109343		16.07	
	LOWER LIMIT	176539		21.70		204286		16.78		46861		15.41	
	CLIENT SAMPLE NO												
01	1-AA(092215)	279884		22.03		326689		17.11		72211		15.74	
03	2-AA(092215)	281133		22.03		322308		17.11		67373		15.74	
05	6-IA(092215)	286474		22.03		319649		17.11		72818		15.74	
07	1-IA(092215)	294034		22.03		327437		17.11		70745		15.74	
09	5-IA(092215)	284546		22.03		326480		17.11		68043		15.74	
11	2-IA(092215)	280365		22.03		308677		17.11		66927		15.74	
13	3-IA(092215)	290767		22.03		319904		17.11		71046		15.74	
15	4-IA(092215)	282119		22.03		323339		17.11		72446		15.74	
17	Lab Blank	280639		22.03		334604		17.11		71290		15.74	
19	CCV	294231		22.03		340477		17.11		78102		15.74	
21	LCS	304058		22.03		340419		17.11		74712		15.74	
22	LCSD	306226		22.03		340516		17.11		76222		15.74	
25													
26													
27													
28													
29													
30													
31													
32													
33													
34													
35													
36													
37													
38													
39													
40													
41													

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS SIM/Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD | SDG No: 1509512

Lab File ID: v100502.d | Date Analyzed: 10/05/2015

Instrument ID: msdv.i | Time Analyzed: 09:23 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	294231		22.03		340477		17.11		78102		15.74	
	UPPER LIMIT	411923		22.36		476668		17.44		109343		16.07	
	LOWER LIMIT	176539		21.70		204286		16.78		46861		15.41	
	CLIENT SAMPLE NO												
42													
43													
44													

'Area Upper Limit=+40% of internal standard area'

'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT

RT Lower Limit=-0.33 minutes of internal standard RT

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS SIM/Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD | SDG No: 1509512

Lab File ID: v100502sim.d | Date Analyzed: 10/05/2015

Instrument ID: msdv.i | Time Analyzed: 09:23 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	289088		22.04		339188		17.12		81342		15.76	
	UPPER LIMIT	404723		22.37		474863		17.45		113879		16.09	
	LOWER LIMIT	173453		21.71		203513		16.79		48805		15.43	
	CLIENT SAMPLE NO												
02	1-AA(092215)	274604		22.04		334103		17.12		77893		15.76	
04	2-AA(092215)	274560		22.04		329616		17.12		75588		15.76	
06	6-IA(092215)	280621		22.04		329470		17.12		78508		15.76	
08	1-IA(092215)	279337		22.04		326870		17.12		76750		15.76	
10	5-IA(092215)	275565		22.04		324079		17.12		74946		15.76	

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

Modified EPA Method TO-15 GC/MS SIM/Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD | SDG No: 1509512

Lab File ID: v100502sim.d | Date Analyzed: 10/05/2015

Instrument ID: msdv.i | Time Analyzed: 09:23 AM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	289088		22.04		339188		17.12		81342		15.76	
	UPPER LIMIT	404723		22.37		474863		17.45		113879		16.09	
	LOWER LIMIT	173453		21.71		203513		16.79		48805		15.43	
	CLIENT SAMPLE NO												
12	2-IA(092215)	275757		22.04		323117		17.12		76091		15.76	
14	3-IA(092215)	280308		22.04		322977		17.12		77278		15.76	
16	4-IA(092215)	274388		22.04		326015		17.12		77182		15.76	
18	Lab Blank	278080		22.04		336012		17.12		78721		15.76	
20	CCV	289088		22.04		339188		17.12		81342		15.76	
23	LCS	290032		22.04		341266		17.12		81473		15.76	
24	LCSD	290224		22.04		343324		17.12		82797		15.76	
25													
26													
27													
28													
29													
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37													
38													
39													
40													
41													
42													
43													
44													

* Designates values outside of QC limits

'Area Upper Limit=+40% of internal standard area'
'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT
RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: v100504.d & v100503.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 10/5/15 & 10/5/15

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
79-00-5	1,1,2-Trichloroethane	ND		ND		0	
75-35-4	1,1-Dichloroethene	ND		ND		0	
95-63-6	1,2,4-Trimethylbenzene	95		92		3.2	
107-06-2	1,2-Dichloroethane	ND		ND		0	
71-43-2	Benzene	ND		ND		0	
67-66-3	Chloroform	ND		ND		0	
156-59-2	cis-1,2-Dichloroethene	ND		ND		0	
100-41-4	Ethyl Benzene	ND		ND		0	
108-38-3	m,p-Xylene	ND		ND		0	
75-09-2	Methylene Chloride	102		104		1.9	
95-47-6	o-Xylene	ND		ND		0	
127-18-4	Tetrachloroethene	ND		ND		0	
108-88-3	Toluene	ND		ND		0	
156-60-5	trans-1,2-Dichloroethene	ND		ND		0	
79-01-6	Trichloroethene	ND		ND		0	
75-01-4	Vinyl Chloride	ND		ND		0	

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: v100504sim.d & v100503sim.d

Lab Sample ID: &

Dilution: 1.00 & 1.00

Client Sample ID: LCS & LCSD

Date Analyzed: 10/5/15 & 10/5/15

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
79-00-5	1,1,2-Trichloroethane	100		101		1.0	
75-35-4	1,1-Dichloroethene	100		101		1.0	
95-63-6	1,2,4-Trimethylbenzene	ND		ND		0	
107-06-2	1,2-Dichloroethane	115		116		0.86	
71-43-2	Benzene	96		96		0	
67-66-3	Chloroform	109		110		0.91	
156-59-2	cis-1,2-Dichloroethene	118		119		0.84	
100-41-4	Ethyl Benzene	111		106		4.6	
108-38-3	m,p-Xylene	108		101		6.7	
75-09-2	Methylene Chloride	ND		ND		0	
95-47-6	o-Xylene	112		103		8.4	
127-18-4	Tetrachloroethene	95		96		1.0	
108-88-3	Toluene	104		102		1.9	
156-60-5	trans-1,2-Dichloroethene	81		83		2.4	
79-01-6	Trichloroethene	94		94		0	
75-01-4	Vinyl Chloride	111		110		0.90	

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2015 17:05
End Cal Date : 29-SEP-2015 21:58
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/29Sep2015.b/v15l0929a.m
Cal Date : 30-Sep-2015 13:05 ghehir
Curve Type : Average

Calibration File Names:
Level 5: /chem/msdv.i/29Sep2015.b/v092906.d
Level 6: /chem/msdv.i/29Sep2015.b/v092907.d
Level 7: /chem/msdv.i/29Sep2015.b/v092908.d
Level 8: /chem/msdv.i/29Sep2015.b/v092909.d
Level 9: /chem/msdv.i/29Sep2015.b/v092910.d
Level 10: /chem/msdv.i/29Sep2015.b/v092911.d
Level 11: /chem/msdv.i/29Sep2015.b/v092912.d
Level 12: /chem/msdv.i/29Sep2015.b/v092913.d

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	RRF	% RSD
	20.000 Level 11	40.000 Level 12						
1 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
208 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
2 Freon 152A	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
3 Propylene	+++++	+++++	4.09989	2.86113	2.65452	2.44148		
	2.55770	2.44359					2.84305	22.344
4 Dichlorodifluoromethane/Fr12	+++++	+++++	4.49195	4.19035	4.15832	3.75357		
	4.00029	3.83096					4.07091	6.614
5 Freon 22	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
6 Freon 114	+++++	3.09593	3.97848	3.33148	3.62874	3.11442		
	3.31447	3.22951					3.38472	9.346

Eurofins Air Toxics Inc.

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Cal Date : 30-Sep-2015 13:05 ghehir
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12						
7 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
8 Chloromethane	+++++	4.10376	3.65870	3.13892	3.27299	2.90997		
	3.07350	2.83425					3.28458	13.729
9 Butane	+++++	+++++	0.63759	0.58361	0.63290	0.52271		
	0.56320	0.55860					0.58310	7.705
10 Vinyl Chloride	+++++	1.87306	2.37945	2.02125	2.36540	2.12346		
	2.25658	2.20164					2.17441	8.457
11 1,3-Butadiene	+++++	4.27409	3.04241	2.58846	2.77643	2.40288		
	2.54506	2.49938					2.87553	22.672
12 Bromomethane	+++++	1.41413	1.33909	1.14493	1.38497	1.23567		
	1.29688	1.26678					1.29749	7.108
13 Vinyl Bromide	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
14 Freon 21	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
15 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
16 Pentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Eurofins Air Toxics Inc.

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Cal Date : 30-Sep-2015 13:05 ghehir
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12						
17 Chloroethane	+++++	+++++	0.90245	0.81069	0.97173	0.85625		
	0.91607	0.89812					0.89255	6.131
18 Isopentane	+++++	+++++	3.34877	2.64226	2.61796	2.28374		
	2.39547	2.33927					2.60458	15.091
19 Diethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
20 Trichlorofluoromethane/Fr11	4.66348	4.35954	4.99175	4.52591	4.79742	4.07149		
	4.32892	4.18283					4.49017	6.993
21 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
22 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
23 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
24 Ethanol	+++++	+++++	+++++	1.19035	1.45063	1.30228		
	1.37782	1.32816					1.32985	7.243
25 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
26 Acetonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Eurofins Air Toxics Inc.

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Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12						
27 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
28 Freon 113	3.25749	3.57862	3.54627	3.28644	3.42380	2.97975		
	3.13119	3.02879					3.27904	6.884
29 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
30 1,1-Dichloroethene	+++++	1.66086	1.15352	1.09570	1.15483	1.03208		
	1.06662	1.03120					1.17069	18.971
31 Acetone	+++++	+++++	2.30163	1.76108	1.53268	1.34847		
	1.48280	1.45047					1.64619	21.206
32 Acrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
33 Carbon Disulfide	+++++	+++++	5.19640	4.69633	5.08578	4.44583		
	4.65901	4.60160					4.78083	6.148
34 2-Propanol	+++++	+++++	5.25674	5.71053	6.30757	5.66545		
	6.04917	5.92998					5.81991	6.221
35 3-Chloroprene	+++++	0.68302	0.63500	0.58130	0.68461	0.65404		
	0.68334	0.65607					0.65391	5.684
36 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

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Cal Date : 30-Sep-2015 13:05 ghehir
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12						
37 Methylene Chloride	+++++	2.22334	1.65579	1.43478	1.52606	1.31843		
	1.43687	1.36087					1.56516	19.848
38 tert-butyl alcohol	+++++	+++++	7.15325	6.28704	6.41939	5.77459		
	6.11034	5.95301					6.28294	7.710
39 MTBE	+++++	5.96777	5.49291	4.98117	5.16656	4.51389		
	4.69891	4.51100					5.04746	10.724
40 trans-1,2-Dichloroethene	+++++	1.35698	1.27912	1.27366	1.18937	1.07485		
	1.12509	1.07478					1.19626	9.239
41 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
42 Ethyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
43 Hexane	+++++	9.49207	6.66256	5.43065	5.42868	4.89380		
	5.09554	4.94773					5.99300	27.614
44 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
45 Isopropyl ether	+++++	+++++	13.61351	12.03552	13.11253	11.51773		
	12.31853	11.72666					12.38741	6.608
46 1,1-Dichloroethane	+++++	4.99559	4.66052	4.17763	4.49320	3.91257		
	4.19655	4.02939					4.35221	8.805

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

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Origin : Disabled
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Integrator : HP RTE
Method file : /chem/msdv.i/29Sep2015.b/v15l0929a.m
Cal Date : 30-Sep-2015 13:05 ghehir
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12						
47 Vinyl Acetate	+++++	+++++	0.31633	0.36887	0.42995	0.39780		
	0.40771	0.42474					0.39090	10.881
48 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
49 Ethyl-tert-butyl ether	+++++	+++++	10.66985	9.53538	10.27799	9.07697		
	9.72820	9.50123					9.79827	5.902
50 cis-1,2-Dichloroethene	+++++	1.51882	1.47601	1.25984	1.32788	1.16264		
	1.21414	1.16836					1.30396	11.056
51 2-Butanone	+++++	+++++	0.82192	0.78035	0.87910	0.80328		
	0.83424	0.82445					0.82389	4.018
52 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
53 Tetrahydrofuran	+++++	+++++	4.68884	4.17455	4.55846	3.94872		
	4.23237	4.14848					4.29190	6.459
55 Chloroform	+++++	4.06245	4.13609	3.75618	3.83267	3.33107		
	3.58656	3.42404					3.73272	8.184
56 1,1-Dicholoropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
57 Cyclohexane	+++++	2.90127	2.44065	2.42762	2.52337	2.15780		
	2.28244	2.19899					2.41888	10.394

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2015 17:05
End Cal Date : 29-SEP-2015 21:58
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/29Sep2015.b/v15l0929a.m
Cal Date : 30-Sep-2015 13:05 ghehir
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12						
58 1,1,1-Trichloroethane	4.32509	4.29672	4.40625	4.27482	4.35842	3.84063		
	3.97078	3.86424					4.16712	5.621
59 Carbon Tetrachloride	2.77895	2.74452	2.14439	2.04229	3.74807	3.37827		
	3.51881	3.45503					2.97629	21.767
60 Ethyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
61 2-Chloroethyl Vinyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
62 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
63 2,2,4-Trimethylpentane	+++++	6.56477	5.96168	5.28330	5.72207	5.03393		
	5.43286	5.31989					5.61693	9.198
64 Benzene	+++++	1.24938	1.17077	1.19038	1.22926	1.16100		
	1.18870	1.09453					1.18343	4.238
66 tert-amyl methyl ether	+++++	+++++	0.29348	0.32072	0.30294	0.27831		
	0.28779	0.27102					0.29238	6.101
67 Methyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
68 1,2-Dichloroethane	+++++	0.73873	0.72185	0.75660	0.79375	0.74618		
	0.75026	0.69821					0.74365	3.994

Eurofins Air Toxics Inc.

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Integrator : HP RTE
Method file : /chem/msdv.i/29Sep2015.b/v15l0929a.m
Cal Date : 30-Sep-2015 13:05 ghehir
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12						
69 Heptane	+++++	1.23176	0.72301	0.66629	0.72343	0.67765		
	0.70368	0.67006					0.77084	26.548
70 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
72 Trichloroethene	0.61896	0.68824	0.53765	0.59884	0.60568	0.57294		
	0.57766	0.54941					0.59367	7.936
73 Methylcyclohexane	+++++	+++++	0.64916	0.69047	0.76684	0.71429		
	0.71937	0.68123					0.70356	5.685
74 1,2-Dichloropropane	+++++	0.70524	0.61943	0.62047	0.65982	0.62754		
	0.63837	0.60088					0.63882	5.397
75 1,4-Dioxane	+++++	0.24283	0.28632	0.28219	0.29813	0.28700		
	0.29424	0.27741					0.28116	6.500
76 Octane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
77 Bromodichloromethane	0.96444	0.95019	0.81897	0.83773	0.91984	0.87088		
	0.88196	0.81801					0.88275	6.497
78 cis-1,3-Dichloropropene	+++++	0.85221	0.68655	0.73019	0.81336	0.74880		
	0.76839	0.72181					0.76019	7.458
79 4-Methyl-2-pentanone	+++++	2.26106	1.90712	2.02846	2.01288	1.93475		
	1.92543	1.82844					1.98545	6.989

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : /chem/msdv.i/29Sep2015.b/v15l0929a.m
Cal Date : 30-Sep-2015 13:05 ghehir
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12						
81 Toluene	+++++	1.78703	1.44416	1.52219	1.54068	1.48455		
	1.48854	1.40139					1.52408	8.199
82 trans-1,3-Dichloropropene	+++++	0.63272	0.67393	0.66474	0.78074	0.73965		
	0.75129	0.74001					0.71187	7.648
83 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
84 1,1,2-Trichloroethane	0.77883	0.70117	0.61271	0.60214	0.64639	0.60167		
	0.61981	0.57606					0.64235	10.386
85 Nonane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
86 Tetrachloroethene	1.06619	0.86037	0.84422	0.83678	0.92772	0.86421		
	0.86609	0.83571					0.88766	8.769
87 2-Hexanone	+++++	+++++	1.01607	0.93052	0.99725	0.97778		
	1.00009	0.98363					0.98422	3.001
88 alpha-pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
89 Dibromochloromethane	1.37886	1.06534	1.03965	1.06635	1.23231	1.12807		
	1.13005	1.10576					1.14330	9.805
90 1,2-Dibromoethane	0.82715	1.01469	0.97997	0.88763	1.01355	0.95153		
	0.93386	0.91128					0.93996	6.855

Eurofins Air Toxics Inc.

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Integrator : HP RTE
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Cal Date : 30-Sep-2015 13:05 ghehir
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12						
91 1,1,1,2-Tetrachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
93 Chlorobenzene	+++++	1.33006	1.30073	1.36039	1.41688	1.38853		
	1.37450	1.31917					1.35575	3.043
94 cis-1,4-dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
95 Ethyl Benzene	+++++	0.62243	0.70234	0.57972	0.68717	0.64331		
	0.64878	0.63625					0.64571	6.300
96 m,p-Xylene	+++++	0.78994	0.66482	0.67242	0.71662	0.70053		
	0.69907	0.68235					0.70368	5.968
97 Bromobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
98 trans-1,4-dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
99 Decane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
100 o-Xylene	+++++	0.81540	0.61381	0.60240	0.67543	0.63627		
	0.66209	0.63814					0.66336	10.801
101 Styrene	+++++	1.11797	1.06925	1.01181	1.07745	1.04094		
	1.05628	1.04142					1.05930	3.176

Eurofins Air Toxics Inc.

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Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12						
102 Bromoform	1.02981	0.91537	1.05450	0.95761	1.18218	1.11508		
	1.14466	1.11207					1.06391	8.706
103 Cumene	+++++	2.13121	1.92593	1.85958	1.96785	1.93204		
	2.02307	1.96422					1.97199	4.362
104 Bis(2-Chloroethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
105 1,2,3-Trichloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
107 2-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
108 1,1,2,2-Tetrachloroethane	1.34674	1.29432	1.08116	1.10804	1.17860	1.07688		
	1.10324	1.04385					1.15410	9.577
109 4-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
110 Undecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
111 Propylbenzene	+++++	2.61317	1.82095	1.68573	1.82912	1.78620		
	1.88138	1.89018					1.92953	16.017
112 Indan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Eurofins Air Toxics Inc.

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Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD	
	20.000 Level 11	40.000 Level 12							
113 4-Ethyltoluene	+++++	2.15522	1.42929	1.33919	1.39457	1.28968			
	1.35181	1.34677					1.47236	20.668	
114 1,3,5-Trimethylbenzene	+++++	2.13847	1.41614	1.18457	1.31816	1.21250			
	1.17685	1.11602					1.36610	25.988	
115 tert-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
116 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
117 Indene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
118 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
119 sec-Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
120 1,2,4-Trimethylbenzene	2.19236	2.07476	1.36109	1.31235	1.31986	1.11033			
	1.03192	0.94540					1.41851	32.873	<-
121 1,2,3-trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
122 1,3-Dichlorobenzene	0.97410	1.10465	0.83387	0.88866	0.93407	0.88777			
	0.91697	0.91185					0.93149	8.672	

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

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Integrator : HP RTE
Method file : /chem/msdv.i/29Sep2015.b/v15l0929a.m
Cal Date : 30-Sep-2015 13:05 ghehir
Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12						
123 Butylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
124 1,4-Dichlorobenzene	1.03493	1.19460	0.86047	0.76860	0.82360	0.79971		
	0.82487	0.82316					0.89124	16.461
125 Dodecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
126 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
127 alpha-chlorotoluene	+++++	+++++	1.08986	1.11728	1.23775	1.23840		
	1.28696	1.28487					1.20919	7.030
128 1,2-Dichlorobenzene	1.44708	1.02406	0.80669	0.78227	0.81638	0.78682		
	0.81445	0.81320					0.91137	25.256
129 1,2-dibromo-3-chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
130 1,2,3-trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
131 1,2,4-Trichlorobenzene	0.97012	0.75050	0.82209	0.82480	0.72722	0.74344		
	0.71715	0.64968					0.77563	12.490
132 Hexachlorobutadiene	0.74813	0.70895	0.56698	0.55940	0.49701	0.52068		
	0.55134	0.56270					0.58940	15.217

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Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12						
133 Naphthalene	+++++	+++++	+++++	0.86859	0.55008	0.60419		
	0.78113	0.59338					0.67947	20.276
204 Butyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
205 2-Heptanone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
206 1-Butanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
207 1-Methoxy-2-Propyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
209 Cyclohexanone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
210 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
211 Cyclopentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
212 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
213 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Eurofins Air Toxics Inc.

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Curve Type : Average

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	___ RRF	% RSD
	20.000 Level 11	40.000 Level 12						
214 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
215 2,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
216 1,2-Dichlorotrifluoroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
217 Freon 123	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
218 Freon 142b	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
$ 65 1,2-Dichloroethane-d4	1.74752	1.69948	1.88248	1.71854	1.72935	1.61186		
	1.82559	1.89191					1.76334	5.466
$ 80 Toluene-d8	0.94932	0.97672	0.92049	0.92847	0.93857	0.93216		
	0.95366	0.94078					0.94252	1.859
$ 106 Bromofluorobenzene	0.49837	0.52308	0.50226	0.48389	0.50342	0.53879		
	0.53196	0.52773					0.51369	3.757

Calibration History

Method : /chem/msdv.i/29Sep2015.b/v15l0929a.m
Start Cal Date: 29-SEP-2015 17:05
End Cal Date : 29-SEP-2015 21:58

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 5 , Cal Amount: 0.05000		
29-SEP-2015 17:05	Level05	/chem/msdv.i/29Sep2015.b/v092906.d
Cal Level: 6 , Cal Amount: 0.10000		
29-SEP-2015 17:52	Level#1	/chem/msdv.i/29Sep2015.b/v092907.d
Cal Level: 7 , Cal Amount: 0.50000		
29-SEP-2015 18:33	HiLoFULLcrv	/chem/msdv.i/29Sep2015.b/v092908.d
Cal Level: 8 , Cal Amount: 1.00000		
29-SEP-2015 19:17	HiLoFULLcrv	/chem/msdv.i/29Sep2015.b/v092909.d
Cal Level: 9 , Cal Amount: 5.00000		
29-SEP-2015 19:51	HiLoFULLcrv	/chem/msdv.i/29Sep2015.b/v092910.d
Cal Level: 10, Cal Amount: 10.00000		
29-SEP-2015 20:36	HiLoFULLcrv	/chem/msdv.i/29Sep2015.b/v092911.d
Cal Level: 11, Cal Amount: 20.00000		
29-SEP-2015 21:15	HiLoFULLcrv	/chem/msdv.i/29Sep2015.b/v092912.d
Cal Level: 12, Cal Amount: 40.00000		
29-SEP-2015 21:58	HiLoFULLcrv	/chem/msdv.i/29Sep2015.b/v092913.d

+------------------+-----------------+--+

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 9

+------------------+-----------------+--+
| Ccal Level: 9 , Ccal Amount: 5.000 |
+==+
|29-SEP-2015 19:51 |HiLoFULLcrv |/chem/msdv.i/29Sep2015.b/v092910a.d |
+------------------+-----------------+--+
| Ccal Level: 9 , Ccal Amount: 5.000 |
+==+
|29-SEP-2015 19:51 |HiLoFULLcrv |/chem/msdv.i/29Sep2015.b/v092910.d |
+------------------+-----------------+--+

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

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End Cal Date : 29-SEP-2015 21:58
Quant Method : ISTD
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Integrator : HP RTE
Method file : /chem/msdv.i/29Sep2015.b/v15l0929a.m
Cal Date : 30-Sep-2015 13:05 ghehir
Curve Type : Average

GH 9/29/15

Calibration File Names:
Level 5: /chem/msdv.i/29Sep2015.b/v092906.d
Level 6: /chem/msdv.i/29Sep2015.b/v092907.d
Level 7: /chem/msdv.i/29Sep2015.b/v092908.d
Level 8: /chem/msdv.i/29Sep2015.b/v092909.d
Level 9: /chem/msdv.i/29Sep2015.b/v092910.d
Level 10: /chem/msdv.i/29Sep2015.b/v092911.d
Level 11: /chem/msdv.i/29Sep2015.b/v092912.d
Level 12: /chem/msdv.i/29Sep2015.b/v092913.d

10/1/15

Compound	0.05000 Level 5	0.10000 Level 6	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	20.000 Level 11	40.000 Level 12	RRF	% RSD
1 Freon 134a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
208 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
2 Freon 152A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++		
3 Propylene	+++++	+++++	4.09989	2.86113	2.65452	2.44148	2.55770	2.44359	2.84305	22.344
4 Dichlorodifluoromethane/Fr12	+++++	+++++	4.49195	4.19035	4.15832	3.75357	4.00029	3.83096	4.07091	6.614
5 Freon 22	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
6 Freon 114	+++++	3.09593	3.97848	3.33148	3.62874	3.11442	3.31447	3.22951	3.38472	9.346

Curve Name: V15L0929A

Initial Calibration Narrative

Tune Files: v092901

ICAL: One(1) out; 1,2,4-Trimethylbenzene @ 32.8%.

ICV: One (2) out; Carbon Tetrachloride @ 158% and Naphthalene@ 173% Multiple compounds out of DOD limits and In House control Limits; evaluate per PID.

File # V092916. Standard 2736-276; 5.0ppbv (50ppbv); 25mL load.

DOD for Ethanol and alpha-chlorotoluene is prohibited at this time due to lack of LOD for fourth quarter 2015.

BTEX RL Spike: v092907x.

- **The reporting limit for alpha-Chlorotoluene has been raised from 0.1ppbv to 0.5ppbv for the duration of the 2015 MDL due to poor peak quality at the normal RL at the time the MDL was run.**
- **The reporting limits for Freon 12 has been raised from 0.1ppbv to 0.5ppbv due to poor peak quality at the RL.**
- **The reporting limits for Ethanol has been raised from 0.5ppbv to 1.0ppbv due to poor peak quality at the RL.**

Naphthalene was calibrated at 0.1ppbv~, 0.5ppbv, 1.0ppbv, 2.0ppbv, and 4.0ppbv.

Naphthalene is expired in the second source standard: CAR: F9A2A2185

~The quantitation ion peak (128 amu) is sufficiently resolved for accurate quantification of Naphthalene at the special reporting limit of 0.1ppbv. However, the secondary mass ion peak (127 amu) for Naphthalene is not completely baseline-resolved. Identification of Naphthalene based on the presence and abundance ratio of confirmation ion is reliable at the lowest concentrations even when insufficient baseline resolution of the secondary mass ion peak (127 amu). The spectrum of Naphthalene in this ICAL point will be used as the reference to determine the ion ratio target in the samples for this ICAL.

The following compounds were calibrated down to a special RL of 0.05ppbv:

Freon 11
Freon 113
1,1,1,-Trichloroethane
Carbon Tetrachloride
Trichloroethene
Bromodichloromethane
1,1,2-Trichloroethane
Tetrachloroethane
Dibromochloromethane
1,2-Dibromoethane
Bromoform
1,1,2,2-Tetrachloroethane
1,2,4-Trimethylbenzene
1,3 Dichlorobenzene
1,2 Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene

MDL 3/2/15, 3/3/15, & 4/9/2015.
Special RL MDL for 1,2,4-Trichlorobenzene on 4/15/2015.

Naph Expired in Stds.

Eurofins Air Toxics, Inc. **MSD-V** CAR# F942A2185 **Logbook #2725**

BFB Verification of 176/174 m/z Ratio:	409177 / 423637
Tekmar Purge Flow:	
Vacuum:	NA 9/29/15

IS/S Std. #:	2936-260	Exp. Date:	12/22/15
BCM	LL: 910777	SIM:	100126
1,4-DFB	412267		412832
CB-d5	371144		352453

Verified CCV IS vs ICAL mid-point (-40%D): GH

File ID:	V092910
Compound:	x0186
Initials:	GH

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = (396994) x (5.00) = 4.979
(412267) (0.94252)

SOP# (Circle one): 6 / (83) / (38) / 91 / 109 Method (Circle one): TO-14A/TO-15/TO-17 Reported Result: 4.979

Method Name: V15209291A / V15509291A.m

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	V092901	BFB Tune Check	2299-805	50ng	2.0 ml	1.0	DB	9/29/15	1321	GH	
2	✓	02	ICAL Level 1	2736-248 08 clean	0.003 ppbv	15 ml	1.00			1355	GH	Exp. 11/20/15*
3	✓	03	2	2736-248	0.005 ppbv	25 ml	1.00			1434	GH	
4	✓	04	3		0.01 ppbv	50 ml	1.00			1509	GH	
5	✓	05	4		0.02 ppbv	100 ml	1.00			1544	GH	
6	✓	06	5		0.05 ppbv	250 ml	1.00	GH		1705	GH	
7	✓	07	6	2736-249	0.1 ppbv	25 ml	1.00	GH		1752	GH	Exp. 11/20/15*
8	✓	08	7		0.5 ppbv	125 ml	1.00	GH		1833	GH	
9	✓	09	9		1.0 ppbv	250 ml	1.00	GH		1917	GH	
10	✓	10	9	2736-233	5.0 ppbv	25 ml	1.00	GH		~~1946~~ 1951	GH	Exp. 11/20/15*
11	✓	11	10		10 ppbv	50 ml	1.00	GH		2036	GH	
12	✓	12	11		20 ppbv	100 ml	1.00	GH		2115	GH	
13	✓	13	12		40 ppbv	200 ml	1.00	GH		2158	GH	
14	✓	14	System blank	35298	humid	250 ml	1.00	GH		2238	GH	

Reviewed

9/29/15
Date

Eurofins Air Toxics, Inc. **MSD-V** **Logbook #2725**

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
15	✓	v0929l5	System blank	35249	humid	250mL	1.00	GH	9-29-15	2312	GH	
16	✓	16	ICV	2736-376	5.0ppbv	25mL	1.00	GH	↓	0952	GH	100% Exp. 10/30/15 *
17	X	17	System blank	35249	humid	250mL	1.00	GH		1054	GH	
18	✓	18	System blank	35249	humid	250mL	1.00	GH		1150	GH	
19		19	LOD	2736-249	0.06ppbv	15mL	1.00	GH		1224		Exp. 11/28/15
20		20	LOD	↓	0.3ppbv	75mL	1.00	GH	↓	1359		
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36											GH 9/30/15	

Reviewed

9/30/15
Date

Modified EPA Methods TO-14A/TO-15 Low Level
Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
3-Chloropropene
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
2,2,4-Trimethylpentane
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/29Sep2015.b/v092916.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 30-SEP-2015 09:52
Operator : gh Inst ID: msdv.i
Smp Info : 25mL #2716-276;ICV;ICV
Misc Info : 5.0ppbv (25ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/29Sep2015.b/v15l0929a.m
Meth Date : 30-Sep-2015 13:05 ghehir Quant Type: ISTD
Cal Date : 29-SEP-2015 21:58 Cal File: v092913.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 54 Bromochloromethane						CAS #: 74-97-5	
15.743	15.743 (1.000)	130	82864	5.00000		80.00- 120.00	100.00
15.743	15.743 (1.000)	128	65098			48.04- 108.04	78.56
15.743	15.743 (1.000)	49	269933			284.77- 344.77	325.75
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.111	17.111 (1.000)	114	375297	5.00000		80.00- 120.00	100.00
17.111	17.111 (1.000)	88	54525			0.00- 44.16	14.53
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.029	22.029 (1.000)	117	339840	5.00000		80.00- 120.00	100.00
22.029	22.029 (1.000)	82	172168			18.70- 78.70	50.66
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.562	16.562 (1.052)	65	139876	4.78642	4.786	80.00- 120.00	100.00
16.562	16.562 (1.052)	67	67679			19.41- 79.41	48.38
$ 80 Toluene-d8						CAS #: 2037-26-5	
19.638	19.638 (1.148)	98	354311	5.00828	5.008	80.00- 120.00	100.00
19.638	19.615 (1.148)	70	40521			0.00- 40.74	11.44

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.638	19.638 (1.148)	100	239767			34.93- 94.93	67.67
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.535	23.535 (1.068)	174	166028	4.75529	4.755	80.00- 120.00	100.00
23.535	23.535 (1.068)	95	210944			94.06- 154.06	127.05
23.535	23.535 (1.068)	176	165292			68.95- 128.95	99.56
3 Propylene					CAS #: 115-07-1		
4.447	4.485 (0.282)	41	247278	5.24813	5.248	80.00- 120.00	100.00
4.485	4.447 (0.285)	42	177844			43.41- 103.41	71.92
4.485	4.447 (0.285)	39	168060			36.60- 96.60	67.96
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
4.976	4.976 (0.316)	85	399702	5.92447	5.924	80.00- 120.00	100.00
5.013	5.013 (0.318)	87	128531			1.54- 61.54	32.16
6 Freon 114					CAS #: 76-14-2		
6.524	6.486 (0.414)	135	336999	6.00773	6.008	80.00- 120.00	100.00
6.524	6.524 (0.414)	137	105302			0.98- 60.98	31.25
6.486	6.486 (0.412)	85	375332			89.42- 149.42	111.37
8 Chloromethane					CAS #: 74-87-3		
6.826	6.826 (0.434)	50	310712	5.70797	5.708	80.00- 120.00	100.00
6.826	6.864 (0.434)	52	95930			2.41- 62.41	30.87
9 Butane					CAS #: 106-97-8		
7.658	7.658 (0.486)	58	56819	5.87967	5.880	80.00- 120.00	100.00
7.658	7.658 (0.486)	43	497208			830.80- 890.80	875.07
10 Vinyl Chloride					CAS #: 75-01-4		
7.813	7.813 (0.496)	62	222936	6.18648	6.186	80.00- 120.00	100.00
7.813	7.813 (0.496)	64	61880			0.00- 57.21	27.76
11 1,3-Butadiene					CAS #: 106-99-0		
8.061	8.061 (0.512)	54	246101	5.16416	5.164	80.00- 120.00	100.00
8.061	8.061 (0.512)	39	210817			60.61- 120.61	85.66
12 Bromomethane					CAS #: 74-83-9		
9.631	9.655 (0.612)	94	122332	5.68905	5.689	80.00- 120.00	100.00
9.655	9.655 (0.613)	96	114505			65.52- 125.52	93.60
17 Chloroethane					CAS #: 75-00-3		
10.161	10.161 (0.645)	64	92468	6.25118	6.251	80.00- 120.00	100.00
10.161	10.161 (0.645)	66	24341			0.00- 56.47	26.32

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
18 Isopentane					CAS #: 78-78-4		
10.330	10.330 (0.656)	57	236694	5.48345	5.483	80.00- 120.00	100.00
10.330	10.330 (0.656)	43	392608			135.48- 195.48	165.87
10.330	10.330 (0.656)	42	333202			110.86- 170.86	140.77
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.980	10.980 (0.697)	101	429831	5.77616	5.776	80.00- 120.00	100.00
11.004	11.004 (0.699)	103	289528			33.91- 93.91	67.36
24 Ethanol					CAS #: 64-17-5		
11.919	11.919 (0.757)	45	131497	5.96647	5.966	80.00- 120.00	100.00
11.919	11.919 (0.757)	46	53410			6.93- 66.93	40.62
11.919	11.919 (0.757)	43	23210			0.00- 45.81	17.65
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.386	12.386 (0.787)	98	106324	5.48017	5.480	80.00- 120.00	100.00
12.386	12.386 (0.787)	61	401756			350.72- 410.72	377.86
12.386	12.386 (0.787)	96	165821			129.58- 189.58	155.96
28 Freon 113					CAS #: 76-13-1		
12.413	12.413 (0.788)	151	300260	5.52528	5.525	80.00- 120.00	100.00
12.413	12.413 (0.788)	153	196566			33.77- 93.77	65.47
12.413	12.413 (0.788)	101	344135			82.21- 142.21	114.61
31 Acetone					CAS #: 67-64-1		
12.633	12.660 (0.802)	58	136316	4.99657	4.996	80.00- 120.00	100.00
12.633	12.660 (0.802)	43	414475			282.00- 342.00	304.05
33 Carbon Disulfide					CAS #: 75-15-0		
12.743	12.743 (0.809)	76	387805	4.89457	4.894	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.210	13.210 (0.839)	76	61057	5.63404	5.634	80.00- 120.00	100.00
13.210	13.210 (0.839)	41	357779			599.84- 659.84	585.98
34 2-Propanol					CAS #: 67-63-0		
13.018	13.018 (0.827)	45	589183	6.10855	6.108	80.00- 120.00	100.00
13.018	13.018 (0.827)	43	96417			0.00- 46.02	16.36
13.018	13.018 (0.827)	59	18414			0.00- 33.30	3.13
37 Methylene Chloride					CAS #: 75-09-2		
13.484	13.484 (0.856)	84	135792	5.23503	5.235	80.00- 120.00	100.00
13.484	13.484 (0.856)	49	398986			254.12- 314.12	293.82
13.484	13.484 (0.856)	51	114509			56.45- 116.45	84.33
39 MTBE					CAS #: 1634-04-4		
13.841	13.841 (0.879)	73	448180	5.35777	5.358	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
39 MTBE (continued)							
13.841	13.841 (0.879)	57	195984			12.63- 72.63	43.73
13.841	13.841 (0.879)	41	176952			8.96- 68.96	39.48
40 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.869	13.896 (0.881)	98	93341	4.70814	4.708	80.00- 120.00	100.00
13.869	13.869 (0.881)	61	308813			297.51- 357.51	330.84
13.869	13.896 (0.881)	96	148147			130.03- 190.03	158.72
43 Hexane					CAS #: 110-54-3		
14.226	14.226 (0.904)	57	514929	5.18450	5.184	80.00- 120.00	100.00
14.226	14.226 (0.904)	43	357342			42.37- 102.37	69.40
14.226	14.226 (0.904)	86	38112			0.00- 38.41	7.40
46 1,1-Dichloroethane					CAS #: 75-34-3		
14.583	14.582 (0.926)	63	406906	5.64142	5.641	80.00- 120.00	100.00
14.583	14.582 (0.926)	65	113114			0.00- 57.42	27.80
47 Vinyl Acetate					CAS #: 108-05-4		
14.637	14.637 (0.930)	86	43485	6.71239	6.712	80.00- 120.00	100.00
14.637	14.637 (0.930)	42	56157			210.64- 270.64	129.14
14.637	14.637 (0.930)	43	879457			3446.49-3506.49	2022.44
50 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.424	15.423 (0.980)	98	133017	6.15528	6.155	80.00- 120.00	100.00
15.424	15.423 (0.980)	61	380972			267.29- 327.29	286.41
15.424	15.423 (0.980)	96	205520			128.72- 188.72	154.51
51 2-Butanone					CAS #: 78-93-3		
15.424	15.423 (0.980)	72	81255	5.95093	5.951	80.00- 120.00	100.00
15.403	15.423 (0.978)	43	706034			804.58- 864.58	868.91
15.403	15.423 (0.978)	57	48663			28.64- 88.64	59.89
53 Tetrahydrofuran					CAS #: 109-99-9		
15.743	15.743 (1.000)	42	406011	5.70811	5.708	80.00- 120.00	100.00
15.743	15.743 (1.000)	71	73384			0.00- 48.89	18.07
15.743	15.743 (1.000)	72	77526			0.00- 47.97	19.09
55 Chloroform					CAS #: 67-66-3		
15.836	15.836 (1.006)	83	343875	5.55877	5.559	80.00- 120.00	100.00
15.836	15.836 (1.006)	85	219468			32.85- 92.85	63.82
57 Cyclohexane					CAS #: 110-82-7		
16.083	16.082 (1.022)	84	224447	5.59892	5.599	80.00- 120.00	100.00
16.083	16.082 (1.022)	56	557139			218.68- 278.68	248.23
16.083	16.082 (1.022)	41	276181			93.43- 153.43	123.05

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
58 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.052	16.052 (1.020)	97	392170	5.67862	5.679	80.00- 120.00	100.00
16.052	16.052 (1.020)	99	248003			32.55- 92.55	63.24
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.267	16.267 (1.033)	119	391563	7.93835	7.938	80.00- 120.00	100.00(R)
16.267	16.267 (1.033)	117	398474			74.89- 134.89	101.76
	Sum of Peak Concentrations =				7.938		
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.535	16.535 (1.050)	56	524459	5.63400	5.634	80.00- 120.00	100.00
16.535	16.535 (1.050)	57	1572805			270.88- 330.88	299.89
16.535	16.535 (1.050)	41	358402			41.84- 101.84	68.34
64 Benzene					CAS #: 71-43-2		
16.562	16.562 (0.968)	78	518200	5.83376	5.834	80.00- 120.00	100.00
16.562	16.562 (0.968)	77	119961			0.00- 52.95	23.15
68 1,2-Dichloroethane					CAS #: 107-06-2		
16.672	16.672 (0.974)	62	314371	5.63205	5.632	80.00- 120.00	100.00
16.672	16.672 (0.974)	64	96868			0.00- 58.12	30.81
69 Heptane					CAS #: 142-82-5		
16.782	16.782 (0.981)	57	315374	5.45076	5.451	80.00- 120.00	100.00
16.782	16.782 (0.981)	100	51036			0.00- 47.88	16.18
16.782	16.782 (0.981)	43	648189			180.46- 240.46	205.53
72 Trichloroethene					CAS #: 79-01-6		
17.523	17.523 (1.024)	130	257924	5.78816	5.788	80.00- 120.00	100.00
17.496	17.523 (1.022)	95	253148			71.46- 131.46	98.15
17.496	17.523 (1.022)	97	164757			35.77- 95.77	63.88
73 Methylcyclohexane					CAS #: 108-87-2		
17.743	17.743 (1.037)	83	312860	5.92439	5.924	80.00- 120.00	100.00
17.743	17.743 (1.037)	98	148037			18.11- 78.11	47.32
17.743	17.743 (1.037)	55	524771			129.45- 189.45	167.73
74 1,2-Dichloropropane					CAS #: 78-87-5		
17.935	17.935 (1.048)	63	280403	5.84788	5.848	80.00- 120.00	100.00
17.935	17.935 (1.048)	62	204836			44.27- 104.27	73.05
17.935	17.935 (1.048)	41	173251			34.00- 94.00	61.79
75 1,4-Dioxane					CAS #: 123-91-1		
18.045	18.045 (1.055)	88	125014	5.92380	5.924	80.00- 120.00	100.00
18.045	18.045 (1.055)	58	158153			101.60- 161.60	126.51
18.045	18.045 (1.055)	57	55187			13.84- 73.84	44.14

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
77 Bromodichloromethane					CAS #: 75-27-4		
18.347	18.347 (1.072)	83	395374	5.96712	5.967	80.00- 120.00	100.00
18.347	18.347 (1.072)	85	248906			33.15- 93.15	62.95
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.145	19.145 (1.119)	75	315780	5.53426	5.534	80.00- 120.00	100.00
19.145	19.145 (1.119)	77	98229			1.23- 61.23	31.11
19.145	19.145 (1.119)	39	240109			46.59- 106.59	76.04
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.346	19.346 (1.131)	43	869681	5.83575	5.836	80.00- 120.00	100.00
19.346	19.346 (1.131)	58	310833			5.80- 65.80	35.74
19.346	19.346 (1.131)	85	74782			0.00- 38.43	8.60
81 Toluene					CAS #: 108-88-3		
19.750	19.772 (1.154)	91	649635	5.67881	5.679	80.00- 120.00	100.00
19.750	19.772 (1.154)	92	386715			28.70- 88.70	59.53
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.212	20.212 (0.918)	75	294243	6.08138	6.081	80.00- 120.00	100.00
20.212	20.212 (0.918)	77	90628			1.04- 61.04	30.80
20.212	20.212 (0.918)	39	215181			45.23- 105.23	73.13
84 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.534	20.534 (0.932)	97	235541	5.39501	5.395	80.00- 120.00	100.00
20.534	20.534 (0.932)	99	147635			33.51- 93.51	62.68
20.534	20.534 (0.932)	83	187435			50.51- 110.51	79.58
86 Tetrachloroethene					CAS #: 127-18-4		
20.714	20.714 (0.940)	166	346633	5.74537	5.745	80.00- 120.00	100.00
20.714	20.714 (0.940)	129	254226			42.44- 102.44	73.34
20.714	20.714 (0.940)	131	246101			39.70- 99.70	71.00
87 2-Hexanone					CAS #: 591-78-6		
20.821	20.821 (0.945)	58	400631	5.98889	5.989	80.00- 120.00	100.00
20.821	20.821 (0.945)	43	794894			168.09- 228.09	198.41
20.821	20.821 (0.945)	100	39437			0.00- 41.01	9.84
89 Dibromochloromethane					CAS #: 124-48-1		
21.180	21.180 (0.961)	129	448662	5.77371	5.774	80.00- 120.00	100.00
21.180	21.180 (0.961)	127	348968			47.32- 107.32	77.78
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.395	21.395 (0.971)	107	378899	5.93076	5.931	80.00- 120.00	100.00
21.395	21.395 (0.971)	109	360309			62.73- 122.73	95.09

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
93 Chlorobenzene					CAS #: 108-90-7		
22.056	22.056 (1.001)	112	530065	5.75234	5.752	80.00- 120.00	100.00
22.056	22.056 (1.001)	114	169073			3.73- 63.73	31.90
22.056	22.056 (1.001)	77	280436			23.21- 83.21	52.91
95 Ethyl Benzene					CAS #: 100-41-4		
22.139	22.139 (1.005)	106	244637	5.57413	5.574	80.00- 120.00	100.00
22.139	22.139 (1.005)	91	780146			282.29- 342.29	318.90
96 m,p-Xylene					CAS #: 108-38-3		
22.303	22.303 (1.012)	106	260075	5.43776	5.438	80.00- 120.00	100.00
22.303	22.303 (1.012)	91	533538			172.44- 232.44	205.15
100 o-Xylene					CAS #: 95-47-6		
22.852	22.852 (1.037)	106	241326	5.35241	5.352	80.00- 120.00	100.00
22.852	22.852 (1.037)	91	533854			182.07- 242.07	221.22
101 Styrene					CAS #: 100-42-5		
22.880	22.880 (1.039)	104	391830	5.44218	5.442	80.00- 120.00	100.00
22.852	22.852 (1.037)	78	199669			19.39- 79.39	50.96
102 Bromoform					CAS #: 75-25-2		
23.174	23.173 (1.052)	173	450630	6.23176	6.232	80.00- 120.00	100.00
23.174	23.173 (1.052)	171	234685			22.28- 82.28	52.08
103 Cumene					CAS #: 98-82-8		
23.277	23.277 (1.057)	105	721358	5.38199	5.382	80.00- 120.00	100.00
23.277	23.277 (1.057)	120	207658			0.00- 59.48	28.79
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.689	23.689 (1.075)	83	434342	5.53710	5.537	80.00- 120.00	100.00
23.689	23.689 (1.075)	85	276053			32.49- 92.49	63.56
111 Propylbenzene					CAS #: 103-65-1		
23.767	23.767 (1.079)	91	690291	5.26351	5.264	80.00- 120.00	100.00
23.767	23.767 (1.079)	120	170180			0.00- 55.67	24.65
113 4-Ethyltoluene					CAS #: 622-96-8		
23.896	23.896 (1.085)	105	492204	4.91844	4.918	80.00- 120.00	100.00
23.896	23.896 (1.085)	120	166528			3.38- 63.38	33.83
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.947	23.947 (1.087)	105	469472	5.05618	5.056	80.00- 120.00	100.00
23.947	23.947 (1.087)	120	242317			21.28- 81.28	51.61
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.386	24.386 (1.107)	105	455101	4.72032	4.720	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
120 1,2,4-Trimethylbenzene (continued)							
24.386	24.386 (1.107)	120	225793			17.26- 77.26	49.61
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.756	24.756 (1.124)	146	331941	5.24297	5.243	80.00- 120.00	100.00
24.756	24.756 (1.124)	148	213549			33.35- 93.35	64.33
24.756	24.756 (1.124)	111	132315			10.42- 70.42	39.86
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.868	24.868 (1.129)	146	290481	4.79531	4.795	80.00- 120.00	100.00
24.868	24.868 (1.129)	148	178291			33.78- 93.78	61.38
24.845	24.868 (1.128)	111	106919			7.61- 67.61	36.81
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.002	25.002 (1.135)	91	458822	5.58273	5.583	80.00- 120.00	100.00
25.002	25.002 (1.135)	126	100108			0.00- 51.90	21.82
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.271	25.271 (1.147)	146	288186	4.65237	4.652	80.00- 120.00	100.00
25.271	25.271 (1.147)	148	184292			34.92- 94.92	63.95
25.271	25.271 (1.147)	111	115650			10.09- 70.09	40.13
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.065	27.065 (1.229)	180	230553	4.37335	4.373	80.00- 120.00	100.00
27.065	27.065 (1.229)	182	217213			64.14- 124.14	94.21
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.177	27.177 (1.234)	225	168545	4.20730	4.207	80.00- 120.00	100.00
27.177	27.177 (1.234)	223	104454			34.80- 94.80	61.97
133 Naphthalene					CAS #: 91-20-3		
27.401	27.401 (1.244)	128	40123	0.86879	0.8688	80.00- 120.00	100.00(R)
27.423	27.423 (1.245)	127	4540			0.00- 45.63	11.32

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v092916.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m
Misc Info: 5.0ppbv (25ppbv)

Calibration Date: 29-SEP-2015
Calibration Time: 19:51
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	90777	54466	127088	82864	-8.72
71 1,4-Difluorobenze	412207	247324	577090	375297	-8.95
92 Chlorobenzene-d5	371144	222686	519602	339840	-8.43

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.74	15.41	16.07	15.74	0.00
71 1,4-Difluorobenze	17.11	16.78	17.44	17.11	0.00
92 Chlorobenzene-d5	22.03	21.70	22.36	22.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 29Sep2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: ICV Client Smp ID: ICV
Level: LOW Operator: gh
Data Type: MS DATA SampleType: LCS
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m
Misc Info: 5.0ppbv (25ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Dichlorodifluorome	5.000	5.924	118.49	70-130
3 Propylene	5.000	5.248	104.96	60-140
6 Freon 114	5.000	6.008	120.15	70-130
8 Chloromethane	5.000	5.708	114.16	70-130
10 Vinyl Chloride	5.000	6.186	123.73	70-130
11 1,3-Butadiene	5.000	5.164	103.28	70-130
12 Bromomethane	5.000	5.689	113.78	70-130
17 Chloroethane	5.000	6.251	125.02	70-130
20 Trichlorofluoromet	5.000	5.776	115.52	70-130
24 Ethanol	5.000	5.966	119.33	70-130
28 Freon 113	5.000	5.525	110.51	70-130
30 1,1-Dichloroethene	5.000	5.480	109.60	70-130
31 Acetone	5.000	4.996	99.93	70-130
33 Carbon Disulfide	5.000	4.894	97.89	70-130
34 2-Propanol	5.000	6.108	122.17	70-130
35 3-Chloroprene	5.000	5.634	112.68	70-130
37 Methylene Chloride	5.000	5.235	104.70	70-130
39 MTBE	5.000	5.358	107.16	70-130
40 trans-1,2-Dichloro	5.000	4.708	94.16	70-130
43 Hexane	5.000	5.184	103.69	70-130
46 1,1-Dichloroethane	5.000	5.641	112.83	70-130
47 Vinyl Acetate	5.000	6.712	134.25	60-140
50 cis-1,2-Dichloroet	5.000	6.155	123.11	70-130
51 2-Butanone	5.000	5.951	119.02	70-130
53 Tetrahydrofuran	5.000	5.708	114.16	70-130
55 Chloroform	5.000	5.559	111.18	70-130
57 Cyclohexane	5.000	5.599	111.98	70-130
58 1,1,1-Trichloroeth	5.000	5.679	113.57	70-130
59 Carbon Tetrachlori	5.000	7.938	158.77*	70-130
63 2,2,4-Trimethylpen	5.000	5.634	112.68	70-130
64 Benzene	5.000	5.834	116.68	70-130
69 Heptane	5.000	5.451	109.02	70-130
68 1,2-Dichloroethane	5.000	5.632	112.64	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
72	Trichloroethene	5.000	5.788	115.76	70-130
74	1,2-Dichloropropan	5.000	5.848	116.96	70-130
75	1,4-Dioxane	5.000	5.924	118.48	70-130
77	Bromodichlorometha	5.000	5.967	119.34	70-130
78	cis-1,3-Dichloropr	5.000	5.534	110.69	70-130
79	4-Methyl-2-pentano	5.000	5.836	116.71	70-130
81	Toluene	5.000	5.679	113.58	70-130
82	trans-1,3-Dichloro	5.000	6.081	121.63	70-130
84	1,1,2-Trichloroeth	5.000	5.395	107.90	70-130
87	2-Hexanone	5.000	5.989	119.78	70-130
86	Tetrachloroethene	5.000	5.745	114.91	70-130
89	Dibromochlorometha	5.000	5.774	115.47	70-130
90	1,2-Dibromoethane	5.000	5.931	118.62	70-130
93	Chlorobenzene	5.000	5.752	115.05	70-130
95	Ethyl Benzene	5.000	5.574	111.48	70-130
96	m,p-Xylene	5.000	5.438	108.76	70-130
100	o-Xylene	5.000	5.352	107.05	70-130
101	Styrene	5.000	5.442	108.84	70-130
102	Bromoform	5.000	6.232	124.64	70-130
103	Cumene	5.000	5.382	107.64	70-130
108	1,1,2,2-Tetrachlor	5.000	5.537	110.74	70-130
111	Propylbenzene	5.000	5.264	105.27	70-130
113	4-Ethyltoluene	5.000	4.918	98.37	70-130
114	1,3,5-Trimethylben	5.000	5.056	101.12	70-130
120	1,2,4-Trimethylben	5.000	4.720	94.41	70-130
122	1,3-Dichlorobenzen	5.000	5.243	104.86	70-130
124	1,4-Dichlorobenzen	5.000	4.795	95.91	70-130
127	alpha-chlorotoluen	5.000	5.583	111.65	70-130
128	1,2-Dichlorobenzen	5.000	4.652	93.05	70-130
131	1,2,4-Trichloroben	5.000	4.373	87.47	70-130
132	Hexachlorobutadien	5.000	4.207	84.15	70-130
133	Naphthalene	0.5000	0.8688	173.76*	60-140
18	Isopentane	5.000	5.483	109.67	60-140
9	Butane	5.000	5.880	117.59	60-140
73	Methylcyclohexane	5.000	5.924	118.49	60-140

	SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65	1,2-Dichloroethane	5.000	4.786	95.73	70-130
$ 80	Toluene-d8	5.000	5.008	100.17	70-130
$ 106	Bromofluorobenzene	5.000	4.755	95.11	70-130

Data File: /chem/msdv.i/29Sep2015.b/v092916.d

Date : 30-SEP-2015 09:52

Client ID: ICV

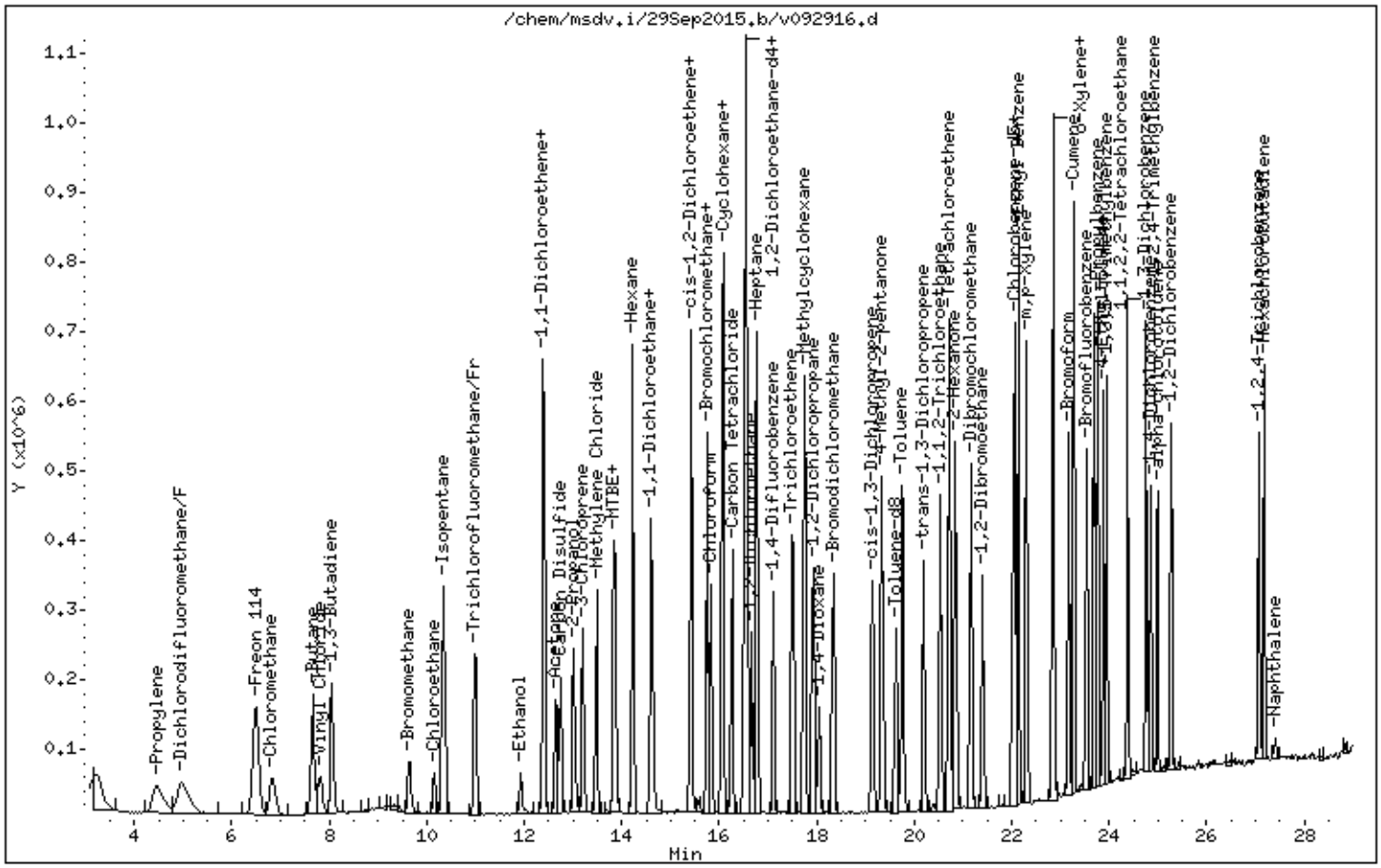
Instrument: msdv.i

Sample Info: 25mL #2716-276;ICV;ICV

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/29Sep2015.b/v092906.d
Lab Smp Id: ICAL Client Smp ID: Level # 5
Inj Date : 29-SEP-2015 17:05
Operator : gh Inst ID: msdv.i
Smp Info : 250mL# 2736-248
Misc Info : 0.05ppbv (0.05ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/29Sep2015.b/v15l0929a.m
Meth Date : 30-Sep-2015 13:02 ghehir Quant Type: ISTD
Cal Date : 29-SEP-2015 17:05 Cal File: v092906.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Level05.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 54 Bromochloromethane					CAS #: 74-97-5			
15.774	15.774 (1.000)	130	87767	5.00000		80.00- 120.00		100.00
15.743	15.743 (1.000)	128	68710			48.04- 108.04		78.29
15.743	15.743 (1.000)	49	224990			284.77- 344.77		256.35
* 71 1,4-Difluorobenzene					CAS #: 540-36-3			
17.111	17.111 (1.000)	114	406972	5.00000		80.00- 120.00		100.00
17.111	17.111 (1.000)	88	56978			0.00- 44.16		14.00
* 92 Chlorobenzene-d5					CAS #: 3114-55-4			
22.029	22.029 (1.000)	117	351812	5.00000		80.00- 120.00		100.00
22.029	22.029 (1.000)	82	177467			18.70- 78.70		50.44
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0			
16.562	16.562 (1.050)	65	153375	5.00000	5.026	80.00- 120.00		100.00
16.562	16.562 (1.050)	67	71431			19.41- 79.41		46.57
$ 80 Toluene-d8					CAS #: 2037-26-5			
19.638	19.638 (1.148)	98	386348	5.00000	5.028	80.00- 120.00		100.00
19.615	19.615 (1.146)	70	41110			0.00- 40.74		10.64

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.638	19.638 (1.148)	100	246945			34.93- 94.93	63.92
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.535	23.535 (1.068)	174	175332	5.00000	4.975	80.00- 120.00	100.00
23.535	23.535 (1.068)	95	210449			94.06- 154.06	120.03
23.535	23.535 (1.068)	176	166743			68.95- 128.95	95.10
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.980	10.980 (0.696)	101	4093	0.05000	0.04929	80.00- 120.00	100.00(a)
11.004	11.004 (0.698)	103	2487			33.91- 93.91	60.76
28 Freon 113					CAS #: 76-13-1		
12.413	12.413 (0.787)	151	2859	0.05000	0.04876	80.00- 120.00	100.00(a)
12.413	12.413 (0.787)	153	2411			33.77- 93.77	84.33
12.413	12.413 (0.787)	101	4004			82.21- 142.21	140.05
58 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.052	16.052 (1.018)	97	3796	0.05000	0.04981	80.00- 120.00	100.00(a)
16.052	16.052 (1.018)	99	1995			32.55- 92.55	52.56
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.267	16.267 (1.031)	119	2439	0.05000	0.04258	80.00- 120.00	100.00(a)
16.267	16.267 (1.031)	117	2221			74.89- 134.89	91.06
Sum of Peak Amounts =				0.0426			
72 Trichloroethene					CAS #: 79-01-6		
17.523	17.523 (1.024)	130	2519	0.05000	0.05054	80.00- 120.00	100.00(a)
17.523	17.523 (1.024)	95	3853			71.46- 131.46	152.96
17.523	17.523 (1.024)	97	1814			35.77- 95.77	72.01
77 Bromodichloromethane					CAS #: 75-27-4		
18.347	18.347 (1.072)	83	3925	0.05000	0.05118	80.00- 120.00	100.00(a)
18.320	18.320 (1.071)	85	2197			33.15- 93.15	55.97
84 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.535	20.535 (0.932)	97	2740	0.05000	0.05465	80.00- 120.00	100.00(Ta)
0.000	1.000 (0.000)	99	0			33.51- 93.51	0.00
20.535	20.535 (0.932)	83	1661			50.51- 110.51	60.62
86 Tetrachloroethene					CAS #: 127-18-4		
20.714	20.714 (0.940)	166	3751	0.05000	0.05347	80.00- 120.00	100.00(a)
20.714	20.714 (0.940)	129	2714			42.44- 102.44	72.35
20.714	20.714 (0.940)	131	3405			39.70- 99.70	90.78
89 Dibromochloromethane					CAS #: 124-48-1		
21.180	21.180 (0.961)	129	4851	0.05000	0.05281	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
89 Dibromochloromethane (continued)							
21.180	21.180 (0.961)	127	3663			47.32- 107.32	75.51
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.395	21.395 (0.971)	107	2910	0.05000	0.04494	80.00- 120.00	100.00(a)
21.395	21.395 (0.971)	109	2880			62.73- 122.73	98.97
102 Bromoform					CAS #: 75-25-2		
23.174	23.174 (1.052)	173	3623	0.05000	0.04656	80.00- 120.00	100.00(a)
23.174	23.174 (1.052)	171	1448			22.28- 82.28	39.97
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.689	23.689 (1.075)	83	4738	0.05000	0.05333	80.00- 120.00	100.00(a)
23.689	23.689 (1.075)	85	3037			32.49- 92.49	64.10
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.386	24.386 (1.107)	105	7713	0.05000	0.06242	80.00- 120.00	100.00(a)
24.386	24.386 (1.107)	120	3715			17.26- 77.26	48.17
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.756	24.756 (1.124)	146	3427	0.05000	0.05105	80.00- 120.00	100.00(a)
24.756	24.756 (1.124)	148	3271			33.35- 93.35	95.45
24.778	24.778 (1.125)	111	2733			10.42- 70.42	79.75
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.868	24.868 (1.129)	146	3641	0.05000	0.05568	80.00- 120.00	100.00(a)
24.868	24.868 (1.129)	148	3289			33.78- 93.78	90.33
24.868	24.868 (1.129)	111	2434			7.61- 67.61	66.85
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.294	25.294 (1.148)	146	5091	0.05000	0.06393	80.00- 120.00	100.00(a)
25.294	25.294 (1.148)	148	3674			34.92- 94.92	72.17
25.271	25.271 (1.147)	111	1909			10.09- 70.09	37.50
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.065	27.065 (1.229)	180	3413	0.05000	0.05716	80.00- 120.00	100.00(a)
27.065	27.065 (1.229)	182	3619			64.14- 124.14	106.04
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.199	27.199 (1.235)	225	2632	0.05000	0.06008	80.00- 120.00	100.00(a)
27.177	27.177 (1.234)	223	2644			34.80- 94.80	100.46

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v092906.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m
Misc Info: 0.05ppbv (0.05ppbv)

Calibration Date: 29-SEP-2015
Calibration Time: 19:51
Client Smp ID: Level # 5
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	90777	54466	127088	87767	-3.32
71 1,4-Difluorobenze	412207	247324	577090	406972	-1.27
92 Chlorobenzene-d5	371144	222686	519602	351812	-5.21

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.74	15.41	16.07	15.77	0.20
71 1,4-Difluorobenze	17.11	16.78	17.44	17.11	0.00
92 Chlorobenzene-d5	22.03	21.70	22.36	22.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/29Sep2015.b/v092906.d

Date : 29-SEP-2015 17:05

Client ID: Level # 5

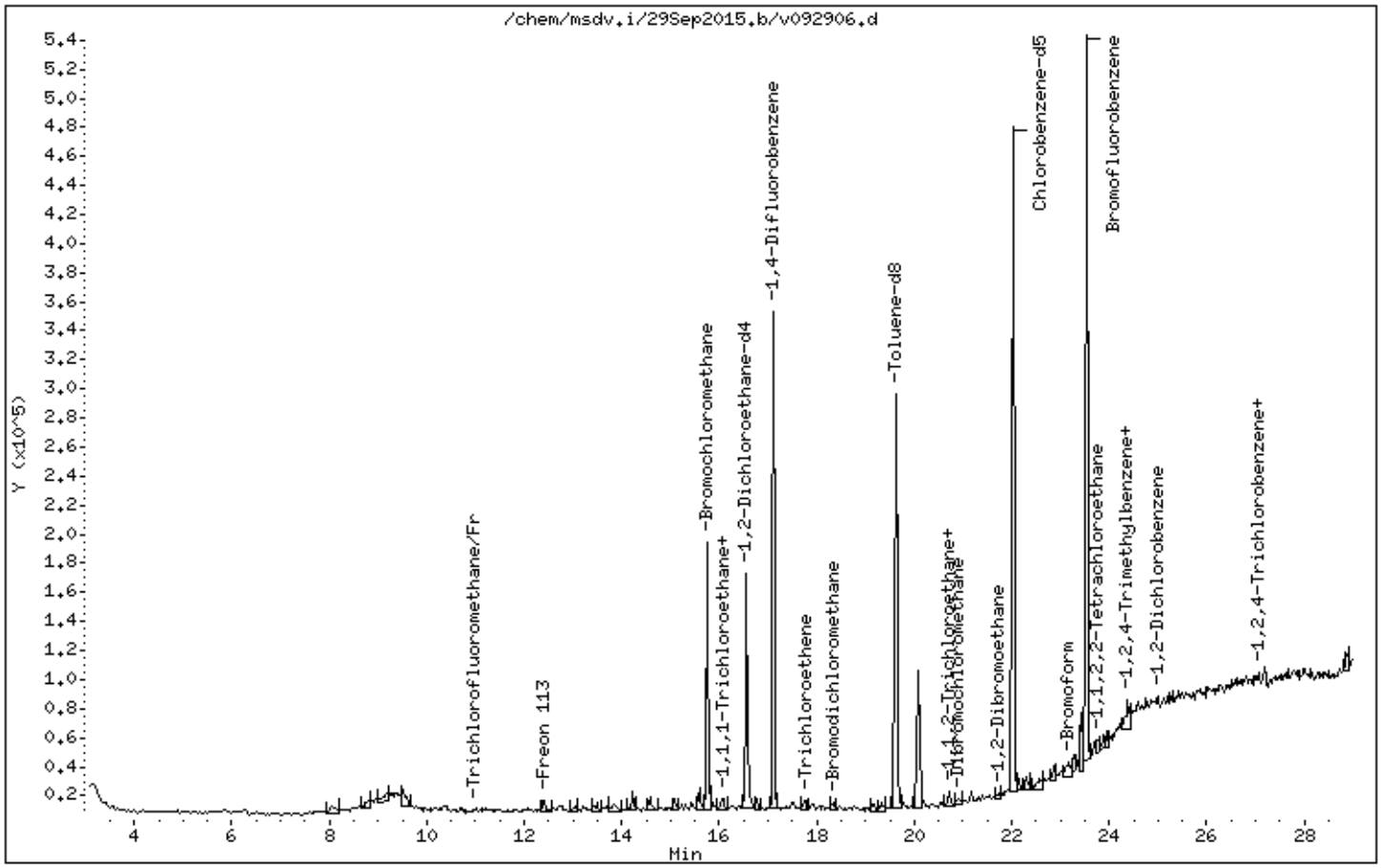
Instrument: msdv.i

Sample Info: 250mL# 2736-248

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/29Sep2015.b/v092907.d
Lab Smp Id: ICAL Client Smp ID: Level # 6
Inj Date : 29-SEP-2015 17:52
Operator : gh Inst ID: msdv.i
Smp Info : 25mL# 2736-249
Misc Info : 0.1ppbv (1.0ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/29Sep2015.b/v15l0929a.m
Meth Date : 30-Sep-2015 13:02 ghehir Quant Type: ISTD
Cal Date : 29-SEP-2015 17:52 Cal File: v092907.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Level#1.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 54 Bromochloromethane					CAS #: 74-97-5			
15.743	15.743 (1.000)	130	88358	5.00000		80.00- 120.00		100.00
15.743	15.743 (1.000)	128	70369			48.04- 108.04		79.64
15.743	15.743 (1.000)	49	237923			284.77- 344.77		269.27
* 71 1,4-Difluorobenzene					CAS #: 540-36-3			
17.111	17.111 (1.000)	114	400078	5.00000		80.00- 120.00		100.00
17.111	17.111 (1.000)	88	56884			0.00- 44.16		14.22
* 92 Chlorobenzene-d5					CAS #: 3114-55-4			
22.029	22.029 (1.000)	117	379080	5.00000		80.00- 120.00		100.00
22.029	22.029 (1.000)	82	187096			18.70- 78.70		49.36
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0			
16.562	16.562 (1.052)	65	150163	5.00000	4.925	80.00- 120.00		100.00
16.562	16.562 (1.052)	67	73189			19.41- 79.41		48.74
$ 80 Toluene-d8					CAS #: 2037-26-5			
19.638	19.638 (1.148)	98	390765	5.00000	5.114	80.00- 120.00		100.00
19.638	19.638 (1.148)	70	39204			0.00- 40.74		10.03

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.638	19.638 (1.148)	100	259004			34.93- 94.93	66.28
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.535	23.535 (1.068)	174	198290	5.00000	5.146	80.00- 120.00	100.00
23.535	23.535 (1.068)	95	241392			94.06- 154.06	121.74
23.535	23.535 (1.068)	176	193878			68.95- 128.95	97.77
6 Freon 114					CAS #: 76-14-2		
6.486	6.486 (0.412)	135	5471	0.10000	0.09208	80.00- 120.00	100.00(a)
6.448	6.448 (0.410)	137	466			0.98- 60.98	8.52
6.486	6.486 (0.412)	85	7417			89.42- 149.42	135.57
8 Chloromethane					CAS #: 74-87-3		
6.864	6.864 (0.436)	50	7252	0.10000	0.1113	80.00- 120.00	100.00
6.901	6.901 (0.438)	52	2372			2.41- 62.41	32.71
10 Vinyl Chloride					CAS #: 75-01-4		
7.813	7.813 (0.496)	62	3310	0.10000	0.08838	80.00- 120.00	100.00(a)
10.161	10.161 (0.645)	64	1287			0.00- 57.21	38.88
11 1,3-Butadiene					CAS #: 106-99-0		
8.061	8.061 (0.512)	54	7553	0.10000	0.1212	80.00- 120.00	100.00
8.061	8.061 (0.512)	39	5751			60.61- 120.61	76.14
12 Bromomethane					CAS #: 74-83-9		
9.679	9.679 (0.615)	94	2499	0.10000	0.1010	80.00- 120.00	100.00
9.655	9.655 (0.613)	96	3454			65.52- 125.52	138.22
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.004	11.004 (0.699)	101	7704	0.10000	0.09463	80.00- 120.00	100.00(a)
11.004	11.004 (0.699)	103	5590			33.91- 93.91	72.56
28 Freon 113					CAS #: 76-13-1		
12.413	12.413 (0.788)	151	6324	0.10000	0.1046	80.00- 120.00	100.00
12.413	12.413 (0.788)	153	3993			33.77- 93.77	63.14
12.413	12.413 (0.788)	101	7186			82.21- 142.21	113.63
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.386	12.386 (0.787)	98	2935	0.10000	0.1180	80.00- 120.00	100.00
12.386	12.386 (0.787)	61	8297			350.72- 410.72	282.69
12.386	12.386 (0.787)	96	6029			129.58- 189.58	205.42
35 3-Chloroprene					CAS #: 107-05-1		
13.210	13.210 (0.839)	76	1207	0.10000	0.09988	80.00- 120.00	100.00(a)
13.210	13.210 (0.839)	41	8008			599.84- 659.84	663.46

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
37 Methylene Chloride					CAS #: 75-09-2		
13.484	13.484 (0.856)	84	3929	0.10000	0.1186	80.00- 120.00	100.00(a)
13.484	13.484 (0.856)	49	9021			254.12- 314.12	229.60
13.484	13.484 (0.856)	51	3619			56.45- 116.45	92.11
39 MTBE					CAS #: 1634-04-4		
13.841	13.841 (0.879)	73	10546	0.10000	0.1072	80.00- 120.00	100.00
13.841	13.841 (0.879)	57	7295			12.63- 72.63	69.17
13.841	13.841 (0.879)	41	2086			8.96- 68.96	19.78
40 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.896	13.896 (0.883)	98	2398	0.10000	0.1066	80.00- 120.00	100.00
13.896	13.896 (0.883)	61	7529			297.51- 357.51	313.97
13.896	13.896 (0.883)	96	6073			130.03- 190.03	253.25
43 Hexane					CAS #: 110-54-3		
14.226	14.226 (0.904)	57	16774	0.10000	0.1272	80.00- 120.00	100.00(T)
14.226	14.226 (0.904)	43	13594			42.37- 102.37	81.04
0.000	1.000 (0.000)	86	0			0.00- 38.41	0.00
46 1,1-Dichloroethane					CAS #: 75-34-3		
14.610	14.610 (0.928)	63	8828	0.10000	0.1053	80.00- 120.00	100.00
14.582	14.582 (0.926)	65	2101			0.00- 57.42	23.80
50 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.423	15.423 (0.980)	98	2684	0.10000	0.1067	80.00- 120.00	100.00
15.423	15.423 (0.980)	61	6803			267.29- 327.29	253.46
15.423	15.423 (0.980)	96	5563			128.72- 188.72	207.27
55 Chloroform					CAS #: 67-66-3		
15.836	15.836 (1.006)	83	7179	0.10000	0.1029	80.00- 120.00	100.00
15.836	15.836 (1.006)	85	4638			32.85- 92.85	64.61
58 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.052	16.052 (1.020)	97	7593	0.10000	0.09931	80.00- 120.00	100.00(a)
16.082	16.082 (1.022)	99	4129			32.55- 92.55	54.38
57 Cyclohexane					CAS #: 110-82-7		
16.082	16.082 (1.022)	84	5127	0.10000	0.1070	80.00- 120.00	100.00
16.082	16.082 (1.022)	56	13012			218.68- 278.68	253.79
16.082	16.082 (1.022)	41	8050			93.43- 153.43	157.01
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.267	16.267 (1.033)	119	4850	0.10000	0.08880	80.00- 120.00	100.00(a)
16.267	16.267 (1.033)	117	3149			74.89- 134.89	64.93
	Sum of Peak Amounts =			0.0888			

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.535	16.535 (1.050)	56	11601	0.10000	0.1068	80.00- 120.00	100.00
16.535	16.535 (1.050)	57	31722			270.88- 330.88	273.44
16.535	16.535 (1.050)	41	10357			41.84- 101.84	89.28
64 Benzene					CAS #: 71-43-2		
16.562	16.562 (0.968)	78	9997	0.10000	0.1008	80.00- 120.00	100.00
16.590	16.590 (0.970)	77	2144			0.00- 52.95	21.45
68 1,2-Dichloroethane					CAS #: 107-06-2		
16.672	16.672 (0.974)	62	5911	0.10000	0.09641	80.00- 120.00	100.00(a)
16.672	16.672 (0.974)	64	2930			0.00- 58.12	49.57
69 Heptane					CAS #: 142-82-5		
16.782	16.782 (0.981)	57	9856	0.10000	0.1260	80.00- 120.00	100.00(T)
0.000	1.000 (0.000)	100	0			0.00- 47.88	0.00
16.782	16.782 (0.981)	43	17096			180.46- 240.46	173.46
72 Trichloroethene					CAS #: 79-01-6		
17.523	17.523 (1.024)	130	5507	0.10000	0.1079	80.00- 120.00	100.00
17.523	17.523 (1.024)	95	6279			71.46- 131.46	114.02
17.523	17.523 (1.024)	97	4907			35.77- 95.77	89.10
74 1,2-Dichloropropane					CAS #: 78-87-5		
17.935	17.935 (1.048)	63	5643	0.10000	0.1033	80.00- 120.00	100.00
17.935	17.935 (1.048)	62	3965			44.27- 104.27	70.26
17.935	17.935 (1.048)	41	5567			34.00- 94.00	98.65
75 1,4-Dioxane					CAS #: 123-91-1		
18.045	18.045 (1.055)	88	1943	0.10000	0.08978	80.00- 120.00	100.00(a)
18.072	18.072 (1.056)	58	4705			101.60- 161.60	242.15
18.045	18.045 (1.055)	57	3113			13.84- 73.84	160.22
77 Bromodichloromethane					CAS #: 75-27-4		
18.347	18.347 (1.072)	83	7603	0.10000	0.1006	80.00- 120.00	100.00
18.347	18.347 (1.072)	85	5530			33.15- 93.15	72.73
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.167	19.167 (1.120)	75	6819	0.10000	0.1023	80.00- 120.00	100.00
19.167	19.167 (1.120)	77	1925			1.23- 61.23	28.23
19.145	19.145 (1.119)	39	6194			46.59- 106.59	90.83
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.346	19.346 (1.131)	43	18092	0.10000	0.1058	80.00- 120.00	100.00
19.346	19.346 (1.131)	58	7142			5.80- 65.80	39.48
19.324	19.324 (1.129)	85	1062			0.00- 38.43	5.87

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
81 Toluene					CAS #: 108-88-3		
19.772	19.772 (1.155)	91	14299	0.10000	0.1074	80.00- 120.00	100.00
19.772	19.772 (1.155)	92	8289			28.70- 88.70	57.97
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.212	20.212 (0.918)	75	4797	0.10000	0.08953	80.00- 120.00	100.00(a)
20.212	20.212 (0.918)	77	3310			1.04- 61.04	69.00
20.212	20.212 (0.918)	39	5802			45.23- 105.23	120.95
84 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.534	20.534 (0.932)	97	5316	0.10000	0.09892	80.00- 120.00	100.00(a)
20.534	20.534 (0.932)	99	2735			33.51- 93.51	51.45
20.534	20.534 (0.932)	83	4324			50.51- 110.51	81.34
86 Tetrachloroethene					CAS #: 127-18-4		
20.714	20.714 (0.940)	166	6523	0.10000	0.09043	80.00- 120.00	100.00(a)
20.714	20.714 (0.940)	129	5774			42.44- 102.44	88.52
20.714	20.714 (0.940)	131	5996			39.70- 99.70	91.92
89 Dibromochloromethane					CAS #: 124-48-1		
21.180	21.180 (0.961)	129	8077	0.10000	0.08693	80.00- 120.00	100.00(a)
21.180	21.180 (0.961)	127	7244			47.32- 107.32	89.69
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.395	21.395 (0.971)	107	7693	0.10000	0.1066	80.00- 120.00	100.00
21.395	21.395 (0.971)	109	7538			62.73- 122.73	97.99
93 Chlorobenzene					CAS #: 108-90-7		
22.056	22.056 (1.001)	112	10084	0.10000	0.09684	80.00- 120.00	100.00(a)
22.056	22.056 (1.001)	114	3963			3.73- 63.73	39.30
22.056	22.056 (1.001)	77	9550			23.21- 83.21	94.70
95 Ethyl Benzene					CAS #: 100-41-4		
22.138	22.138 (1.005)	106	4719	0.10000	0.09506	80.00- 120.00	100.00(a)
22.138	22.138 (1.005)	91	16413			282.29- 342.29	347.81
96 m,p-Xylene					CAS #: 108-38-3		
22.303	22.303 (1.012)	106	5989	0.10000	0.1049	80.00- 120.00	100.00
22.303	22.303 (1.012)	91	12504			172.44- 232.44	208.78
100 o-Xylene					CAS #: 95-47-6		
22.852	22.852 (1.037)	106	6182	0.10000	0.1094	80.00- 120.00	100.00
22.852	22.852 (1.037)	91	13034			182.07- 242.07	210.84
101 Styrene					CAS #: 100-42-5		
22.880	22.880 (1.039)	104	8476	0.10000	0.1018	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
101 Styrene (continued)							
22.880	22.880 (1.039)	78	4225			19.39- 79.39	49.85
102 Bromoform					CAS #: 75-25-2		
23.173	23.173 (1.052)	173	6940	0.10000	0.08781	80.00- 120.00	100.00(a)
23.173	23.173 (1.052)	171	4203			22.28- 82.28	60.56
103 Cumene					CAS #: 98-82-8		
23.277	23.277 (1.057)	105	16158	0.10000	0.1040	80.00- 120.00	100.00
23.277	23.277 (1.057)	120	4890			0.00- 59.48	30.26
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.689	23.689 (1.075)	83	9813	0.10000	0.1016	80.00- 120.00	100.00
23.689	23.689 (1.075)	85	6130			32.49- 92.49	62.47
111 Propylbenzene					CAS #: 103-65-1		
23.767	23.767 (1.079)	91	19812	0.10000	0.1176	80.00- 120.00	100.00
23.767	23.767 (1.079)	120	4220			0.00- 55.67	21.30
113 4-Ethyltoluene					CAS #: 622-96-8		
23.896	23.896 (1.085)	105	16340	0.10000	0.1214	80.00- 120.00	100.00
23.896	23.896 (1.085)	120	5009			3.38- 63.38	30.65
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.947	23.947 (1.087)	105	16213	0.10000	0.1237	80.00- 120.00	100.00
23.947	23.947 (1.087)	120	8760			21.28- 81.28	54.03
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.386	24.386 (1.107)	105	15730	0.10000	0.1114	80.00- 120.00	100.00
24.386	24.386 (1.107)	120	6538			17.26- 77.26	41.56
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.756	24.756 (1.124)	146	8375	0.10000	0.1100	80.00- 120.00	100.00
24.756	24.756 (1.124)	148	5732			33.35- 93.35	68.44
24.756	24.756 (1.124)	111	3287			10.42- 70.42	39.25
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.868	24.868 (1.129)	146	9057	0.10000	0.1174	80.00- 120.00	100.00
24.868	24.868 (1.129)	148	8334			33.78- 93.78	92.02
24.868	24.868 (1.129)	111	3587			7.61- 67.61	39.60
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.002	25.002 (1.135)	91	9587	0.10000	0.1022	80.00- 120.00	100.00
25.002	25.002 (1.135)	126	4577			0.00- 51.90	47.74
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.271	25.271 (1.147)	146	7764	0.10000	0.09345	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
128 1,2-Dichlorobenzene (continued)							
25.271	25.271 (1.147)	148	5987			34.92- 94.92	77.11
25.271	25.271 (1.147)	111	5440			10.09- 70.09	70.07
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.087	27.087 (1.230)	180	5690	0.10000	0.09198	80.00- 120.00	100.00(a)
27.065	27.065 (1.229)	182	5313			64.14- 124.14	93.37
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.177	27.177 (1.234)	225	5375	0.10000	0.1088	80.00- 120.00	100.00(a)
27.177	27.177 (1.234)	223	4695			34.80- 94.80	87.35

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v092907.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m
Misc Info: 0.1ppbv (1.0ppbv)

Calibration Date: 29-SEP-2015
Calibration Time: 19:51
Client Smp ID: Level # 6
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	90777	54466	127088	88358	-2.66
71 1,4-Difluorobenze	412207	247324	577090	400078	-2.94
92 Chlorobenzene-d5	371144	222686	519602	379080	2.14

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.74	15.41	16.07	15.74	0.00
71 1,4-Difluorobenze	17.11	16.78	17.44	17.11	0.00
92 Chlorobenzene-d5	22.03	21.70	22.36	22.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/29Sep2015.b/v092907.d

Date : 29-SEP-2015 17:52

Client ID: Level # 6

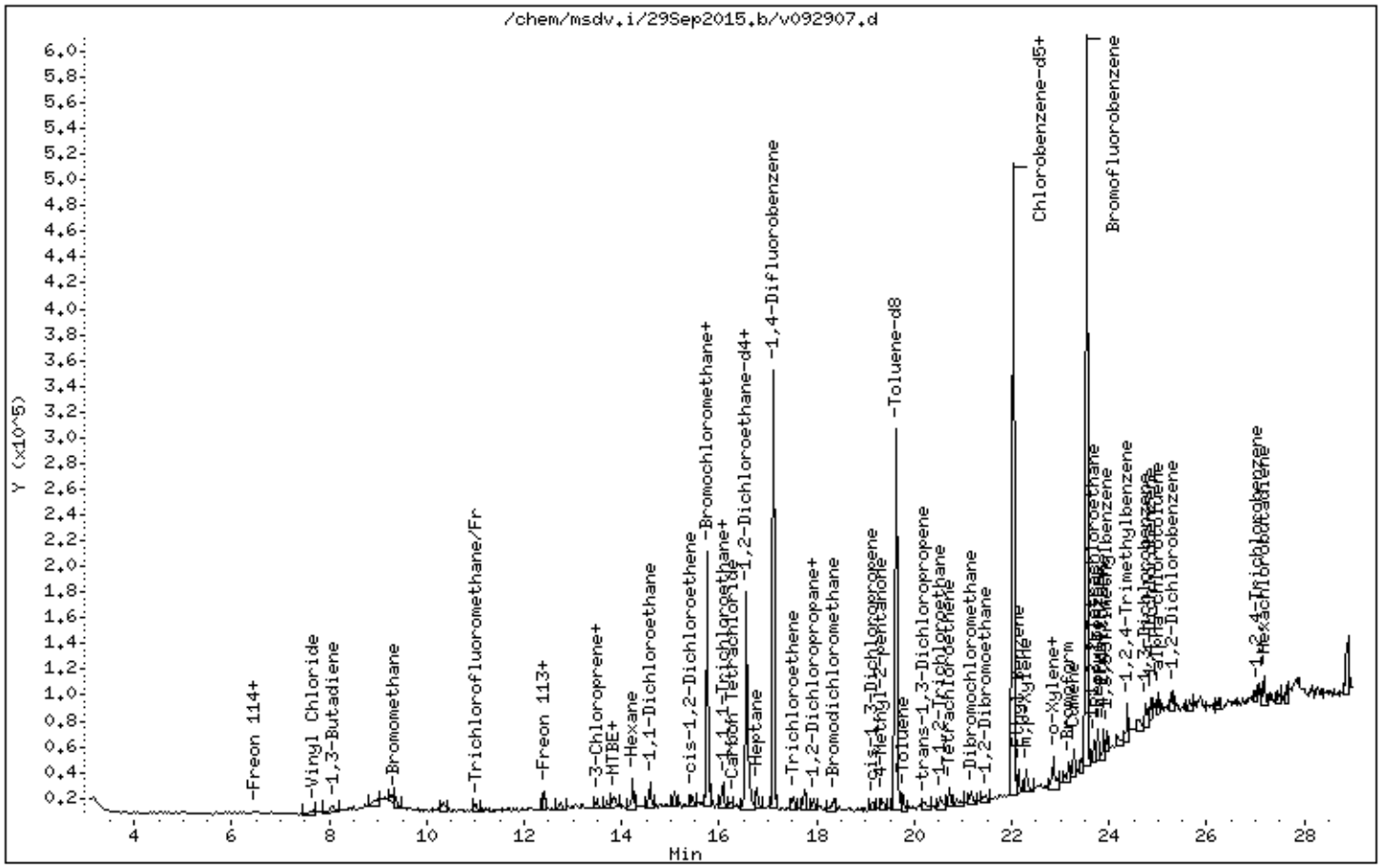
Instrument: msdv.i

Sample Info: 25mL# 2736-249

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/29Sep2015.b/v092908.d
Lab Smp Id: ICAL Client Smp ID: Level # 7
Inj Date : 29-SEP-2015 18:33
Operator : gh Inst ID: msdv.i
Smp Info : 125mL# 2736-249
Misc Info : 0.5ppbv (1.0ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/29Sep2015.b/v15l0929a.m
Meth Date : 30-Sep-2015 13:02 ghehir Quant Type: ISTD
Cal Date : 29-SEP-2015 18:33 Cal File: v092908.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HiLoFULLcrv.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 54 Bromochloromethane					CAS #: 74-97-5			
15.743	15.743 (1.000)	130	81212	5.00000		80.00- 120.00		100.00
15.743	15.743 (1.000)	128	68420			48.04- 108.04		84.25
15.743	15.743 (1.000)	49	237988			284.77- 344.77		293.05
* 71 1,4-Difluorobenzene					CAS #: 540-36-3			
17.111	17.111 (1.000)	114	416110	5.00000		80.00- 120.00		100.00
17.111	17.111 (1.000)	88	56033			0.00- 44.16		13.47
* 92 Chlorobenzene-d5					CAS #: 3114-55-4			
22.029	22.029 (1.000)	117	364266	5.00000		80.00- 120.00		100.00
22.029	22.029 (1.000)	82	181488			18.70- 78.70		49.82
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0			
16.562	16.562 (1.052)	65	152880	5.00000	5.334	80.00- 120.00		100.00
16.562	16.562 (1.052)	67	67986			19.41- 79.41		44.47
$ 80 Toluene-d8					CAS #: 2037-26-5			
19.638	19.638 (1.148)	98	383024	5.00000	4.864	80.00- 120.00		100.00
19.638	19.638 (1.148)	70	38971			0.00- 40.74		10.17

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.638	19.638 (1.148)	100	255987			34.93- 94.93	66.83
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.535	23.535 (1.068)	174	182958	5.00000	4.955	80.00- 120.00	100.00
23.535	23.535 (1.068)	95	223135			94.06- 154.06	121.96
23.535	23.535 (1.068)	176	176174			68.95- 128.95	96.29
3 Propylene					CAS #: 115-07-1		
4.485	4.485 (0.285)	41	33296	0.50000	0.6070	80.00- 120.00	100.00
4.447	4.447 (0.282)	42	11338			43.41- 103.41	34.05
4.485	4.485 (0.285)	39	25273			36.60- 96.60	75.90
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.013	5.013 (0.318)	85	36480	0.50000	0.5193	80.00- 120.00	100.00
4.976	4.976 (0.316)	87	11108			1.54- 61.54	30.45
6 Freon 114					CAS #: 76-14-2		
6.524	6.524 (0.414)	135	32310	0.50000	0.5576	80.00- 120.00	100.00
6.524	6.524 (0.414)	137	10626			0.98- 60.98	32.89
6.486	6.486 (0.412)	85	37564			89.42- 149.42	116.26
8 Chloromethane					CAS #: 74-87-3		
6.902	6.902 (0.438)	50	29713	0.50000	0.4973	80.00- 120.00	100.00
6.864	6.864 (0.436)	52	8433			2.41- 62.41	28.38
9 Butane					CAS #: 106-97-8		
7.658	7.658 (0.486)	58	5178	0.50000	0.5018	80.00- 120.00	100.00
7.658	7.658 (0.486)	43	44365			830.80- 890.80	856.80
10 Vinyl Chloride					CAS #: 75-01-4		
7.813	7.813 (0.496)	62	19324	0.50000	0.5393	80.00- 120.00	100.00
7.844	7.844 (0.498)	64	5233			0.00- 57.21	27.08
11 1,3-Butadiene					CAS #: 106-99-0		
8.061	8.061 (0.512)	54	24708	0.50000	0.4522	80.00- 120.00	100.00
8.061	8.061 (0.512)	39	22014			60.61- 120.61	89.10
12 Bromomethane					CAS #: 74-83-9		
9.655	9.655 (0.613)	94	10875	0.50000	0.4854	80.00- 120.00	100.00
9.655	9.655 (0.613)	96	12043			65.52- 125.52	110.74
17 Chloroethane					CAS #: 75-00-3		
10.161	10.161 (0.645)	64	7329	0.50000	0.4815	80.00- 120.00	100.00
10.185	10.185 (0.647)	66	1785			0.00- 56.47	24.36

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
18 Isopentane					CAS #: 78-78-4		
10.354	10.354 (0.658)	57	27196	0.50000	0.5612	80.00- 120.00	100.00
10.354	10.354 (0.658)	43	38018			135.48- 195.48	139.79
10.354	10.354 (0.658)	42	31895			110.86- 170.86	117.28
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.004	11.004 (0.699)	101	40539	0.50000	0.5307	80.00- 120.00	100.00
10.980	10.980 (0.697)	103	23568			33.91- 93.91	58.14
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.386	12.386 (0.787)	98	9368	0.50000	0.4359	80.00- 120.00	100.00
12.386	12.386 (0.787)	61	36231			350.72- 410.72	386.75
12.386	12.386 (0.787)	96	16400			129.58- 189.58	175.06
28 Freon 113					CAS #: 76-13-1		
12.413	12.413 (0.788)	151	28800	0.50000	0.5137	80.00- 120.00	100.00
12.413	12.413 (0.788)	153	18592			33.77- 93.77	64.56
12.413	12.413 (0.788)	101	32198			82.21- 142.21	111.80
31 Acetone					CAS #: 67-64-1		
12.660	12.660 (0.804)	58	18692	0.50000	0.6003	80.00- 120.00	100.00
12.660	12.660 (0.804)	43	45093			282.00- 342.00	241.24
33 Carbon Disulfide					CAS #: 75-15-0		
12.743	12.743 (0.809)	76	42201	0.50000	0.5054	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.210	13.210 (0.839)	76	5157	0.50000	0.4756	80.00- 120.00	100.00
13.210	13.210 (0.839)	41	32645			599.84- 659.84	633.02
34 2-Propanol					CAS #: 67-63-0		
13.045	13.045 (0.829)	45	42691	0.50000	0.4546	80.00- 120.00	100.00
13.045	13.045 (0.829)	43	9630			0.00- 46.02	22.56
13.018	13.018 (0.827)	59	2134			0.00- 33.30	5.00
37 Methylene Chloride					CAS #: 75-09-2		
13.484	13.484 (0.856)	84	13447	0.50000	0.4595	80.00- 120.00	100.00
13.484	13.484 (0.856)	49	37414			254.12- 314.12	278.23
13.484	13.484 (0.856)	51	11558			56.45- 116.45	85.95
38 tert-butyl alcohol					CAS #: 75-65-0		
13.704	13.704 (0.870)	59	58093	0.50000	0.5270	80.00- 120.00	100.00
13.704	13.704 (0.870)	41	14666			0.00- 51.49	25.25
13.704	13.704 (0.870)	57	7938			0.00- 40.80	13.66
39 MTBE					CAS #: 1634-04-4		
13.841	13.841 (0.879)	73	44609	0.50000	0.4955	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
39 MTBE (continued)							
13.841	13.841 (0.879)	57	22482			12.63- 72.63	50.40
13.841	13.841 (0.879)	41	19875			8.96- 68.96	44.55
40 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.896	13.896 (0.883)	98	10388	0.50000	0.5016	80.00- 120.00	100.00
13.896	13.896 (0.883)	61	30806			297.51- 357.51	296.55
13.896	13.896 (0.883)	96	22049			130.03- 190.03	212.25
43 Hexane					CAS #: 110-54-3		
14.226	14.226 (0.904)	57	54108	0.50000	0.4630	80.00- 120.00	100.00
14.226	14.226 (0.904)	43	41112			42.37- 102.37	75.98
14.226	14.226 (0.904)	86	3887			0.00- 38.41	7.18
45 Isopropyl ether					CAS #: 108-20-3		
14.582	14.582 (0.926)	45	110558	0.50000	0.5094	80.00- 120.00	100.00
14.582	14.582 (0.926)	87	11987			0.00- 42.22	10.84
14.582	14.582 (0.926)	59	11449			0.00- 38.61	10.36
46 1,1-Dichloroethane					CAS #: 75-34-3		
14.582	14.582 (0.926)	63	37849	0.50000	0.4941	80.00- 120.00	100.00
14.582	14.582 (0.926)	65	11046			0.00- 57.42	29.18
47 Vinyl Acetate					CAS #: 108-05-4		
14.637	14.637 (0.930)	86	2569	0.50000	0.4239	80.00- 120.00	100.00(H)
14.665	14.665 (0.931)	42	7646			210.64- 270.64	297.63
14.637	14.637 (0.930)	43	60501			3446.49-3506.49	2355.04
49 Ethyl-tert-butyl ether					CAS #: 637-92-3		
15.071	15.071 (0.957)	59	86652	0.50000	0.5094	80.00- 120.00	100.00
15.092	15.092 (0.959)	87	20510			0.00- 53.82	23.67
15.092	15.092 (0.959)	41	18838			0.00- 48.32	21.74
50 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.423	15.423 (0.980)	98	11987	0.50000	0.5122	80.00- 120.00	100.00
15.423	15.423 (0.980)	61	34735			267.29- 327.29	289.77
15.423	15.423 (0.980)	96	17857			128.72- 188.72	148.97
51 2-Butanone					CAS #: 78-93-3		
15.423	15.423 (0.980)	72	6675	0.50000	0.4832	80.00- 120.00	100.00
15.423	15.423 (0.980)	43	53252			804.58- 864.58	797.78
15.423	15.423 (0.980)	57	2705			28.64- 88.64	40.52
53 Tetrahydrofuran					CAS #: 109-99-9		
15.743	15.743 (1.000)	42	38079	0.50000	0.5070	80.00- 120.00	100.00
15.743	15.743 (1.000)	71	5488			0.00- 48.89	14.41

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
53 Tetrahydrofuran (continued)							
15.774	15.774 (1.002)	72	7109			0.00- 47.97	18.67
55 Chloroform					CAS #: 67-66-3		
15.836	15.836 (1.006)	83	33590	0.50000	0.5157	80.00- 120.00	100.00
15.836	15.836 (1.006)	85	22013			32.85- 92.85	65.53
57 Cyclohexane					CAS #: 110-82-7		
16.082	16.082 (1.022)	84	19821	0.50000	0.4654	80.00- 120.00	100.00
16.082	16.082 (1.022)	56	57062			218.68- 278.68	287.89
16.082	16.082 (1.022)	41	27773			93.43- 153.43	140.12
58 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.052	16.052 (1.020)	97	35784	0.50000	0.5068	80.00- 120.00	100.00
16.052	16.052 (1.020)	99	25263			32.55- 92.55	70.60
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.267	16.267 (1.033)	119	17415	0.50000	0.3757	80.00- 120.00	100.00
16.267	16.267 (1.033)	117	18531			74.89- 134.89	106.41
	Sum of Peak Amounts =				0.376		
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.535	16.535 (1.050)	56	48416	0.50000	0.4900	80.00- 120.00	100.00
16.535	16.535 (1.050)	57	145881			270.88- 330.88	301.31
16.535	16.535 (1.050)	41	35132			41.84- 101.84	72.56
64 Benzene					CAS #: 71-43-2		
16.562	16.562 (0.968)	78	48717	0.50000	0.4812	80.00- 120.00	100.00
16.562	16.562 (0.968)	77	10931			0.00- 52.95	22.44
66 tert-amyl methyl ether					CAS #: 994-05-8		
16.617	16.617 (0.971)	87	12212	0.50000	0.4921	80.00- 120.00	100.00
16.617	16.617 (0.971)	73	55100			401.74- 461.74	451.20
16.617	16.617 (0.971)	55	26531			176.52- 236.52	217.25
68 1,2-Dichloroethane					CAS #: 107-06-2		
16.672	16.672 (0.974)	62	30037	0.50000	0.4803	80.00- 120.00	100.00
16.672	16.672 (0.974)	64	8447			0.00- 58.12	28.12
69 Heptane					CAS #: 142-82-5		
16.782	16.782 (0.981)	57	30085	0.50000	0.4049	80.00- 120.00	100.00
16.782	16.782 (0.981)	100	4501			0.00- 47.88	14.96
16.782	16.782 (0.981)	43	56762			180.46- 240.46	188.67
72 Trichloroethene					CAS #: 79-01-6		
17.523	17.523 (1.024)	130	22372	0.50000	0.4388	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
	72 Trichloroethene (continued)						
17.523	17.523 (1.024)	95	23944			71.46- 131.46	107.03
17.523	17.523 (1.024)	97	16190			35.77- 95.77	72.37
	73 Methylcyclohexane				CAS #: 108-87-2		
17.743	17.743 (1.037)	83	27012	0.50000	0.4584	80.00- 120.00	100.00
17.743	17.743 (1.037)	98	14309			18.11- 78.11	52.97
17.743	17.743 (1.037)	55	50559			129.45- 189.45	187.17
	74 1,2-Dichloropropane				CAS #: 78-87-5		
17.935	17.935 (1.048)	63	25775	0.50000	0.4682	80.00- 120.00	100.00
17.935	17.935 (1.048)	62	18359			44.27- 104.27	71.23
17.935	17.935 (1.048)	41	17433			34.00- 94.00	67.64
	75 1,4-Dioxane				CAS #: 123-91-1		
18.045	18.045 (1.055)	88	11914	0.50000	0.5191	80.00- 120.00	100.00
18.045	18.045 (1.055)	58	15152			101.60- 161.60	127.18
18.045	18.045 (1.055)	57	7685			13.84- 73.84	64.50
	77 Bromodichloromethane				CAS #: 75-27-4		
18.347	18.347 (1.072)	83	34078	0.50000	0.4483	80.00- 120.00	100.00
18.347	18.347 (1.072)	85	24266			33.15- 93.15	71.21
	78 cis-1,3-Dichloropropene				CAS #: 10061-01-5		
19.145	19.145 (1.119)	75	28568	0.50000	0.4378	80.00- 120.00	100.00
19.145	19.145 (1.119)	77	9664			1.23- 61.23	33.83
19.145	19.145 (1.119)	39	24578			46.59- 106.59	86.03
	79 4-Methyl-2-pentanone				CAS #: 108-10-1		
19.346	19.346 (1.131)	43	79357	0.50000	0.4628	80.00- 120.00	100.00
19.346	19.346 (1.131)	58	28507			5.80- 65.80	35.92
19.346	19.346 (1.131)	85	7011			0.00- 38.43	8.83
	81 Toluene				CAS #: 108-88-3		
19.772	19.772 (1.155)	91	60093	0.50000	0.4540	80.00- 120.00	100.00
19.772	19.772 (1.155)	92	34858			28.70- 88.70	58.01
	82 trans-1,3-Dichloropropene				CAS #: 10061-02-6		
20.212	20.212 (0.918)	75	24549	0.50000	0.4843	80.00- 120.00	100.00
20.212	20.212 (0.918)	77	9110			1.04- 61.04	37.11
20.212	20.212 (0.918)	39	21364			45.23- 105.23	87.03
	84 1,1,2-Trichloroethane				CAS #: 79-00-5		
20.534	20.534 (0.932)	97	22319	0.50000	0.4474	80.00- 120.00	100.00
20.534	20.534 (0.932)	99	13057			33.51- 93.51	58.50
20.534	20.534 (0.932)	83	17866			50.51- 110.51	80.05

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
86 Tetrachloroethene					CAS #: 127-18-4		
20.714	20.714 (0.940)	166	30752	0.50000	0.4565	80.00- 120.00	100.00
20.714	20.714 (0.940)	129	25603			42.44- 102.44	83.26
20.714	20.714 (0.940)	131	22977			39.70- 99.70	74.72
87 2-Hexanone					CAS #: 591-78-6		
20.857	20.857 (0.947)	58	37012	0.50000	0.5047	80.00- 120.00	100.00
20.857	20.857 (0.947)	43	69612			168.09- 228.09	188.08
20.857	20.857 (0.947)	100	3133			0.00- 41.01	8.46
89 Dibromochloromethane					CAS #: 124-48-1		
21.180	21.180 (0.961)	129	37871	0.50000	0.4409	80.00- 120.00	100.00
21.180	21.180 (0.961)	127	29586			47.32- 107.32	78.12
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.395	21.395 (0.971)	107	35697	0.50000	0.5110	80.00- 120.00	100.00
21.395	21.395 (0.971)	109	32290			62.73- 122.73	90.46
93 Chlorobenzene					CAS #: 108-90-7		
22.056	22.056 (1.001)	112	47381	0.50000	0.4820	80.00- 120.00	100.00
22.056	22.056 (1.001)	114	15139			3.73- 63.73	31.95
22.056	22.056 (1.001)	77	31015			23.21- 83.21	65.46
95 Ethyl Benzene					CAS #: 100-41-4		
22.139	22.139 (1.005)	106	25584	0.50000	0.5236	80.00- 120.00	100.00
22.139	22.139 (1.005)	91	75134			282.29- 342.29	293.68
96 m,p-Xylene					CAS #: 108-38-3		
22.303	22.303 (1.012)	106	24217	0.50000	0.4592	80.00- 120.00	100.00
22.303	22.303 (1.012)	91	55573			172.44- 232.44	229.48
100 o-Xylene					CAS #: 95-47-6		
22.852	22.852 (1.037)	106	22359	0.50000	0.4375	80.00- 120.00	100.00
22.852	22.852 (1.037)	91	49275			182.07- 242.07	220.38
101 Styrene					CAS #: 100-42-5		
22.880	22.880 (1.039)	104	38949	0.50000	0.4913	80.00- 120.00	100.00
22.880	22.880 (1.039)	78	18438			19.39- 79.39	47.34
102 Bromoform					CAS #: 75-25-2		
23.173	23.173 (1.052)	173	38412	0.50000	0.5043	80.00- 120.00	100.00
23.173	23.173 (1.052)	171	19546			22.28- 82.28	50.89
103 Cumene					CAS #: 98-82-8		
23.277	23.277 (1.057)	105	70155	0.50000	0.4795	80.00- 120.00	100.00
23.277	23.277 (1.057)	120	18545			0.00- 59.48	26.43

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.689	23.689 (1.075)	83	39383	0.50000	0.4412	80.00- 120.00	100.00
23.689	23.689 (1.075)	85	23655			32.49- 92.49	60.06
111 Propylbenzene					CAS #: 103-65-1		
23.767	23.767 (1.079)	91	66331	0.50000	0.4361	80.00- 120.00	100.00
23.767	23.767 (1.079)	120	17414			0.00- 55.67	26.25
113 4-Ethyltoluene					CAS #: 622-96-8		
23.896	23.896 (1.085)	105	52064	0.50000	0.4306	80.00- 120.00	100.00
23.896	23.896 (1.085)	120	18763			3.38- 63.38	36.04
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.947	23.947 (1.087)	105	51585	0.50000	0.4359	80.00- 120.00	100.00
23.947	23.947 (1.087)	120	26406			21.28- 81.28	51.19
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.386	24.386 (1.107)	105	49580	0.50000	0.3918	80.00- 120.00	100.00
24.386	24.386 (1.107)	120	25058			17.26- 77.26	50.54
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.756	24.756 (1.124)	146	30375	0.50000	0.4336	80.00- 120.00	100.00
24.756	24.756 (1.124)	148	21152			33.35- 93.35	69.64
24.756	24.756 (1.124)	111	15768			10.42- 70.42	51.91
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.868	24.868 (1.129)	146	31344	0.50000	0.4397	80.00- 120.00	100.00
24.868	24.868 (1.129)	148	20514			33.78- 93.78	65.45
24.868	24.868 (1.129)	111	10238			7.61- 67.61	32.66
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.002	25.002 (1.135)	91	39700	0.50000	0.4682	80.00- 120.00	100.00
25.002	25.002 (1.135)	126	9351			0.00- 51.90	23.55
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.271	25.271 (1.147)	146	29385	0.50000	0.3941	80.00- 120.00	100.00
25.271	25.271 (1.147)	148	19672			34.92- 94.92	66.95
25.271	25.271 (1.147)	111	14336			10.09- 70.09	48.79
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.065	27.065 (1.229)	180	29946	0.50000	0.5028	80.00- 120.00	100.00
27.065	27.065 (1.229)	182	31064			64.14- 124.14	103.73
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.177	27.177 (1.234)	225	20653	0.50000	0.4498	80.00- 120.00	100.00
27.177	27.177 (1.234)	223	15713			34.80- 94.80	76.08

QC Flag Legend

H - Operator selected an alternate compound hit.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v092908.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m
Misc Info: 0.5ppbv (1.0ppbv)

Calibration Date: 29-SEP-2015
Calibration Time: 19:51
Client Smp ID: Level # 7
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	90777	54466	127088	81212	-10.54
71 1,4-Difluorobenze	412207	247324	577090	416110	0.95
92 Chlorobenzene-d5	371144	222686	519602	364266	-1.85

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.74	15.41	16.07	15.74	0.00
71 1,4-Difluorobenze	17.11	16.78	17.44	17.11	0.00
92 Chlorobenzene-d5	22.03	21.70	22.36	22.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/29Sep2015.b/v092908.d

Date : 29-SEP-2015 18:33

Client ID: Level # 7

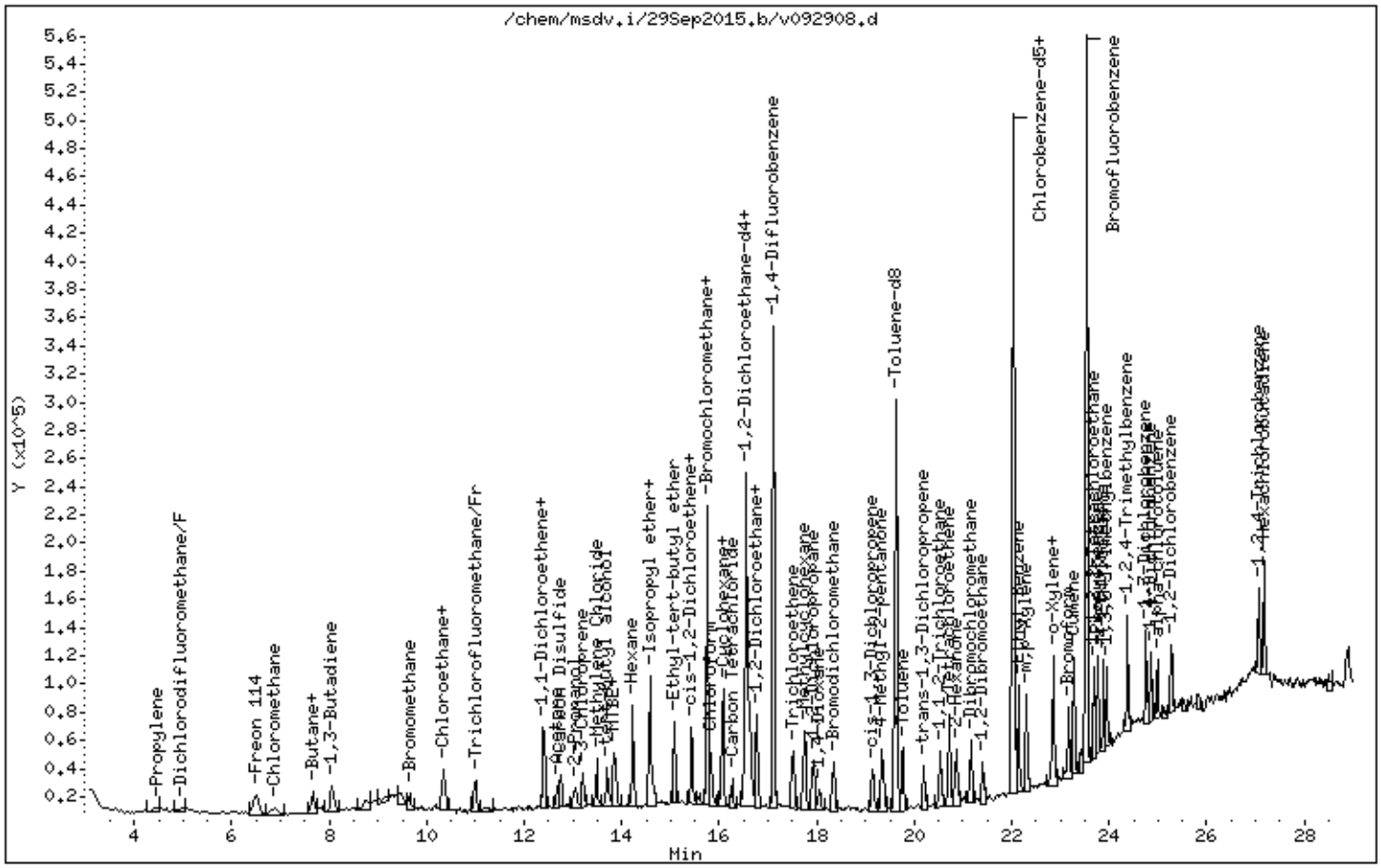
Instrument: msdv.i

Sample Info: 125mL# 2736-249

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/29Sep2015.b/v092909.d
Lab Smp Id: ICAL Client Smp ID: Level # 8
Inj Date : 29-SEP-2015 19:17
Operator : gh Inst ID: msdv.i
Smp Info : 250mL# 2736-249
Misc Info : 1.0ppbv (1.0ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/29Sep2015.b/v15l0929a.m
Meth Date : 30-Sep-2015 13:02 ghehir Quant Type: ISTD
Cal Date : 29-SEP-2015 19:17 Cal File: v092909.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HiLoFULLcrv.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 54 Bromochloromethane					CAS #: 74-97-5			
15.743	15.743 (1.000)	130	90805	5.00000		80.00- 120.00		100.00
15.774	15.774 (1.000)	128	72797			48.04- 108.04		80.17
15.743	15.743 (1.000)	49	233629			284.77- 344.77		257.29
* 71 1,4-Difluorobenzene					CAS #: 540-36-3			
17.111	17.111 (1.000)	114	404139	5.00000		80.00- 120.00		100.00
17.111	17.111 (1.000)	88	58822			0.00- 44.16		14.55
* 92 Chlorobenzene-d5					CAS #: 3114-55-4			
22.029	22.029 (1.000)	117	372786	5.00000		80.00- 120.00		100.00
22.029	22.029 (1.000)	82	186086			18.70- 78.70		49.92
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0			
16.562	16.562 (1.052)	65	156052	5.00000	4.895	80.00- 120.00		100.00
16.562	16.562 (1.052)	67	70824			19.41- 79.41		45.38
$ 80 Toluene-d8					CAS #: 2037-26-5			
19.638	19.638 (1.148)	98	375229	5.00000	4.924	80.00- 120.00		100.00
19.615	19.615 (1.146)	70	38698			0.00- 40.74		10.31

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.638	19.638 (1.148)	100	246229			34.93- 94.93	65.62
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.534	23.534 (1.068)	174	180388	5.00000	4.818	80.00- 120.00	100.00
23.534	23.534 (1.068)	95	233029			94.06- 154.06	129.18
23.534	23.534 (1.068)	176	176459			68.95- 128.95	97.82
3 Propylene					CAS #: 115-07-1		
4.560	4.560 (0.290)	41	51961	1.00000	0.8926	80.00- 120.00	100.00
4.522	4.522 (0.287)	42	28262			43.41- 103.41	54.39
4.598	4.598 (0.292)	39	24701			36.60- 96.60	47.54
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.051	5.051 (0.321)	85	76101	1.00000	0.9790	80.00- 120.00	100.00
5.089	5.089 (0.323)	87	19840			1.54- 61.54	26.07
6 Freon 114					CAS #: 76-14-2		
6.524	6.524 (0.414)	135	60503	1.00000	0.9495	80.00- 120.00	100.00
6.524	6.524 (0.414)	137	18979			0.98- 60.98	31.37
6.524	6.524 (0.414)	85	71195			89.42- 149.42	117.67
8 Chloromethane					CAS #: 74-87-3		
6.901	6.901 (0.438)	50	57006	1.00000	0.8858	80.00- 120.00	100.00
6.939	6.939 (0.441)	52	17991			2.41- 62.41	31.56
9 Butane					CAS #: 106-97-8		
7.689	7.689 (0.488)	58	10599	1.00000	0.9443	80.00- 120.00	100.00
7.658	7.658 (0.486)	43	92368			830.80- 890.80	871.48
10 Vinyl Chloride					CAS #: 75-01-4		
7.813	7.813 (0.496)	62	36708	1.00000	0.9358	80.00- 120.00	100.00
7.813	7.813 (0.496)	64	11917			0.00- 57.21	32.46
11 1,3-Butadiene					CAS #: 106-99-0		
8.061	8.061 (0.512)	54	47009	1.00000	0.8164	80.00- 120.00	100.00
8.061	8.061 (0.512)	39	42972			60.61- 120.61	91.41
12 Bromomethane					CAS #: 74-83-9		
9.655	9.655 (0.613)	94	20793	1.00000	0.8668	80.00- 120.00	100.00
9.655	9.655 (0.613)	96	19582			65.52- 125.52	94.18
17 Chloroethane					CAS #: 75-00-3		
10.185	10.185 (0.647)	64	14723	1.00000	0.9058	80.00- 120.00	100.00
10.161	10.161 (0.645)	66	4198			0.00- 56.47	28.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
18 Isopentane					CAS #: 78-78-4		
10.354	10.354 (0.658)	57	47986	1.00000	0.9208	80.00- 120.00	100.00
10.354	10.354 (0.658)	43	71540			135.48- 195.48	149.09
10.354	10.354 (0.658)	42	63536			110.86- 170.86	132.41
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.004	11.004 (0.699)	101	82195	1.00000	0.9696	80.00- 120.00	100.00
11.004	11.004 (0.699)	103	49241			33.91- 93.91	59.91
24 Ethanol					CAS #: 64-17-5		
11.974	11.974 (0.761)	45	21618	1.00000	0.9014	80.00- 120.00	100.00(H)
12.001	12.001 (0.762)	46	4962			6.93- 66.93	22.95
12.001	12.001 (0.762)	43	4688			0.00- 45.81	21.69
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.386	12.386 (0.787)	98	19899	1.00000	0.8653	80.00- 120.00	100.00
12.386	12.386 (0.787)	61	72778			350.72- 410.72	365.74
12.386	12.386 (0.787)	96	33052			129.58- 189.58	166.10
28 Freon 113					CAS #: 76-13-1		
12.413	12.413 (0.788)	151	59685	1.00000	0.9614	80.00- 120.00	100.00
12.413	12.413 (0.788)	153	33755			33.77- 93.77	56.56
12.413	12.413 (0.788)	101	69281			82.21- 142.21	116.08
31 Acetone					CAS #: 67-64-1		
12.660	12.660 (0.804)	58	31983	1.00000	0.9442	80.00- 120.00	100.00
12.660	12.660 (0.804)	43	100093			282.00- 342.00	312.96
33 Carbon Disulfide					CAS #: 75-15-0		
12.743	12.743 (0.809)	76	85290	1.00000	0.9406	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.210	13.210 (0.839)	76	10557	1.00000	0.8999	80.00- 120.00	100.00
13.210	13.210 (0.839)	41	59714			599.84- 659.84	565.63
34 2-Propanol					CAS #: 67-63-0		
13.045	13.045 (0.829)	45	103709	1.00000	0.9917	80.00- 120.00	100.00
13.045	13.045 (0.829)	43	15864			0.00- 46.02	15.30
13.045	13.045 (0.829)	59	3904			0.00- 33.30	3.76
37 Methylene Chloride					CAS #: 75-09-2		
13.484	13.484 (0.856)	84	26057	1.00000	0.8390	80.00- 120.00	100.00
13.484	13.484 (0.856)	49	76540			254.12- 314.12	293.74
13.484	13.484 (0.856)	51	22820			56.45- 116.45	87.58
38 tert-butyl alcohol					CAS #: 75-65-0		
13.704	13.704 (0.870)	59	114179	1.00000	0.9497	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 tert-butyl alcohol (continued)							
13.704	13.704 (0.870)	41	27297			0.00- 51.49	23.91
13.704	13.704 (0.870)	57	12653			0.00- 40.80	11.08
39 MTBE					CAS #: 1634-04-4		
13.841	13.841 (0.879)	73	90463	1.00000	0.9221	80.00- 120.00	100.00
13.841	13.841 (0.879)	57	38236			12.63- 72.63	42.27
13.841	13.841 (0.879)	41	31882			8.96- 68.96	35.24
40 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.896	13.896 (0.883)	98	23131	1.00000	0.9991	80.00- 120.00	100.00
13.896	13.896 (0.883)	61	69922			297.51- 357.51	302.29
13.896	13.896 (0.883)	96	33660			130.03- 190.03	145.52
43 Hexane					CAS #: 110-54-3		
14.226	14.226 (0.904)	57	98626	1.00000	0.8041	80.00- 120.00	100.00
14.226	14.226 (0.904)	43	68552			42.37- 102.37	69.51
14.226	14.226 (0.904)	86	7567			0.00- 38.41	7.67
45 Isopropyl ether					CAS #: 108-20-3		
14.582	14.582 (0.926)	45	218577	1.00000	0.9315	80.00- 120.00	100.00
14.582	14.582 (0.926)	87	30137			0.00- 42.22	13.79
14.582	14.582 (0.926)	59	20197			0.00- 38.61	9.24
46 1,1-Dichloroethane					CAS #: 75-34-3		
14.582	14.582 (0.926)	63	75870	1.00000	0.9118	80.00- 120.00	100.00
14.610	14.610 (0.928)	65	20749			0.00- 57.42	27.35
47 Vinyl Acetate					CAS #: 108-05-4		
14.637	14.637 (0.930)	86	6699	1.00000	0.9923	80.00- 120.00	100.00
14.637	14.637 (0.930)	42	8576			210.64- 270.64	128.02
14.637	14.637 (0.930)	43	153621			3446.49-3506.49	2293.19
49 Ethyl-tert-butyl ether					CAS #: 637-92-3		
15.071	15.071 (0.957)	59	173172	1.00000	0.9384	80.00- 120.00	100.00
15.071	15.071 (0.957)	87	40943			0.00- 53.82	23.64
15.092	15.092 (0.959)	41	32112			0.00- 48.32	18.54
50 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.423	15.423 (0.980)	98	22880	1.00000	0.9027	80.00- 120.00	100.00
15.423	15.423 (0.980)	61	67317			267.29- 327.29	294.22
15.423	15.423 (0.980)	96	35617			128.72- 188.72	155.67
51 2-Butanone					CAS #: 78-93-3		
15.423	15.423 (0.980)	72	14172	1.00000	0.9434	80.00- 120.00	100.00
15.423	15.423 (0.980)	43	124300			804.58- 864.58	877.08

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
51 2-Butanone (continued)							
15.423	15.423 (0.980)	57	8589			28.64- 88.64	60.61
53 Tetrahydrofuran					CAS #: 109-99-9		
15.743	15.743 (1.000)	42	75814	1.00000	0.9331	80.00- 120.00	100.00
15.774	15.774 (1.002)	71	15022			0.00- 48.89	19.81
15.743	15.743 (1.000)	72	16112			0.00- 47.97	21.25
55 Chloroform					CAS #: 67-66-3		
15.836	15.836 (1.006)	83	68216	1.00000	0.9517	80.00- 120.00	100.00
15.836	15.836 (1.006)	85	45414			32.85- 92.85	66.57
57 Cyclohexane					CAS #: 110-82-7		
16.082	16.082 (1.022)	84	44088	1.00000	0.9434	80.00- 120.00	100.00
16.082	16.082 (1.022)	56	111384			218.68- 278.68	252.64
16.082	16.082 (1.022)	41	54966			93.43- 153.43	124.67
58 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.052	16.052 (1.020)	97	77635	1.00000	0.9867	80.00- 120.00	100.00
16.052	16.052 (1.020)	99	44257			32.55- 92.55	57.01
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.267	16.267 (1.033)	119	37090	1.00000	0.7588	80.00- 120.00	100.00
16.267	16.267 (1.033)	117	36627			74.89- 134.89	98.75
	Sum of Peak Amounts =				0.759		
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.535	16.535 (1.050)	56	95950	1.00000	0.8981	80.00- 120.00	100.00
16.535	16.535 (1.050)	57	290648			270.88- 330.88	302.92
16.535	16.535 (1.050)	41	72413			41.84- 101.84	75.47
64 Benzene					CAS #: 71-43-2		
16.590	16.590 (0.970)	78	96216	1.00000	0.9838	80.00- 120.00	100.00
16.590	16.590 (0.970)	77	21276			0.00- 52.95	22.11
66 tert-amyl methyl ether					CAS #: 994-05-8		
16.617	16.617 (0.971)	87	25923	1.00000	1.049	80.00- 120.00	100.00
16.617	16.617 (0.971)	73	97186			401.74- 461.74	374.90
16.617	16.617 (0.971)	55	49112			176.52- 236.52	189.45
68 1,2-Dichloroethane					CAS #: 107-06-2		
16.672	16.672 (0.974)	62	61154	1.00000	1.005	80.00- 120.00	100.00
16.672	16.672 (0.974)	64	18610			0.00- 58.12	30.43
69 Heptane					CAS #: 142-82-5		
16.782	16.782 (0.981)	57	53855	1.00000	0.7969	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
69 Heptane (continued)							
16.782	16.782 (0.981)	100	9830			0.00- 47.88	18.25
16.782	16.782 (0.981)	43	117425			180.46- 240.46	218.04
72 Trichloroethene					CAS #: 79-01-6		
17.523	17.523 (1.024)	130	48403	1.00000	0.9819	80.00- 120.00	100.00
17.523	17.523 (1.024)	95	46886			71.46- 131.46	96.87
17.523	17.523 (1.024)	97	28735			35.77- 95.77	59.37
73 Methylcyclohexane					CAS #: 108-87-2		
17.743	17.743 (1.037)	83	55809	1.00000	0.9834	80.00- 120.00	100.00
17.743	17.743 (1.037)	98	28267			18.11- 78.11	50.65
17.743	17.743 (1.037)	55	98116			129.45- 189.45	175.81
74 1,2-Dichloropropane					CAS #: 78-87-5		
17.935	17.935 (1.048)	63	50151	1.00000	0.9528	80.00- 120.00	100.00
17.935	17.935 (1.048)	62	36964			44.27- 104.27	73.71
17.935	17.935 (1.048)	41	36803			34.00- 94.00	73.38
75 1,4-Dioxane					CAS #: 123-91-1		
18.045	18.045 (1.055)	88	22809	1.00000	1.017	80.00- 120.00	100.00
18.045	18.045 (1.055)	58	36081			101.60- 161.60	158.19
18.045	18.045 (1.055)	57	14491			13.84- 73.84	63.53
77 Bromodichloromethane					CAS #: 75-27-4		
18.347	18.347 (1.072)	83	67712	1.00000	0.9326	80.00- 120.00	100.00
18.347	18.347 (1.072)	85	44077			33.15- 93.15	65.09
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.145	19.145 (1.119)	75	59020	1.00000	0.9476	80.00- 120.00	100.00
19.145	19.145 (1.119)	77	19204			1.23- 61.23	32.54
19.145	19.145 (1.119)	39	50867			46.59- 106.59	86.19
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.346	19.346 (1.131)	43	163956	1.00000	0.9883	80.00- 120.00	100.00
19.346	19.346 (1.131)	58	56309			5.80- 65.80	34.34
19.346	19.346 (1.131)	85	13383			0.00- 38.43	8.16
81 Toluene					CAS #: 108-88-3		
19.772	19.772 (1.155)	91	123035	1.00000	0.9674	80.00- 120.00	100.00
19.772	19.772 (1.155)	92	73226			28.70- 88.70	59.52
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.211	20.211 (0.918)	75	49561	1.00000	0.9661	80.00- 120.00	100.00
20.211	20.211 (0.918)	77	18043			1.04- 61.04	36.41
20.211	20.211 (0.918)	39	42003			45.23- 105.23	84.75

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
84 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.534	20.534 (0.932)	97	44894	1.00000	0.9011	80.00- 120.00	100.00
20.534	20.534 (0.932)	99	28525			33.51- 93.51	63.54
20.534	20.534 (0.932)	83	36824			50.51- 110.51	82.02
86 Tetrachloroethene					CAS #: 127-18-4		
20.714	20.714 (0.940)	166	62388	1.00000	0.9225	80.00- 120.00	100.00
20.714	20.714 (0.940)	129	45381			42.44- 102.44	72.74
20.714	20.714 (0.940)	131	48078			39.70- 99.70	77.06
87 2-Hexanone					CAS #: 591-78-6		
20.857	20.857 (0.947)	58	69377	1.00000	0.9483	80.00- 120.00	100.00
20.857	20.857 (0.947)	43	136741			168.09- 228.09	197.10
20.857	20.857 (0.947)	100	7574			0.00- 41.01	10.92
89 Dibromochloromethane					CAS #: 124-48-1		
21.180	21.180 (0.961)	129	79504	1.00000	0.9220	80.00- 120.00	100.00
21.180	21.180 (0.961)	127	63729			47.32- 107.32	80.16
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.395	21.395 (0.971)	107	66179	1.00000	0.9397	80.00- 120.00	100.00
21.395	21.395 (0.971)	109	65396			62.73- 122.73	98.82
93 Chlorobenzene					CAS #: 108-90-7		
22.056	22.056 (1.001)	112	101427	1.00000	1.006	80.00- 120.00	100.00
22.056	22.056 (1.001)	114	29485			3.73- 63.73	29.07
22.056	22.056 (1.001)	77	55698			23.21- 83.21	54.91
95 Ethyl Benzene					CAS #: 100-41-4		
22.138	22.138 (1.005)	106	43222	1.00000	0.8947	80.00- 120.00	100.00
22.138	22.138 (1.005)	91	154079			282.29- 342.29	356.48
96 m,p-Xylene					CAS #: 108-38-3		
22.303	22.303 (1.012)	106	50134	1.00000	0.9458	80.00- 120.00	100.00
22.303	22.303 (1.012)	91	101191			172.44- 232.44	201.84
100 o-Xylene					CAS #: 95-47-6		
22.852	22.852 (1.037)	106	44913	1.00000	0.8901	80.00- 120.00	100.00
22.852	22.852 (1.037)	91	99527			182.07- 242.07	221.60
101 Styrene					CAS #: 100-42-5		
22.880	22.880 (1.039)	104	75438	1.00000	0.9464	80.00- 120.00	100.00
22.880	22.880 (1.039)	78	37900			19.39- 79.39	50.24
102 Bromoform					CAS #: 75-25-2		
23.173	23.173 (1.052)	173	71397	1.00000	0.9316	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
102 Bromoform (continued)							
23.173	23.173 (1.052)	171	37396			22.28- 82.28	52.38
103 Cumene					CAS #: 98-82-8		
23.277	23.277 (1.057)	105	138645	1.00000	0.9434	80.00- 120.00	100.00
23.277	23.277 (1.057)	120	40527			0.00- 59.48	29.23
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.689	23.689 (1.075)	83	82612	1.00000	0.9220	80.00- 120.00	100.00
23.689	23.689 (1.075)	85	55727			32.49- 92.49	67.46
111 Propylbenzene					CAS #: 103-65-1		
23.767	23.767 (1.079)	91	125683	1.00000	0.8483	80.00- 120.00	100.00
23.767	23.767 (1.079)	120	32358			0.00- 55.67	25.75
113 4-Ethyltoluene					CAS #: 622-96-8		
23.896	23.896 (1.085)	105	99846	1.00000	0.8478	80.00- 120.00	100.00
23.896	23.896 (1.085)	120	31966			3.38- 63.38	32.02
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.947	23.947 (1.087)	105	88318	1.00000	0.7822	80.00- 120.00	100.00
23.947	23.947 (1.087)	120	44208			21.28- 81.28	50.06
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.386	24.386 (1.107)	105	97845	1.00000	0.7944	80.00- 120.00	100.00
24.386	24.386 (1.107)	120	44451			17.26- 77.26	45.43
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.756	24.756 (1.124)	146	66256	1.00000	0.9383	80.00- 120.00	100.00
24.756	24.756 (1.124)	148	41673			33.35- 93.35	62.90
24.756	24.756 (1.124)	111	26293			10.42- 70.42	39.68
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.868	24.868 (1.129)	146	57305	1.00000	0.8208	80.00- 120.00	100.00
24.868	24.868 (1.129)	148	37549			33.78- 93.78	65.52
24.868	24.868 (1.129)	111	24162			7.61- 67.61	42.16
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.002	25.002 (1.135)	91	83301	1.00000	0.9730	80.00- 120.00	100.00
25.002	25.002 (1.135)	126	18468			0.00- 51.90	22.17
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.271	25.271 (1.147)	146	58324	1.00000	0.8021	80.00- 120.00	100.00
25.271	25.271 (1.147)	148	37903			34.92- 94.92	64.99
25.271	25.271 (1.147)	111	23602			10.09- 70.09	40.47

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.065	27.065 (1.229)	180	61495	1.00000	1.007	80.00- 120.00	100.00
27.065	27.065 (1.229)	182	55560			64.14- 124.14	90.35
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.177	27.177 (1.234)	225	41707	1.00000	0.9080	80.00- 120.00	100.00
27.177	27.177 (1.234)	223	26401			34.80- 94.80	63.30
133 Naphthalene					CAS #: 91-20-3		
27.423	27.423 (1.245)	128	6476	0.10000	0.1224	80.00- 120.00	100.00
27.423	27.423 (1.245)	127	3193			0.00- 45.63	49.31

QC Flag Legend

H - Operator selected an alternate compound hit.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v092909.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m
Misc Info: 1.0ppbv (1.0ppbv)

Calibration Date: 29-SEP-2015
Calibration Time: 19:51
Client Smp ID: Level # 8
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	90777	54466	127088	90805	0.03
71 1,4-Difluorobenze	412207	247324	577090	404139	-1.96
92 Chlorobenzene-d5	371144	222686	519602	372786	0.44

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.74	15.41	16.07	15.74	0.00
71 1,4-Difluorobenze	17.11	16.78	17.44	17.11	0.00
92 Chlorobenzene-d5	22.03	21.70	22.36	22.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/29Sep2015.b/v092909.d

Date : 29-SEP-2015 19:17

Client ID: Level # 8

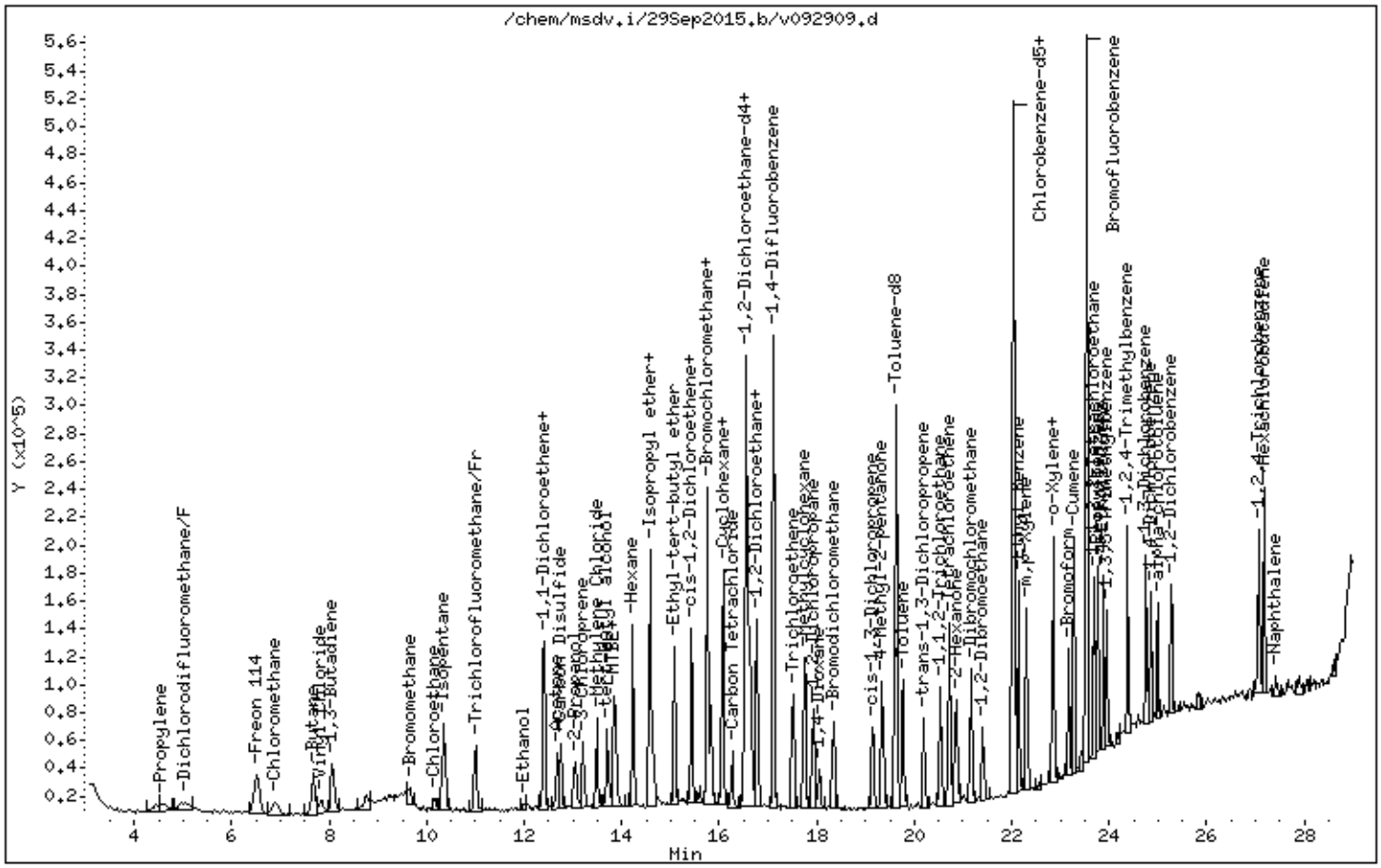
Instrument: msdv.i

Sample Info: 250mL# 2736-249

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/29Sep2015.b/v092910.d
Lab Smp Id: ICAL Client Smp ID: Level # 9
Inj Date : 29-SEP-2015 19:51
Operator : gh Inst ID: msdv.i
Smp Info : 25mL# 2736-233
Misc Info : 5.0ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/29Sep2015.b/v15l0929a.m
Meth Date : 30-Sep-2015 13:02 ghehir Quant Type: ISTD
Cal Date : 29-SEP-2015 19:51 Cal File: v092910.d
Als bottle: 2 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HiLoFULLcrv.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 54 Bromochloromethane					CAS #: 74-97-5		
15.743	15.743 (1.000)	130	90777	5.00000		80.00- 120.00	100.00
15.743	15.743 (1.000)	128	70839			48.04- 108.04	78.04
15.743	15.743 (1.000)	49	285735			284.77- 344.77	314.77
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.111	17.111 (1.000)	114	412207	5.00000		80.00- 120.00	100.00
17.111	17.111 (1.000)	88	58379			0.00- 44.16	14.16
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.029	22.029 (1.000)	117	371144	5.00000		80.00- 120.00	100.00
22.029	22.029 (1.000)	82	180765			18.70- 78.70	48.70
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.562	16.562 (1.052)	65	156985	5.00000	5.000	80.00- 120.00	100.00
16.562	16.562 (1.052)	67	77565			19.41- 79.41	49.41
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.638	19.638 (1.148)	98	386884	5.00000	5.000	80.00- 120.00	100.00
19.615	19.615 (1.146)	70	41565			0.00- 40.74	10.74

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.638	19.638 (1.148)	100	251204			34.93- 94.93	64.93
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.535	23.535 (1.068)	174	186842	5.00000	5.000	80.00- 120.00	100.00
23.535	23.535 (1.068)	95	231790			94.06- 154.06	124.06
23.535	23.535 (1.068)	176	184887			68.95- 128.95	98.95
3 Propylene					CAS #: 115-07-1		
4.485	4.485 (0.285)	41	240969	5.00000	5.000	80.00- 120.00	100.00
4.447	4.447 (0.282)	42	176904			43.41- 103.41	73.41
4.447	4.447 (0.282)	39	160485			36.60- 96.60	66.60
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
4.976	4.976 (0.316)	85	377480	5.00000	5.000	80.00- 120.00	100.00
5.013	5.013 (0.318)	87	119071			1.54- 61.54	31.54
6 Freon 114					CAS #: 76-14-2		
6.486	6.486 (0.412)	135	329406	5.00000	5.000	80.00- 120.00	100.00
6.524	6.524 (0.414)	137	102056			0.98- 60.98	30.98
6.486	6.486 (0.412)	85	393374			89.42- 149.42	119.42
8 Chloromethane					CAS #: 74-87-3		
6.826	6.826 (0.434)	50	297112	5.00000	5.000	80.00- 120.00	100.00
6.864	6.864 (0.436)	52	96298			2.41- 62.41	32.41
9 Butane					CAS #: 106-97-8		
7.658	7.658 (0.486)	58	57453	5.00000	5.000	80.00- 120.00	100.00
7.658	7.658 (0.486)	43	494553			830.80- 890.80	860.80
10 Vinyl Chloride					CAS #: 75-01-4		
7.813	7.813 (0.496)	62	214724	5.00000	5.000	80.00- 120.00	100.00
7.813	7.813 (0.496)	64	58422			0.00- 57.21	27.21
11 1,3-Butadiene					CAS #: 106-99-0		
8.061	8.061 (0.512)	54	252036	5.00000	5.000	80.00- 120.00	100.00
8.061	8.061 (0.512)	39	228363			60.61- 120.61	90.61
12 Bromomethane					CAS #: 74-83-9		
9.655	9.655 (0.613)	94	125723	5.00000	5.000	80.00- 120.00	100.00
9.655	9.655 (0.613)	96	120088			65.52- 125.52	95.52
17 Chloroethane					CAS #: 75-00-3		
10.161	10.161 (0.645)	64	88211	5.00000	5.000	80.00- 120.00	100.00
10.161	10.161 (0.645)	66	23349			0.00- 56.47	26.47

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
18 Isopentane					CAS #: 78-78-4		
10.330	10.330 (0.656)	57	237651	5.00000	5.000	80.00- 120.00	100.00
10.330	10.330 (0.656)	43	393256			135.48- 195.48	165.48
10.330	10.330 (0.656)	42	334761			110.86- 170.86	140.86
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.980	10.980 (0.697)	101	435495	5.00000	5.000	80.00- 120.00	100.00
11.004	11.004 (0.699)	103	278307			33.91- 93.91	63.91
24 Ethanol					CAS #: 64-17-5		
11.919	11.919 (0.757)	45	131684	5.00000	5.000	80.00- 120.00	100.00
11.919	11.919 (0.757)	46	48627			6.93- 66.93	36.93
11.919	11.919 (0.757)	43	20825			0.00- 45.81	15.81
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.386	12.386 (0.787)	98	104832	5.00000	5.000	80.00- 120.00	100.00
12.386	12.386 (0.787)	61	399112			350.72- 410.72	380.72
12.386	12.386 (0.787)	96	167296			129.58- 189.58	159.58
28 Freon 113					CAS #: 76-13-1		
12.413	12.413 (0.788)	151	310802	5.00000	5.000	80.00- 120.00	100.00
12.413	12.413 (0.788)	153	198186			33.77- 93.77	63.77
12.413	12.413 (0.788)	101	348759			82.21- 142.21	112.21
31 Acetone					CAS #: 67-64-1		
12.660	12.660 (0.804)	58	139132	5.00000	5.000	80.00- 120.00	100.00
12.660	12.660 (0.804)	43	434091			282.00- 342.00	312.00
33 Carbon Disulfide					CAS #: 75-15-0		
12.743	12.743 (0.809)	76	461672	5.00000	5.000	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.210	13.210 (0.839)	76	62147	5.00000	5.000	80.00- 120.00	100.00
13.210	13.210 (0.839)	41	391427			599.84- 659.84	629.84
34 2-Propanol					CAS #: 67-63-0		
13.018	13.018 (0.827)	45	572582	5.00000	5.000	80.00- 120.00	100.00
13.018	13.018 (0.827)	43	91714			0.00- 46.02	16.02
13.018	13.018 (0.827)	59	18914			0.00- 33.30	3.30
37 Methylene Chloride					CAS #: 75-09-2		
13.484	13.484 (0.856)	84	138531	5.00000	5.000	80.00- 120.00	100.00
13.484	13.484 (0.856)	49	393592			254.12- 314.12	284.12
13.484	13.484 (0.856)	51	119765			56.45- 116.45	86.45
38 tert-butyl alcohol					CAS #: 75-65-0		
13.677	13.677 (0.869)	59	582733	5.00000	5.000	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 tert-butyl alcohol (continued)							
13.677	13.677 (0.869)	41	125240			0.00- 51.49	21.49
13.677	13.677 (0.869)	57	62931			0.00- 40.80	10.80
39 MTBE					CAS #: 1634-04-4		
13.841	13.841 (0.879)	73	469005	5.00000	5.000	80.00- 120.00	100.00
13.841	13.841 (0.879)	57	199932			12.63- 72.63	42.63
13.841	13.841 (0.879)	41	182705			8.96- 68.96	38.96
40 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.896	13.896 (0.883)	98	107967	5.00000	5.000	80.00- 120.00	100.00
13.869	13.869 (0.881)	61	353607			297.51- 357.51	327.51
13.896	13.896 (0.883)	96	172784			130.03- 190.03	160.03
43 Hexane					CAS #: 110-54-3		
14.226	14.226 (0.904)	57	492799	5.00000	5.000	80.00- 120.00	100.00
14.226	14.226 (0.904)	43	356637			42.37- 102.37	72.37
14.226	14.226 (0.904)	86	41425			0.00- 38.41	8.41
45 Isopropyl ether					CAS #: 108-20-3		
14.582	14.582 (0.926)	45	1190316	5.00000	5.000	80.00- 120.00	100.00
14.582	14.582 (0.926)	87	145401			0.00- 42.22	12.22
14.582	14.582 (0.926)	59	102432			0.00- 38.61	8.61
46 1,1-Dichloroethane					CAS #: 75-34-3		
14.582	14.582 (0.926)	63	407879	5.00000	5.000	80.00- 120.00	100.00
14.582	14.582 (0.926)	65	111851			0.00- 57.42	27.42
47 Vinyl Acetate					CAS #: 108-05-4		
14.637	14.637 (0.930)	86	39030	5.00000	5.000	80.00- 120.00	100.00
14.637	14.637 (0.930)	42	93920			210.64- 270.64	240.64
14.637	14.637 (0.930)	43	1356874			3446.49-3506.49	3476.49
49 Ethyl-tert-butyl ether					CAS #: 637-92-3		
15.071	15.071 (0.957)	59	933005	5.00000	5.000	80.00- 120.00	100.00
15.071	15.071 (0.957)	87	222233			0.00- 53.82	23.82
15.071	15.071 (0.957)	41	170903			0.00- 48.32	18.32
50 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.423	15.423 (0.980)	98	120541	5.00000	5.000	80.00- 120.00	100.00
15.423	15.423 (0.980)	61	358357			267.29- 327.29	297.29
15.423	15.423 (0.980)	96	191326			128.72- 188.72	158.72
51 2-Butanone					CAS #: 78-93-3		
15.423	15.423 (0.980)	72	79802	5.00000	5.000	80.00- 120.00	100.00
15.423	15.423 (0.980)	43	666013			804.58- 864.58	834.58

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
51 2-Butanone (continued)							
15.423	15.423 (0.980)	57	46792			28.64- 88.64	58.64
53 Tetrahydrofuran					CAS #: 109-99-9		
15.743	15.743 (1.000)	42	413803	5.00000	5.000	80.00- 120.00	100.00
15.743	15.743 (1.000)	71	78168			0.00- 48.89	18.89
15.743	15.743 (1.000)	72	74370			0.00- 47.97	17.97
55 Chloroform					CAS #: 67-66-3		
15.836	15.836 (1.006)	83	347918	5.00000	5.000	80.00- 120.00	100.00
15.836	15.836 (1.006)	85	218675			32.85- 92.85	62.85
57 Cyclohexane					CAS #: 110-82-7		
16.082	16.082 (1.022)	84	229064	5.00000	5.000	80.00- 120.00	100.00
16.082	16.082 (1.022)	56	569625			218.68- 278.68	248.68
16.082	16.082 (1.022)	41	282744			93.43- 153.43	123.43
58 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.052	16.052 (1.020)	97	395644	5.00000	5.000	80.00- 120.00	100.00
16.052	16.052 (1.020)	99	247470			32.55- 92.55	62.55
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.267	16.267 (1.033)	119	340239	5.00000	5.000	80.00- 120.00	100.00
16.267	16.267 (1.033)	117	356879			74.89- 134.89	104.89
Sum of Peak Amounts =				5			
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.535	16.535 (1.050)	56	519432	5.00000	5.000	80.00- 120.00	100.00
16.535	16.535 (1.050)	57	1562875			270.88- 330.88	300.88
16.535	16.535 (1.050)	41	373169			41.84- 101.84	71.84
64 Benzene					CAS #: 71-43-2		
16.562	16.562 (0.968)	78	506709	5.00000	5.000	80.00- 120.00	100.00
16.562	16.562 (0.968)	77	116301			0.00- 52.95	22.95
66 tert-amyl methyl ether					CAS #: 994-05-8		
16.617	16.617 (0.971)	87	124876	5.00000	5.000	80.00- 120.00	100.00
16.617	16.617 (0.971)	73	539145			401.74- 461.74	431.74
16.617	16.617 (0.971)	55	257893			176.52- 236.52	206.52
68 1,2-Dichloroethane					CAS #: 107-06-2		
16.672	16.672 (0.974)	62	327190	5.00000	5.000	80.00- 120.00	100.00
16.672	16.672 (0.974)	64	92012			0.00- 58.12	28.12
69 Heptane					CAS #: 142-82-5		
16.782	16.782 (0.981)	57	298202	5.00000	5.000	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
69 Heptane (continued)							
16.782	16.782 (0.981)	100	53311			0.00- 47.88	17.88
16.782	16.782 (0.981)	43	627610			180.46- 240.46	210.46
72 Trichloroethene					CAS #: 79-01-6		
17.523	17.523 (1.024)	130	249665	5.00000	5.000	80.00- 120.00	100.00
17.523	17.523 (1.024)	95	253308			71.46- 131.46	101.46
17.523	17.523 (1.024)	97	164210			35.77- 95.77	65.77
73 Methylcyclohexane					CAS #: 108-87-2		
17.743	17.743 (1.037)	83	316098	5.00000	5.000	80.00- 120.00	100.00
17.743	17.743 (1.037)	98	152079			18.11- 78.11	48.11
17.743	17.743 (1.037)	55	504021			129.45- 189.45	159.45
74 1,2-Dichloropropane					CAS #: 78-87-5		
17.935	17.935 (1.048)	63	271982	5.00000	5.000	80.00- 120.00	100.00
17.935	17.935 (1.048)	62	202012			44.27- 104.27	74.27
17.935	17.935 (1.048)	41	174056			34.00- 94.00	64.00
75 1,4-Dioxane					CAS #: 123-91-1		
18.045	18.045 (1.055)	88	122890	5.00000	5.000	80.00- 120.00	100.00
18.045	18.045 (1.055)	58	161727			101.60- 161.60	131.60
18.045	18.045 (1.055)	57	53873			13.84- 73.84	43.84
77 Bromodichloromethane					CAS #: 75-27-4		
18.347	18.347 (1.072)	83	379165	5.00000	5.000	80.00- 120.00	100.00
18.347	18.347 (1.072)	85	239446			33.15- 93.15	63.15
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.145	19.145 (1.119)	75	335271	5.00000	5.000	80.00- 120.00	100.00
19.145	19.145 (1.119)	77	104695			1.23- 61.23	31.23
19.145	19.145 (1.119)	39	256796			46.59- 106.59	76.59
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.346	19.346 (1.131)	43	829724	5.00000	5.000	80.00- 120.00	100.00
19.346	19.346 (1.131)	58	297012			5.80- 65.80	35.80
19.346	19.346 (1.131)	85	69906			0.00- 38.43	8.43
81 Toluene					CAS #: 108-88-3		
19.772	19.772 (1.155)	91	635079	5.00000	5.000	80.00- 120.00	100.00
19.772	19.772 (1.155)	92	372811			28.70- 88.70	58.70
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.212	20.212 (0.918)	75	289767	5.00000	5.000	80.00- 120.00	100.00
20.212	20.212 (0.918)	77	89943			1.04- 61.04	31.04
20.212	20.212 (0.918)	39	217992			45.23- 105.23	75.23

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
84 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.534	20.534 (0.932)	97	239902	5.00000	5.000	80.00- 120.00	100.00
20.534	20.534 (0.932)	99	152359			33.51- 93.51	63.51
20.534	20.534 (0.932)	83	193152			50.51- 110.51	80.51
86 Tetrachloroethene					CAS #: 127-18-4		
20.714	20.714 (0.940)	166	344317	5.00000	5.000	80.00- 120.00	100.00
20.714	20.714 (0.940)	129	249430			42.44- 102.44	72.44
20.714	20.714 (0.940)	131	239981			39.70- 99.70	69.70
87 2-Hexanone					CAS #: 591-78-6		
20.821	20.821 (0.945)	58	370122	5.00000	5.000	80.00- 120.00	100.00
20.821	20.821 (0.945)	43	733160			168.09- 228.09	198.09
20.821	20.821 (0.945)	100	40733			0.00- 41.01	11.01
89 Dibromochloromethane					CAS #: 124-48-1		
21.180	21.180 (0.961)	129	457365	5.00000	5.000	80.00- 120.00	100.00
21.180	21.180 (0.961)	127	353614			47.32- 107.32	77.32
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.395	21.395 (0.971)	107	376174	5.00000	5.000	80.00- 120.00	100.00
21.395	21.395 (0.971)	109	348822			62.73- 122.73	92.73
93 Chlorobenzene					CAS #: 108-90-7		
22.056	22.056 (1.001)	112	525866	5.00000	5.000	80.00- 120.00	100.00
22.056	22.056 (1.001)	114	177357			3.73- 63.73	33.73
22.056	22.056 (1.001)	77	279800			23.21- 83.21	53.21
95 Ethyl Benzene					CAS #: 100-41-4		
22.139	22.139 (1.005)	106	255038	5.00000	5.000	80.00- 120.00	100.00
22.139	22.139 (1.005)	91	796456			282.29- 342.29	312.29
96 m,p-Xylene					CAS #: 108-38-3		
22.303	22.303 (1.012)	106	265969	5.00000	5.000	80.00- 120.00	100.00
22.303	22.303 (1.012)	91	538434			172.44- 232.44	202.44
100 o-Xylene					CAS #: 95-47-6		
22.852	22.852 (1.037)	106	250680	5.00000	5.000	80.00- 120.00	100.00
22.852	22.852 (1.037)	91	531607			182.07- 242.07	212.07
101 Styrene					CAS #: 100-42-5		
22.880	22.880 (1.039)	104	399889	5.00000	5.000	80.00- 120.00	100.00
22.852	22.852 (1.037)	78	197519			19.39- 79.39	49.39
102 Bromoform					CAS #: 75-25-2		
23.173	23.173 (1.052)	173	438758	5.00000	5.000	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
102 Bromoform (continued)							
23.173	23.173 (1.052)	171	229382			22.28- 82.28	52.28
103 Cumene					CAS #: 98-82-8		
23.277	23.277 (1.057)	105	730356	5.00000	5.000	80.00- 120.00	100.00
23.277	23.277 (1.057)	120	215312			0.00- 59.48	29.48
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.689	23.689 (1.075)	83	437430	5.00000	5.000	80.00- 120.00	100.00
23.689	23.689 (1.075)	85	273354			32.49- 92.49	62.49
111 Propylbenzene					CAS #: 103-65-1		
23.767	23.767 (1.079)	91	678866	5.00000	5.000	80.00- 120.00	100.00
23.767	23.767 (1.079)	120	174278			0.00- 55.67	25.67
113 4-Ethyltoluene					CAS #: 622-96-8		
23.896	23.896 (1.085)	105	517585	5.00000	5.000	80.00- 120.00	100.00
23.896	23.896 (1.085)	120	172755			3.38- 63.38	33.38
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.947	23.947 (1.087)	105	489228	5.00000	5.000	80.00- 120.00	100.00
23.947	23.947 (1.087)	120	250852			21.28- 81.28	51.28
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.386	24.386 (1.107)	105	489858	5.00000	5.000	80.00- 120.00	100.00
24.386	24.386 (1.107)	120	231516			17.26- 77.26	47.26
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.756	24.756 (1.124)	146	346673	5.00000	5.000	80.00- 120.00	100.00
24.756	24.756 (1.124)	148	219631			33.35- 93.35	63.35
24.756	24.756 (1.124)	111	140119			10.42- 70.42	40.42
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.868	24.868 (1.129)	146	305676	5.00000	5.000	80.00- 120.00	100.00
24.868	24.868 (1.129)	148	194968			33.78- 93.78	63.78
24.868	24.868 (1.129)	111	114973			7.61- 67.61	37.61
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.002	25.002 (1.135)	91	459383	5.00000	5.000	80.00- 120.00	100.00
25.002	25.002 (1.135)	126	100603			0.00- 51.90	21.90
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.271	25.271 (1.147)	146	302994	5.00000	5.000	80.00- 120.00	100.00
25.271	25.271 (1.147)	148	196695			34.92- 94.92	64.92
25.271	25.271 (1.147)	111	121465			10.09- 70.09	40.09

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.065	27.065 (1.229)	180	269903	5.00000	5.000	80.00- 120.00	100.00
27.065	27.065 (1.229)	182	254096			64.14- 124.14	94.14
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.177	27.177 (1.234)	225	184462	5.00000	5.000	80.00- 120.00	100.00
27.177	27.177 (1.234)	223	119531			34.80- 94.80	64.80
133 Naphthalene					CAS #: 91-20-3		
27.401	27.401 (1.244)	128	20416	0.50000	0.5000	80.00- 120.00	100.00
27.423	27.423 (1.245)	127	3192			0.00- 45.63	15.63

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v092910.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m
Misc Info: 5.0ppbv (50ppbv)

Calibration Date: 29-SEP-2015
Calibration Time: 19:51
Client Smp ID: Level # 9
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	90777	54466	127088	90777	0.00
71 1,4-Difluorobenze	412207	247324	577090	412207	0.00
92 Chlorobenzene-d5	371144	222686	519602	371144	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.74	15.41	16.07	15.74	0.00
71 1,4-Difluorobenze	17.11	16.78	17.44	17.11	0.00
92 Chlorobenzene-d5	22.03	21.70	22.36	22.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/29Sep2015.b/v092910.d

Date : 29-SEP-2015 19:51

Client ID: Level # 9

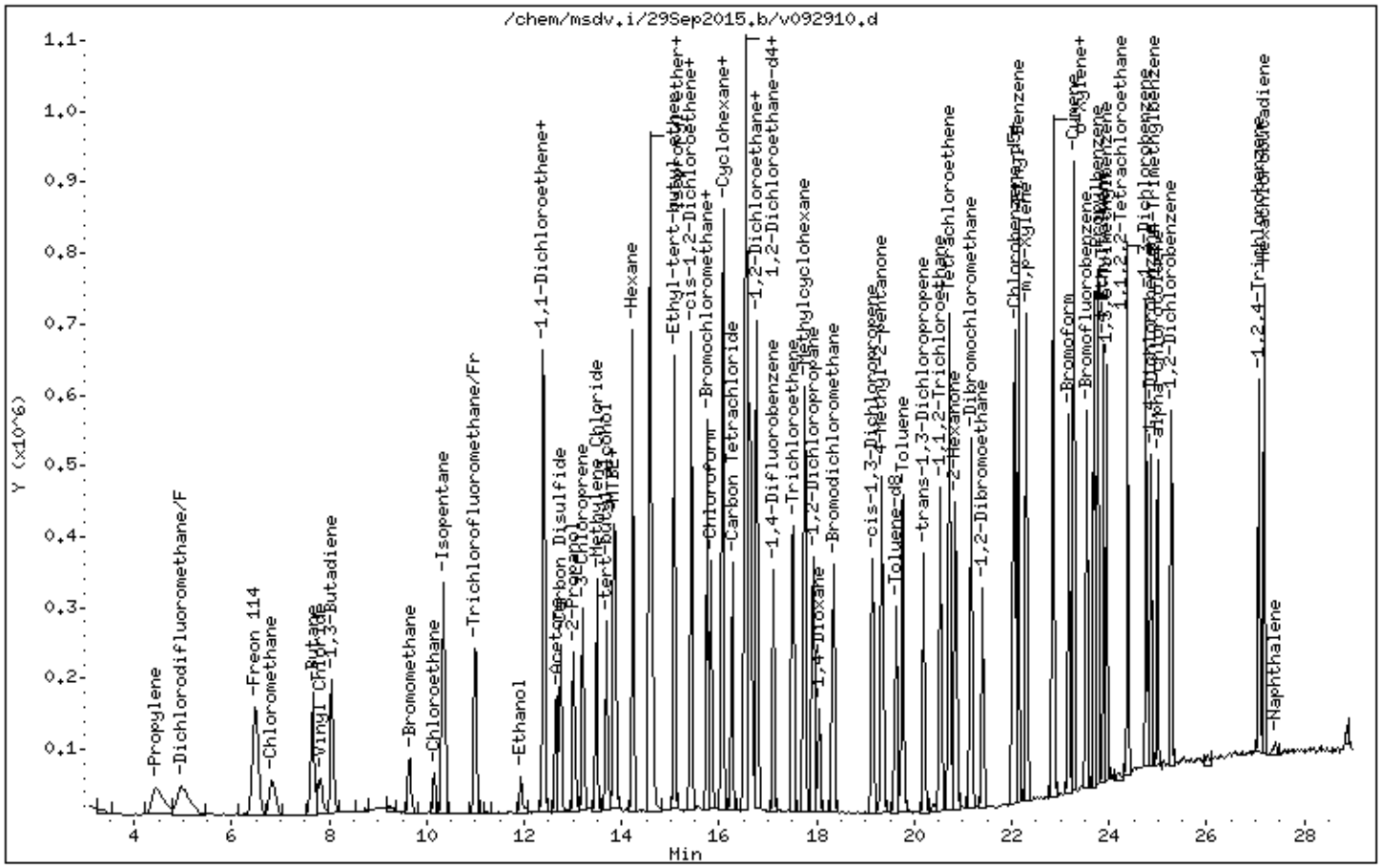
Instrument: msdv.i

Sample Info: 25mL# 2736-233

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/29Sep2015.b/v092911.d
Lab Smp Id: ICAL Client Smp ID: Level # 10
Inj Date : 29-SEP-2015 20:36
Operator : gh Inst ID: msdv.i
Smp Info : 50mL# 2736-233
Misc Info : 10ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/29Sep2015.b/v15l0929a.m
Meth Date : 30-Sep-2015 13:02 ghehir Quant Type: ISTD
Cal Date : 29-SEP-2015 20:36 Cal File: v092911.d
Als bottle: 2 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HiLoFULLcrv.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 54 Bromochloromethane					CAS #: 74-97-5		
15.743	15.743 (1.000)	130	96199	5.00000		80.00- 120.00	100.00
15.743	15.743 (1.000)	128	67965			48.04- 108.04	70.65
15.743	15.743 (1.000)	49	321208			284.77- 344.77	333.90
* 71 1,4-Difluorobenzene					CAS #: 540-36-3		
17.111	17.111 (1.000)	114	409954	5.00000		80.00- 120.00	100.00
17.111	17.111 (1.000)	88	58954			0.00- 44.16	14.38
* 92 Chlorobenzene-d5					CAS #: 3114-55-4		
22.029	22.029 (1.000)	117	367966	5.00000		80.00- 120.00	100.00
22.029	22.029 (1.000)	82	186846			18.70- 78.70	50.78
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.562	16.562 (1.052)	65	155059	5.00000	4.654	80.00- 120.00	100.00
16.562	16.562 (1.052)	67	87375			19.41- 79.41	56.35
$ 80 Toluene-d8					CAS #: 2037-26-5		
19.638	19.638 (1.148)	98	382141	5.00000	4.953	80.00- 120.00	100.00
19.638	19.638 (1.148)	70	39563			0.00- 40.74	10.35

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.638	19.638 (1.148)	100	250069			34.93- 94.93	65.44
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.535	23.535 (1.068)	174	198258	5.00000	5.300	80.00- 120.00	100.00
23.535	23.535 (1.068)	95	238051			94.06- 154.06	120.07
23.535	23.535 (1.068)	176	183602			68.95- 128.95	92.61
3 Propylene					CAS #: 115-07-1		
4.485	4.485 (0.285)	41	469736	10.0000	8.100	80.00- 120.00	100.00
4.485	4.485 (0.285)	42	329065			43.41- 103.41	70.05
4.447	4.447 (0.282)	39	302813			36.60- 96.60	64.46
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.013	5.013 (0.318)	85	722180	10.0000	9.048	80.00- 120.00	100.00
4.976	4.976 (0.316)	87	225150			1.54- 61.54	31.18
6 Freon 114					CAS #: 76-14-2		
6.524	6.524 (0.414)	135	599208	10.0000	9.080	80.00- 120.00	100.00
6.524	6.524 (0.414)	137	191056			0.98- 60.98	31.88
6.486	6.486 (0.412)	85	709712			89.42- 149.42	118.44
8 Chloromethane					CAS #: 74-87-3		
6.864	6.864 (0.436)	50	559872	10.0000	8.516	80.00- 120.00	100.00
6.864	6.864 (0.436)	52	179812			2.41- 62.41	32.12
9 Butane					CAS #: 106-97-8		
7.658	7.658 (0.486)	58	100568	10.0000	8.797	80.00- 120.00	100.00
7.658	7.658 (0.486)	43	923894			830.80- 890.80	918.68
10 Vinyl Chloride					CAS #: 75-01-4		
7.813	7.813 (0.496)	62	408550	10.0000	9.865	80.00- 120.00	100.00
7.813	7.813 (0.496)	64	109261			0.00- 57.21	26.74
11 1,3-Butadiene					CAS #: 106-99-0		
8.061	8.061 (0.512)	54	462310	10.0000	7.965	80.00- 120.00	100.00
8.061	8.061 (0.512)	39	403242			60.61- 120.61	87.22
12 Bromomethane					CAS #: 74-83-9		
9.655	9.655 (0.613)	94	237741	10.0000	9.478	80.00- 120.00	100.00
9.655	9.655 (0.613)	96	230724			65.52- 125.52	97.05
17 Chloroethane					CAS #: 75-00-3		
10.161	10.161 (0.645)	64	164740	10.0000	9.672	80.00- 120.00	100.00
10.161	10.161 (0.645)	66	45789			0.00- 56.47	27.79

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
18 Isopentane					CAS #: 78-78-4		
10.354	10.354 (0.658)	57	439387	10.0000	8.386	80.00- 120.00	100.00
10.354	10.354 (0.658)	43	719423			135.48- 195.48	163.73
10.354	10.354 (0.658)	42	608639			110.86- 170.86	138.52
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.004	11.004 (0.699)	101	783346	10.0000	8.912	80.00- 120.00	100.00
11.004	11.004 (0.699)	103	511248			33.91- 93.91	65.26
24 Ethanol					CAS #: 64-17-5		
11.919	11.919 (0.757)	45	250557	10.0000	9.908	80.00- 120.00	100.00
11.919	11.919 (0.757)	46	100093			6.93- 66.93	39.95
11.919	11.919 (0.757)	43	44567			0.00- 45.81	17.79
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.386	12.386 (0.787)	98	198570	10.0000	8.464	80.00- 120.00	100.00
12.386	12.386 (0.787)	61	714080			350.72- 410.72	359.61
12.386	12.386 (0.787)	96	316699			129.58- 189.58	159.49
28 Freon 113					CAS #: 76-13-1		
12.413	12.413 (0.788)	151	573298	10.0000	8.907	80.00- 120.00	100.00
12.413	12.413 (0.788)	153	364468			33.77- 93.77	63.57
12.413	12.413 (0.788)	101	644753			82.21- 142.21	112.46
31 Acetone					CAS #: 67-64-1		
12.660	12.660 (0.804)	58	259442	10.0000	7.768	80.00- 120.00	100.00
12.660	12.660 (0.804)	43	802075			282.00- 342.00	309.15
33 Carbon Disulfide					CAS #: 75-15-0		
12.743	12.743 (0.809)	76	855369	10.0000	9.155	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.210	13.210 (0.839)	76	125836	10.0000	10.100	80.00- 120.00	100.00
13.210	13.210 (0.839)	41	726587			599.84- 659.84	577.41
34 2-Propanol					CAS #: 67-63-0		
13.018	13.018 (0.827)	45	1090021	10.0000	9.879	80.00- 120.00	100.00
13.018	13.018 (0.827)	43	170067			0.00- 46.02	15.60
13.018	13.018 (0.827)	59	34085			0.00- 33.30	3.13
37 Methylene Chloride					CAS #: 75-09-2		
13.484	13.484 (0.856)	84	253663	10.0000	8.080	80.00- 120.00	100.00
13.484	13.484 (0.856)	49	718556			254.12- 314.12	283.27
13.484	13.484 (0.856)	51	224472			56.45- 116.45	88.49
38 tert-butyl alcohol					CAS #: 75-65-0		
13.704	13.704 (0.870)	59	1111019	10.0000	9.011	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
38 tert-butyl alcohol (continued)							
13.677	13.677 (0.869)	41	224872			0.00- 51.49	20.24
13.704	13.704 (0.870)	57	115854			0.00- 40.80	10.43
39 MTBE					CAS #: 1634-04-4		
13.841	13.841 (0.879)	73	868464	10.0000	8.640	80.00- 120.00	100.00
13.841	13.841 (0.879)	57	362755			12.63- 72.63	41.77
13.841	13.841 (0.879)	41	330768			8.96- 68.96	38.09
40 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.896	13.896 (0.883)	98	206799	10.0000	8.705	80.00- 120.00	100.00
13.896	13.896 (0.883)	61	663923			297.51- 357.51	321.05
13.896	13.896 (0.883)	96	314000			130.03- 190.03	151.84
43 Hexane					CAS #: 110-54-3		
14.226	14.226 (0.904)	57	941558	10.0000	7.669	80.00- 120.00	100.00
14.226	14.226 (0.904)	43	646764			42.37- 102.37	68.69
14.226	14.226 (0.904)	86	75899			0.00- 38.41	8.06
45 Isopropyl ether					CAS #: 108-20-3		
14.583	14.583 (0.926)	45	2215989	10.0000	9.163	80.00- 120.00	100.00
14.583	14.583 (0.926)	87	281273			0.00- 42.22	12.69
14.583	14.583 (0.926)	59	204889			0.00- 38.61	9.25
46 1,1-Dichloroethane					CAS #: 75-34-3		
14.583	14.583 (0.926)	63	752770	10.0000	8.796	80.00- 120.00	100.00
14.583	14.583 (0.926)	65	206558			0.00- 57.42	27.44
47 Vinyl Acetate					CAS #: 108-05-4		
14.637	14.637 (0.930)	86	76536	10.0000	10.517	80.00- 120.00	100.00
14.637	14.637 (0.930)	42	173094			210.64- 270.64	226.16
14.637	14.637 (0.930)	43	2406496			3446.49-3506.49	3144.27
49 Ethyl-tert-butyl ether					CAS #: 637-92-3		
15.071	15.071 (0.957)	59	1746391	10.0000	9.178	80.00- 120.00	100.00
15.071	15.071 (0.957)	87	420168			0.00- 53.82	24.06
15.071	15.071 (0.957)	41	319952			0.00- 48.32	18.32
50 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.423	15.423 (0.980)	98	223690	10.0000	8.618	80.00- 120.00	100.00
15.423	15.423 (0.980)	61	657887			267.29- 327.29	294.11
15.423	15.423 (0.980)	96	357168			128.72- 188.72	159.67
51 2-Butanone					CAS #: 78-93-3		
15.423	15.423 (0.980)	72	154549	10.0000	9.782	80.00- 120.00	100.00
15.423	15.423 (0.980)	43	1378396			804.58- 864.58	891.88

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
51 2-Butanone (continued)							
15.423	15.423 (0.980)	57	93312			28.64- 88.64	60.38
53 Tetrahydrofuran					CAS #: 109-99-9		
15.743	15.743 (1.000)	42	759725	10.0000	9.093	80.00- 120.00	100.00
15.743	15.743 (1.000)	71	149991			0.00- 48.89	19.74
15.743	15.743 (1.000)	72	154719			0.00- 47.97	20.37
55 Chloroform					CAS #: 67-66-3		
15.836	15.836 (1.006)	83	640892	10.0000	8.712	80.00- 120.00	100.00
15.836	15.836 (1.006)	85	426441			32.85- 92.85	66.54
57 Cyclohexane					CAS #: 110-82-7		
16.082	16.082 (1.022)	84	415156	10.0000	8.665	80.00- 120.00	100.00
16.082	16.082 (1.022)	56	1039591			218.68- 278.68	250.41
16.082	16.082 (1.022)	41	527702			93.43- 153.43	127.11
58 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.052	16.052 (1.020)	97	738929	10.0000	9.036	80.00- 120.00	100.00
16.052	16.052 (1.020)	99	471430			32.55- 92.55	63.80
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.267	16.267 (1.033)	119	649973	10.0000	12.039	80.00- 120.00	100.00
16.267	16.267 (1.033)	117	668860			74.89- 134.89	102.91
Sum of Peak Amounts =				12			
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.535	16.535 (1.050)	56	968519	10.0000	8.811	80.00- 120.00	100.00
16.535	16.535 (1.050)	57	2932059			270.88- 330.88	302.74
16.535	16.535 (1.050)	41	702884			41.84- 101.84	72.57
64 Benzene					CAS #: 71-43-2		
16.562	16.562 (0.968)	78	951915	10.0000	9.674	80.00- 120.00	100.00
16.562	16.562 (0.968)	77	213275			0.00- 52.95	22.40
66 tert-amyl methyl ether					CAS #: 994-05-8		
16.617	16.617 (0.971)	87	228191	10.0000	9.312	80.00- 120.00	100.00
16.617	16.617 (0.971)	73	991136			401.74- 461.74	434.34
16.617	16.617 (0.971)	55	485165			176.52- 236.52	212.61
68 1,2-Dichloroethane					CAS #: 107-06-2		
16.672	16.672 (0.974)	62	611802	10.0000	9.930	80.00- 120.00	100.00
16.672	16.672 (0.974)	64	175693			0.00- 58.12	28.72
69 Heptane					CAS #: 142-82-5		
16.782	16.782 (0.981)	57	555608	10.0000	8.424	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
69 Heptane (continued)							
16.782	16.782 (0.981)	100	97115			0.00- 47.88	17.48
16.782	16.782 (0.981)	43	1184518			180.46- 240.46	213.19
72 Trichloroethene					CAS #: 79-01-6		
17.523	17.523 (1.024)	130	469756	10.0000	9.490	80.00- 120.00	100.00
17.523	17.523 (1.024)	95	474245			71.46- 131.46	100.96
17.523	17.523 (1.024)	97	301899			35.77- 95.77	64.27
73 Methylcyclohexane					CAS #: 108-87-2		
17.743	17.743 (1.037)	83	585655	10.0000	10.129	80.00- 120.00	100.00
17.743	17.743 (1.037)	98	285827			18.11- 78.11	48.80
17.743	17.743 (1.037)	55	960524			129.45- 189.45	164.01
74 1,2-Dichloropropane					CAS #: 78-87-5		
17.935	17.935 (1.048)	63	514529	10.0000	9.707	80.00- 120.00	100.00
17.935	17.935 (1.048)	62	378692			44.27- 104.27	73.60
17.935	17.935 (1.048)	41	331226			34.00- 94.00	64.37
75 1,4-Dioxane					CAS #: 123-91-1		
18.045	18.045 (1.055)	88	235312	10.0000	10.276	80.00- 120.00	100.00
18.045	18.045 (1.055)	58	298003			101.60- 161.60	126.64
18.045	18.045 (1.055)	57	99569			13.84- 73.84	42.31
77 Bromodichloromethane					CAS #: 75-27-4		
18.347	18.347 (1.072)	83	714038	10.0000	9.745	80.00- 120.00	100.00
18.347	18.347 (1.072)	85	458293			33.15- 93.15	64.18
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.145	19.145 (1.119)	75	613945	10.0000	9.773	80.00- 120.00	100.00
19.145	19.145 (1.119)	77	197765			1.23- 61.23	32.21
19.145	19.145 (1.119)	39	483656			46.59- 106.59	78.78
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.346	19.346 (1.131)	43	1586313	10.0000	9.536	80.00- 120.00	100.00
19.346	19.346 (1.131)	58	564567			5.80- 65.80	35.59
19.346	19.346 (1.131)	85	135168			0.00- 38.43	8.52
81 Toluene					CAS #: 108-88-3		
19.772	19.772 (1.155)	91	1217196	10.0000	9.542	80.00- 120.00	100.00
19.772	19.772 (1.155)	92	714533			28.70- 88.70	58.70
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.212	20.212 (0.918)	75	544333	10.0000	10.591	80.00- 120.00	100.00
20.212	20.212 (0.918)	77	170083			1.04- 61.04	31.25
20.212	20.212 (0.918)	39	418501			45.23- 105.23	76.88

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
84 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.534	20.534 (0.932)	97	442789	10.0000	9.156	80.00- 120.00	100.00
20.534	20.534 (0.932)	99	271622			33.51- 93.51	61.34
20.534	20.534 (0.932)	83	356381			50.51- 110.51	80.49
86 Tetrachloroethene					CAS #: 127-18-4		
20.714	20.714 (0.940)	166	635998	10.0000	9.603	80.00- 120.00	100.00
20.714	20.714 (0.940)	129	468203			42.44- 102.44	73.62
20.714	20.714 (0.940)	131	477879			39.70- 99.70	75.14
87 2-Hexanone					CAS #: 591-78-6		
20.821	20.821 (0.945)	58	719583	10.0000	9.973	80.00- 120.00	100.00
20.821	20.821 (0.945)	43	1430465			168.09- 228.09	198.79
20.821	20.821 (0.945)	100	76595			0.00- 41.01	10.64
89 Dibromochloromethane					CAS #: 124-48-1		
21.180	21.180 (0.961)	129	830184	10.0000	9.794	80.00- 120.00	100.00
21.180	21.180 (0.961)	127	641940			47.32- 107.32	77.33
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.395	21.395 (0.971)	107	700263	10.0000	10.061	80.00- 120.00	100.00
21.395	21.395 (0.971)	109	651176			62.73- 122.73	92.99
93 Chlorobenzene					CAS #: 108-90-7		
22.056	22.056 (1.001)	112	1021860	10.0000	10.215	80.00- 120.00	100.00
22.056	22.056 (1.001)	114	319011			3.73- 63.73	31.22
22.056	22.056 (1.001)	77	530575			23.21- 83.21	51.92
95 Ethyl Benzene					CAS #: 100-41-4		
22.139	22.139 (1.005)	106	473434	10.0000	9.943	80.00- 120.00	100.00
22.139	22.139 (1.005)	91	1492684			282.29- 342.29	315.29
96 m,p-Xylene					CAS #: 108-38-3		
22.303	22.303 (1.012)	106	515543	10.0000	9.882	80.00- 120.00	100.00
22.303	22.303 (1.012)	91	1047678			172.44- 232.44	203.22
100 o-Xylene					CAS #: 95-47-6		
22.852	22.852 (1.037)	106	468254	10.0000	9.516	80.00- 120.00	100.00
22.852	22.852 (1.037)	91	1027048			182.07- 242.07	219.34
101 Styrene					CAS #: 100-42-5		
22.880	22.880 (1.039)	104	766062	10.0000	9.788	80.00- 120.00	100.00
22.852	22.852 (1.037)	78	379318			19.39- 79.39	49.52
102 Bromoform					CAS #: 75-25-2		
23.173	23.173 (1.052)	173	820623	10.0000	10.697	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
102 Bromoform (continued)							
23.173	23.173 (1.052)	171	423094			22.28- 82.28	51.56
103 Cumene					CAS #: 98-82-8		
23.277	23.277 (1.057)	105	1421852	10.0000	9.841	80.00- 120.00	100.00
23.277	23.277 (1.057)	120	426927			0.00- 59.48	30.03
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.689	23.689 (1.075)	83	792514	10.0000	9.119	80.00- 120.00	100.00
23.689	23.689 (1.075)	85	531273			32.49- 92.49	67.04
111 Propylbenzene					CAS #: 103-65-1		
23.767	23.767 (1.079)	91	1314522	10.0000	9.174	80.00- 120.00	100.00
23.767	23.767 (1.079)	120	322600			0.00- 55.67	24.54
113 4-Ethyltoluene					CAS #: 622-96-8		
23.896	23.896 (1.085)	105	949117	10.0000	8.476	80.00- 120.00	100.00
23.896	23.896 (1.085)	120	308217			3.38- 63.38	32.47
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.947	23.947 (1.087)	105	892320	10.0000	8.339	80.00- 120.00	100.00
23.947	23.947 (1.087)	120	462410			21.28- 81.28	51.82
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.386	24.386 (1.107)	105	817126	10.0000	7.109	80.00- 120.00	100.00
24.386	24.386 (1.107)	120	399150			17.26- 77.26	48.85
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.756	24.756 (1.124)	146	653337	10.0000	9.473	80.00- 120.00	100.00
24.756	24.756 (1.124)	148	416285			33.35- 93.35	63.72
24.756	24.756 (1.124)	111	261957			10.42- 70.42	40.10
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.868	24.868 (1.129)	146	588533	10.0000	8.753	80.00- 120.00	100.00
24.868	24.868 (1.129)	148	369553			33.78- 93.78	62.79
24.868	24.868 (1.129)	111	221227			7.61- 67.61	37.59
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.002	25.002 (1.135)	91	911376	10.0000	10.577	80.00- 120.00	100.00
25.002	25.002 (1.135)	126	198610			0.00- 51.90	21.79
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.271	25.271 (1.147)	146	579045	10.0000	8.336	80.00- 120.00	100.00
25.271	25.271 (1.147)	148	366391			34.92- 94.92	63.28
25.271	25.271 (1.147)	111	238765			10.09- 70.09	41.23

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.065	27.065 (1.229)	180	547119	10.0000	9.220	80.00- 120.00	100.00
27.065	27.065 (1.229)	182	513428			64.14- 124.14	93.84
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.177	27.177 (1.234)	225	383186	10.0000	8.675	80.00- 120.00	100.00
27.177	27.177 (1.234)	223	239389			34.80- 94.80	62.47
133 Naphthalene					CAS #: 91-20-3		
27.401	27.401 (1.244)	128	44464	1.00000	0.8960	80.00- 120.00	100.00
27.423	27.423 (1.245)	127	8165			0.00- 45.63	18.36

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v092911.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m
Misc Info: 10ppbv (50ppbv)

Calibration Date: 29-SEP-2015
Calibration Time: 19:51
Client Smp ID: Level # 10
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	90777	54466	127088	96199	5.97
71 1,4-Difluorobenze	412207	247324	577090	409954	-0.55
92 Chlorobenzene-d5	371144	222686	519602	367966	-0.86

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.74	15.41	16.07	15.74	0.00
71 1,4-Difluorobenze	17.11	16.78	17.44	17.11	0.00
92 Chlorobenzene-d5	22.03	21.70	22.36	22.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/29Sep2015.b/v092911.d

Date : 29-SEP-2015 20:36

Client ID: Level # 10

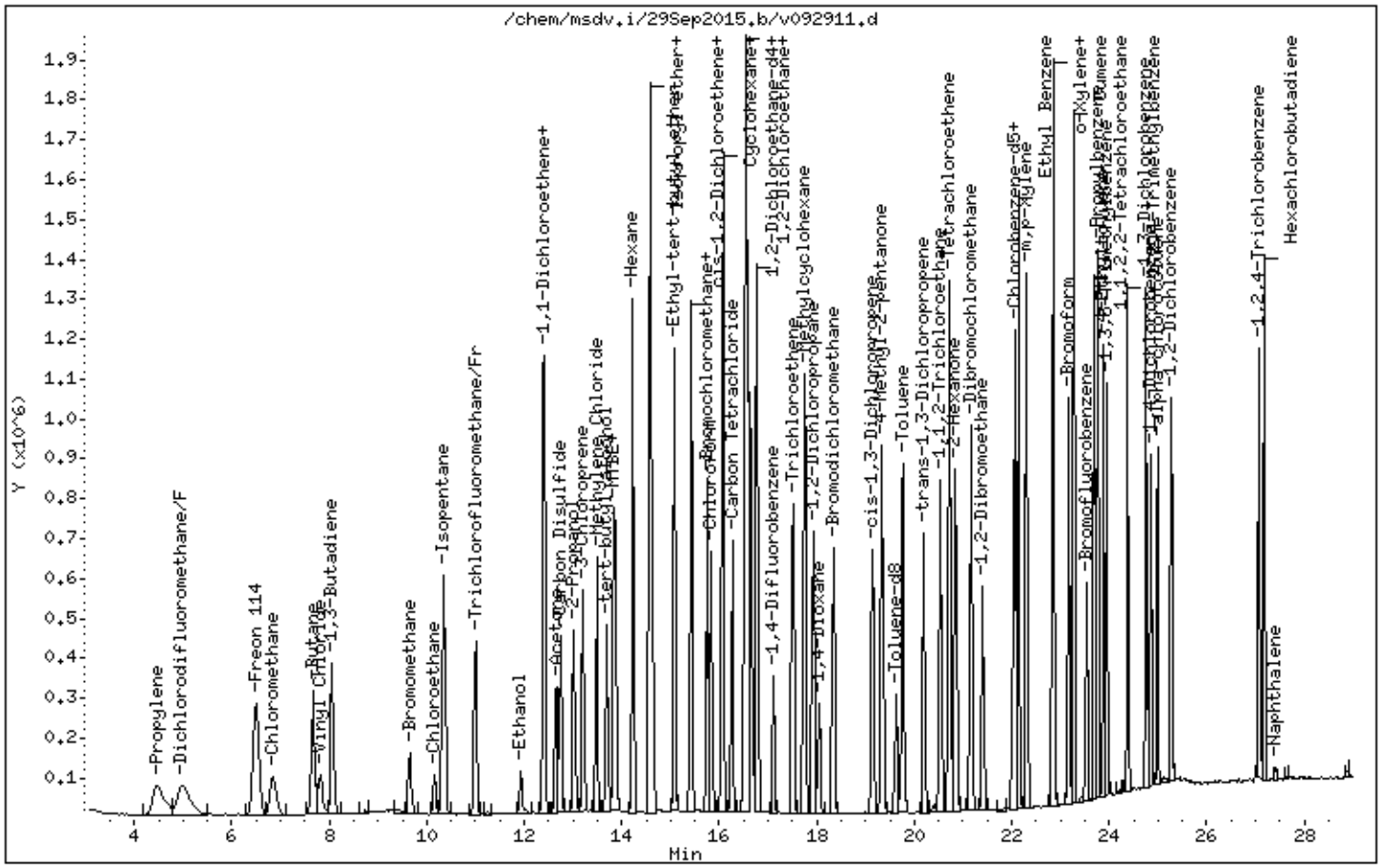
Instrument: msdv.i

Sample Info: 50mL# 2736-233

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/29Sep2015.b/v092912.d
Lab Smp Id: ICAL Client Smp ID: Level # 11
Inj Date : 29-SEP-2015 21:15
Operator : gh Inst ID: msdv.i
Smp Info : 100mL# 2736-233
Misc Info : 20ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/29Sep2015.b/v15l0929a.m
Meth Date : 30-Sep-2015 13:02 ghehir Quant Type: ISTD
Cal Date : 29-SEP-2015 21:15 Cal File: v092912.d
Als bottle: 2 Calibration Sample, Level: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HiLoFULLcrv.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 54 Bromochloromethane					CAS #: 74-97-5			
15.743	15.743 (1.000)	130	89655	5.00000		80.00- 120.00		100.00
15.743	15.743 (1.000)	128	72588			48.04- 108.04		80.96
15.743	15.743 (1.000)	49	272758			284.77- 344.77		304.23
* 71 1,4-Difluorobenzene					CAS #: 540-36-3			
17.111	17.111 (1.000)	114	402006	5.00000		80.00- 120.00		100.00
17.111	17.111 (1.000)	88	59293			0.00- 44.16		14.75
* 92 Chlorobenzene-d5					CAS #: 3114-55-4			
22.029	22.029 (1.000)	117	361070	5.00000		80.00- 120.00		100.00
22.029	22.029 (1.000)	82	183342			18.70- 78.70		50.78
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0			
16.562	16.562 (1.052)	65	163673	5.00000	5.231	80.00- 120.00		100.00
16.562	16.562 (1.052)	67	98157			19.41- 79.41		59.97
$ 80 Toluene-d8					CAS #: 2037-26-5			
19.638	19.638 (1.148)	98	383379	5.00000	5.058	80.00- 120.00		100.00
19.638	19.638 (1.148)	70	41160			0.00- 40.74		10.74

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.638	19.638 (1.148)	100	255699			34.93- 94.93	66.70
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.535	23.535 (1.068)	174	192074	5.00000	5.198	80.00- 120.00	100.00
23.535	23.535 (1.068)	95	240634			94.06- 154.06	125.28
23.535	23.535 (1.068)	176	192047			68.95- 128.95	99.99
3 Propylene					CAS #: 115-07-1		
4.485	4.485 (0.285)	41	917244	20.0000	17.501	80.00- 120.00	100.00
4.485	4.485 (0.285)	42	648592			43.41- 103.41	70.71
4.485	4.485 (0.285)	39	587349			36.60- 96.60	64.03
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
4.976	4.976 (0.316)	85	1434584	20.0000	19.424	80.00- 120.00	100.00
4.976	4.976 (0.316)	87	463303			1.54- 61.54	32.30
6 Freon 114					CAS #: 76-14-2		
6.524	6.524 (0.414)	135	1188634	20.0000	19.436	80.00- 120.00	100.00
6.524	6.524 (0.414)	137	378195			0.98- 60.98	31.82
6.524	6.524 (0.414)	85	1418580			89.42- 149.42	119.35
8 Chloromethane					CAS #: 74-87-3		
6.864	6.864 (0.436)	50	1102220	20.0000	18.297	80.00- 120.00	100.00
6.864	6.864 (0.436)	52	343891			2.41- 62.41	31.20
9 Butane					CAS #: 106-97-8		
7.658	7.658 (0.486)	58	201974	20.0000	19.156	80.00- 120.00	100.00
7.658	7.658 (0.486)	43	1821563			830.80- 890.80	901.88
10 Vinyl Chloride					CAS #: 75-01-4		
7.813	7.813 (0.496)	62	809254	20.0000	20.799	80.00- 120.00	100.00
7.813	7.813 (0.496)	64	220405			0.00- 57.21	27.24
11 1,3-Butadiene					CAS #: 106-99-0		
8.061	8.061 (0.512)	54	912709	20.0000	17.324	80.00- 120.00	100.00
8.061	8.061 (0.512)	39	810847			60.61- 120.61	88.84
12 Bromomethane					CAS #: 74-83-9		
9.655	9.655 (0.613)	94	465087	20.0000	19.912	80.00- 120.00	100.00
9.655	9.655 (0.613)	96	450492			65.52- 125.52	96.86
17 Chloroethane					CAS #: 75-00-3		
10.161	10.161 (0.645)	64	328520	20.0000	20.552	80.00- 120.00	100.00
10.161	10.161 (0.645)	66	91814			0.00- 56.47	27.95

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
18 Isopentane					CAS #: 78-78-4		
10.354	10.354 (0.658)	57	859065	20.0000	18.027	80.00- 120.00	100.00
10.354	10.354 (0.658)	43	1398465			135.48- 195.48	162.79
10.354	10.354 (0.658)	42	1207521			110.86- 170.86	140.56
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.004	11.004 (0.699)	101	1552438	20.0000	19.095	80.00- 120.00	100.00
11.004	11.004 (0.699)	103	997556			33.91- 93.91	64.26
24 Ethanol					CAS #: 64-17-5		
11.919	11.919 (0.757)	45	494114	20.0000	20.715	80.00- 120.00	100.00
11.919	11.919 (0.757)	46	196947			6.93- 66.93	39.86
11.919	11.919 (0.757)	43	87325			0.00- 45.81	17.67
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.386	12.386 (0.787)	98	382513	20.0000	17.867	80.00- 120.00	100.00
12.386	12.386 (0.787)	61	1393856			350.72- 410.72	364.39
12.386	12.386 (0.787)	96	612855			129.58- 189.58	160.22
28 Freon 113					CAS #: 76-13-1		
12.413	12.413 (0.788)	151	1122907	20.0000	18.892	80.00- 120.00	100.00
12.413	12.413 (0.788)	153	710587			33.77- 93.77	63.28
12.413	12.413 (0.788)	101	1271798			82.21- 142.21	113.26
31 Acetone					CAS #: 67-64-1		
12.633	12.633 (0.802)	58	531763	20.0000	17.596	80.00- 120.00	100.00
12.633	12.633 (0.802)	43	1637815			282.00- 342.00	308.00
33 Carbon Disulfide					CAS #: 75-15-0		
12.743	12.743 (0.809)	76	1670814	20.0000	19.345	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.210	13.210 (0.839)	76	245060	20.0000	20.912	80.00- 120.00	100.00
13.210	13.210 (0.839)	41	1471811			599.84- 659.84	600.59
34 2-Propanol					CAS #: 67-63-0		
13.018	13.018 (0.827)	45	2169355	20.0000	20.867	80.00- 120.00	100.00
13.018	13.018 (0.827)	43	334594			0.00- 46.02	15.42
13.018	13.018 (0.827)	59	73223			0.00- 33.30	3.38
37 Methylene Chloride					CAS #: 75-09-2		
13.484	13.484 (0.856)	84	515289	20.0000	17.970	80.00- 120.00	100.00
13.484	13.484 (0.856)	49	1440476			254.12- 314.12	279.55
13.484	13.484 (0.856)	51	448842			56.45- 116.45	87.10
38 tert-butyl alcohol					CAS #: 75-65-0		
13.704	13.704 (0.870)	59	2191291	20.0000	19.248	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 tert-butyl alcohol (continued)							
13.677	13.677 (0.869)	41	456344			0.00- 51.49	20.83
13.704	13.704 (0.870)	57	226453			0.00- 40.80	10.33
39 MTBE					CAS #: 1634-04-4		
13.841	13.841 (0.879)	73	1685122	20.0000	18.295	80.00- 120.00	100.00
13.841	13.841 (0.879)	57	725898			12.63- 72.63	43.08
13.841	13.841 (0.879)	41	653772			8.96- 68.96	38.80
40 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.896	13.896 (0.883)	98	403481	20.0000	18.497	80.00- 120.00	100.00
13.869	13.869 (0.881)	61	1301775			297.51- 357.51	322.64
13.896	13.896 (0.883)	96	615326			130.03- 190.03	152.50
43 Hexane					CAS #: 110-54-3		
14.226	14.226 (0.904)	57	1827363	20.0000	16.525	80.00- 120.00	100.00
14.226	14.226 (0.904)	43	1281910			42.37- 102.37	70.15
14.226	14.226 (0.904)	86	142740			0.00- 38.41	7.81
45 Isopropyl ether					CAS #: 108-20-3		
14.583	14.583 (0.926)	45	4417671	20.0000	19.679	80.00- 120.00	100.00
14.583	14.583 (0.926)	87	536414			0.00- 42.22	12.14
14.583	14.583 (0.926)	59	404255			0.00- 38.61	9.15
46 1,1-Dichloroethane					CAS #: 75-34-3		
14.583	14.583 (0.926)	63	1504967	20.0000	19.049	80.00- 120.00	100.00
14.583	14.583 (0.926)	65	415164			0.00- 57.42	27.59
47 Vinyl Acetate					CAS #: 108-05-4		
14.637	14.637 (0.930)	86	146212	20.0000	21.227	80.00- 120.00	100.00
14.637	14.637 (0.930)	42	341347			210.64- 270.64	233.46
14.610	14.610 (0.928)	43	5097372			3446.49-3506.49	3486.29
49 Ethyl-tert-butyl ether					CAS #: 637-92-3		
15.071	15.071 (0.957)	59	3488726	20.0000	19.737	80.00- 120.00	100.00
15.071	15.071 (0.957)	87	824877			0.00- 53.82	23.64
15.071	15.071 (0.957)	41	641622			0.00- 48.32	18.39
50 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.424	15.424 (0.980)	98	435414	20.0000	18.305	80.00- 120.00	100.00
15.424	15.424 (0.980)	61	1283795			267.29- 327.29	294.84
15.424	15.424 (0.980)	96	672967			128.72- 188.72	154.56
51 2-Butanone					CAS #: 78-93-3		
15.403	15.403 (0.978)	72	299174	20.0000	20.254	80.00- 120.00	100.00
15.403	15.403 (0.978)	43	2458059			804.58- 864.58	821.62

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
51 2-Butanone (continued)							
15.403	15.403 (0.978)	57	181650			28.64- 88.64	60.72
53 Tetrahydrofuran					CAS #: 109-99-9		
15.743	15.743 (1.000)	42	1517811	20.0000	19.592	80.00- 120.00	100.00
15.743	15.743 (1.000)	71	275469			0.00- 48.89	18.15
15.743	15.743 (1.000)	72	296887			0.00- 47.97	19.56
55 Chloroform					CAS #: 67-66-3		
15.836	15.836 (1.006)	83	1286211	20.0000	18.956	80.00- 120.00	100.00
15.836	15.836 (1.006)	85	823652			32.85- 92.85	64.04
57 Cyclohexane					CAS #: 110-82-7		
16.082	16.082 (1.022)	84	818529	20.0000	18.590	80.00- 120.00	100.00
16.082	16.082 (1.022)	56	2043058			218.68- 278.68	249.60
16.082	16.082 (1.022)	41	1026222			93.43- 153.43	125.37
58 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.052	16.052 (1.020)	97	1424001	20.0000	18.862	80.00- 120.00	100.00
16.052	16.052 (1.020)	99	905321			32.55- 92.55	63.58
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.267	16.267 (1.033)	119	1261914	20.0000	24.202	80.00- 120.00	100.00
16.267	16.267 (1.033)	117	1331884			74.89- 134.89	105.54
Sum of Peak Amounts =				24.2			
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.535	16.535 (1.050)	56	1948331	20.0000	19.176	80.00- 120.00	100.00
16.535	16.535 (1.050)	57	5863549			270.88- 330.88	300.95
16.535	16.535 (1.050)	41	1393534			41.84- 101.84	71.52
64 Benzene					CAS #: 71-43-2		
16.562	16.562 (0.968)	78	1911462	20.0000	19.841	80.00- 120.00	100.00
16.562	16.562 (0.968)	77	425830			0.00- 52.95	22.28
66 tert-amyl methyl ether					CAS #: 994-05-8		
16.617	16.617 (0.971)	87	462774	20.0000	19.403	80.00- 120.00	100.00
16.617	16.617 (0.971)	73	1937603			401.74- 461.74	418.69
16.617	16.617 (0.971)	55	964606			176.52- 236.52	208.44
68 1,2-Dichloroethane					CAS #: 107-06-2		
16.672	16.672 (0.974)	62	1206434	20.0000	19.974	80.00- 120.00	100.00
16.672	16.672 (0.974)	64	354096			0.00- 58.12	29.35
69 Heptane					CAS #: 142-82-5		
16.782	16.782 (0.981)	57	1131535	20.0000	17.868	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
69 Heptane (continued)							
16.782	16.782 (0.981)	100	193499			0.00- 47.88	17.10
16.782	16.782 (0.981)	43	2376416			180.46- 240.46	210.02
72 Trichloroethene					CAS #: 79-01-6		
17.523	17.523 (1.024)	130	928889	20.0000	19.255	80.00- 120.00	100.00
17.523	17.523 (1.024)	95	912678			71.46- 131.46	98.25
17.523	17.523 (1.024)	97	589118			35.77- 95.77	63.42
73 Methylcyclohexane					CAS #: 108-87-2		
17.743	17.743 (1.037)	83	1156771	20.0000	20.320	80.00- 120.00	100.00
17.743	17.743 (1.037)	98	556711			18.11- 78.11	48.13
17.743	17.743 (1.037)	55	1882905			129.45- 189.45	162.77
74 1,2-Dichloropropane					CAS #: 78-87-5		
17.935	17.935 (1.048)	63	1026509	20.0000	19.790	80.00- 120.00	100.00
17.935	17.935 (1.048)	62	766919			44.27- 104.27	74.71
17.935	17.935 (1.048)	41	635671			34.00- 94.00	61.93
75 1,4-Dioxane					CAS #: 123-91-1		
18.045	18.045 (1.055)	88	473143	20.0000	20.884	80.00- 120.00	100.00
18.045	18.045 (1.055)	58	612095			101.60- 161.60	129.37
18.045	18.045 (1.055)	57	192928			13.84- 73.84	40.78
77 Bromodichloromethane					CAS #: 75-27-4		
18.347	18.347 (1.072)	83	1418214	20.0000	19.775	80.00- 120.00	100.00
18.347	18.347 (1.072)	85	898294			33.15- 93.15	63.34
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.145	19.145 (1.119)	75	1235587	20.0000	20.047	80.00- 120.00	100.00
19.145	19.145 (1.119)	77	386242			1.23- 61.23	31.26
19.145	19.145 (1.119)	39	966472			46.59- 106.59	78.22
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.346	19.346 (1.131)	43	3096134	20.0000	19.143	80.00- 120.00	100.00
19.346	19.346 (1.131)	58	1113281			5.80- 65.80	35.96
19.346	19.346 (1.131)	85	266112			0.00- 38.43	8.59
81 Toluene					CAS #: 108-88-3		
19.772	19.772 (1.155)	91	2393615	20.0000	19.275	80.00- 120.00	100.00
19.772	19.772 (1.155)	92	1416973			28.70- 88.70	59.20
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.212	20.212 (0.918)	75	1085070	20.0000	21.248	80.00- 120.00	100.00
20.212	20.212 (0.918)	77	352059			1.04- 61.04	32.45
20.212	20.212 (0.918)	39	802910			45.23- 105.23	74.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
84 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.534	20.534 (0.932)	97	895182	20.0000	19.018	80.00- 120.00	100.00
20.534	20.534 (0.932)	99	552355			33.51- 93.51	61.70
20.534	20.534 (0.932)	83	719039			50.51- 110.51	80.32
86 Tetrachloroethene					CAS #: 127-18-4		
20.714	20.714 (0.940)	166	1250882	20.0000	19.352	80.00- 120.00	100.00
20.714	20.714 (0.940)	129	886536			42.44- 102.44	70.87
20.714	20.714 (0.940)	131	915671			39.70- 99.70	73.20
87 2-Hexanone					CAS #: 591-78-6		
20.821	20.821 (0.945)	58	1444404	20.0000	20.320	80.00- 120.00	100.00
20.821	20.821 (0.945)	43	2902003			168.09- 228.09	200.91
20.821	20.821 (0.945)	100	154139			0.00- 41.01	10.67
89 Dibromochloromethane					CAS #: 124-48-1		
21.180	21.180 (0.961)	129	1632106	20.0000	19.676	80.00- 120.00	100.00
21.180	21.180 (0.961)	127	1264513			47.32- 107.32	77.48
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.395	21.395 (0.971)	107	1348756	20.0000	19.784	80.00- 120.00	100.00
21.395	21.395 (0.971)	109	1298599			62.73- 122.73	96.28
93 Chlorobenzene					CAS #: 108-90-7		
22.056	22.056 (1.001)	112	1985167	20.0000	20.186	80.00- 120.00	100.00
22.056	22.056 (1.001)	114	648807			3.73- 63.73	32.68
22.056	22.056 (1.001)	77	1065260			23.21- 83.21	53.66
95 Ethyl Benzene					CAS #: 100-41-4		
22.139	22.139 (1.005)	106	937024	20.0000	20.046	80.00- 120.00	100.00
22.139	22.139 (1.005)	91	3007276			282.29- 342.29	320.94
96 m,p-Xylene					CAS #: 108-38-3		
22.303	22.303 (1.012)	106	1009647	20.0000	19.769	80.00- 120.00	100.00
22.303	22.303 (1.012)	91	2081011			172.44- 232.44	206.11
100 o-Xylene					CAS #: 95-47-6		
22.852	22.852 (1.037)	106	956244	20.0000	19.836	80.00- 120.00	100.00
22.852	22.852 (1.037)	91	2040748			182.07- 242.07	213.41
101 Styrene					CAS #: 100-42-5		
22.880	22.880 (1.039)	104	1525559	20.0000	19.887	80.00- 120.00	100.00
22.852	22.852 (1.037)	78	765242			19.39- 79.39	50.16
102 Bromoform					CAS #: 75-25-2		
23.173	23.173 (1.052)	173	1653203	20.0000	21.658	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
102 Bromoform (continued)							
23.173	23.173 (1.052)	171	857013			22.28- 82.28	51.84
103 Cumene					CAS #: 98-82-8		
23.277	23.277 (1.057)	105	2921873	20.0000	20.504	80.00- 120.00	100.00
23.277	23.277 (1.057)	120	846604			0.00- 59.48	28.97
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.689	23.689 (1.075)	83	1593390	20.0000	18.861	80.00- 120.00	100.00
23.689	23.689 (1.075)	85	1025266			32.49- 92.49	64.34
111 Propylbenzene					CAS #: 103-65-1		
23.767	23.767 (1.079)	91	2717243	20.0000	19.435	80.00- 120.00	100.00
23.767	23.767 (1.079)	120	660916			0.00- 55.67	24.32
113 4-Ethyltoluene					CAS #: 622-96-8		
23.896	23.896 (1.085)	105	1952385	20.0000	18.105	80.00- 120.00	100.00
23.896	23.896 (1.085)	120	648780			3.38- 63.38	33.23
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.947	23.947 (1.087)	105	1699705	20.0000	16.719	80.00- 120.00	100.00
23.947	23.947 (1.087)	120	873751			21.28- 81.28	51.41
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.386	24.386 (1.107)	105	1490383	20.0000	13.888	80.00- 120.00	100.00
24.386	24.386 (1.107)	120	709574			17.26- 77.26	47.61
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.756	24.756 (1.124)	146	1324359	20.0000	19.629	80.00- 120.00	100.00
24.756	24.756 (1.124)	148	842711			33.35- 93.35	63.63
24.756	24.756 (1.124)	111	533393			10.42- 70.42	40.28
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.868	24.868 (1.129)	146	1191341	20.0000	18.311	80.00- 120.00	100.00
24.868	24.868 (1.129)	148	757489			33.78- 93.78	63.58
24.868	24.868 (1.129)	111	452355			7.61- 67.61	37.97
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.002	25.002 (1.135)	91	1858730	20.0000	21.556	80.00- 120.00	100.00
25.002	25.002 (1.135)	126	400407			0.00- 51.90	21.54
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.271	25.271 (1.147)	146	1176300	20.0000	17.602	80.00- 120.00	100.00
25.271	25.271 (1.147)	148	752475			34.92- 94.92	63.97
25.271	25.271 (1.147)	111	478725			10.09- 70.09	40.70

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.065	27.065 (1.229)	180	1035772	20.0000	18.073	80.00- 120.00	100.00
27.065	27.065 (1.229)	182	965198			64.14- 124.14	93.19
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.177	27.177 (1.234)	225	796292	20.0000	18.588	80.00- 120.00	100.00
27.177	27.177 (1.234)	223	495526			34.80- 94.80	62.23
133 Naphthalene					CAS #: 91-20-3		
27.423	27.423 (1.245)	128	112817	2.00000	2.229	80.00- 120.00	100.00
27.423	27.423 (1.245)	127	16029			0.00- 45.63	14.21

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v092912.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m
Misc Info: 20ppbv (50ppbv)

Calibration Date: 29-SEP-2015
Calibration Time: 19:51
Client Smp ID: Level # 11
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	90777	54466	127088	89655	-1.24
71 1,4-Difluorobenze	412207	247324	577090	402006	-2.47
92 Chlorobenzene-d5	371144	222686	519602	361070	-2.71

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.74	15.41	16.07	15.74	0.00
71 1,4-Difluorobenze	17.11	16.78	17.44	17.11	0.00
92 Chlorobenzene-d5	22.03	21.70	22.36	22.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/29Sep2015.b/v092912.d

Date : 29-SEP-2015 21:15

Client ID: Level # 11

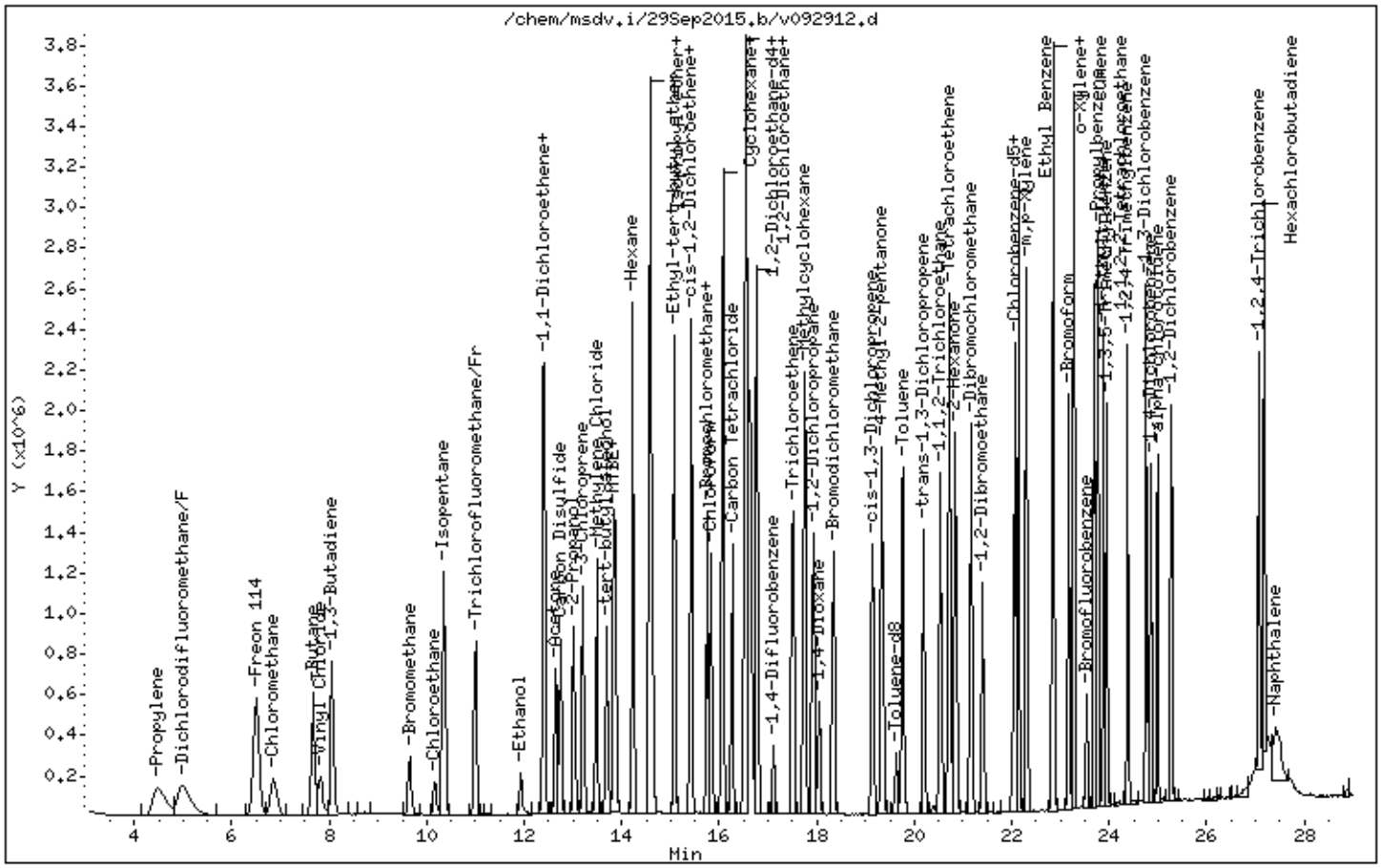
Instrument: msdv.i

Sample Info: 100mL# 2736-233

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/29Sep2015.b/v092913.d
Lab Smp Id: ICAL Client Smp ID: Level # 12
Inj Date : 29-SEP-2015 21:58
Operator : gh Inst ID: msdv.i
Smp Info : 200mL# 2736-233
Misc Info : 40ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/29Sep2015.b/v15l0929a.m
Meth Date : 30-Sep-2015 13:02 ghehir Quant Type: ISTD
Cal Date : 29-SEP-2015 21:58 Cal File: v092913.d
Als bottle: 2 Calibration Sample, Level: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HiLoFULLcrv.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 54 Bromochloromethane					CAS #: 74-97-5			
15.743	15.743 (1.000)	130	92194	5.00000		80.00- 120.00		100.00
15.743	15.743 (1.000)	128	69849			48.04- 108.04		75.76
15.743	15.743 (1.000)	49	334271			284.77- 344.77		362.57
* 71 1,4-Difluorobenzene					CAS #: 540-36-3			
17.111	17.111 (1.000)	114	428028	5.00000		80.00- 120.00		100.00
17.111	17.111 (1.000)	88	62866			0.00- 44.16		14.69
* 92 Chlorobenzene-d5					CAS #: 3114-55-4			
22.029	22.029 (1.000)	117	375229	5.00000		80.00- 120.00		100.00
22.029	22.029 (1.000)	82	183107			18.70- 78.70		48.80
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0			
16.562	16.562 (1.052)	65	174423	5.00000	5.364	80.00- 120.00		100.00
16.562	16.562 (1.052)	67	126117			19.41- 79.41		72.31
$ 80 Toluene-d8					CAS #: 2037-26-5			
19.638	19.638 (1.148)	98	402679	5.00000	4.991	80.00- 120.00		100.00
19.638	19.638 (1.148)	70	41510			0.00- 40.74		10.31

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.638	19.638 (1.148)	100	263052			34.93- 94.93	65.33
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.535	23.535 (1.068)	174	198019	5.00000	5.137	80.00- 120.00	100.00
23.535	23.535 (1.068)	95	245156			94.06- 154.06	123.80
23.535	23.535 (1.068)	176	190877			68.95- 128.95	96.39
3 Propylene					CAS #: 115-07-1		
4.523	4.523 (0.287)	41	1802274	40.0000	34.380	80.00- 120.00	100.00
4.523	4.523 (0.287)	42	1260210			43.41- 103.41	69.92
4.485	4.485 (0.285)	39	1167393			36.60- 96.60	64.77
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.013	5.013 (0.318)	85	2825530	40.0000	37.642	80.00- 120.00	100.00
5.013	5.013 (0.318)	87	906151			1.54- 61.54	32.07
6 Freon 114					CAS #: 76-14-2		
6.524	6.524 (0.414)	135	2381933	40.0000	38.166	80.00- 120.00	100.00
6.524	6.524 (0.414)	137	743094			0.98- 60.98	31.20
6.524	6.524 (0.414)	85	2809043			89.42- 149.42	117.93
8 Chloromethane					CAS #: 74-87-3		
6.902	6.902 (0.438)	50	2090410	40.0000	34.516	80.00- 120.00	100.00
6.902	6.902 (0.438)	52	676706			2.41- 62.41	32.37
9 Butane					CAS #: 106-97-8		
7.689	7.689 (0.488)	58	411999	40.0000	38.319	80.00- 120.00	100.00
7.658	7.658 (0.486)	43	3572523			830.80- 890.80	867.12
10 Vinyl Chloride					CAS #: 75-01-4		
7.813	7.813 (0.496)	62	1623821	40.0000	40.501	80.00- 120.00	100.00(A)
7.813	7.813 (0.496)	64	437806			0.00- 57.21	26.96
11 1,3-Butadiene					CAS #: 106-99-0		
8.061	8.061 (0.512)	54	1843422	40.0000	34.768	80.00- 120.00	100.00
8.061	8.061 (0.512)	39	1610107			60.61- 120.61	87.34
12 Bromomethane					CAS #: 74-83-9		
9.655	9.655 (0.613)	94	934314	40.0000	39.053	80.00- 120.00	100.00
9.655	9.655 (0.613)	96	874543			65.52- 125.52	93.60
17 Chloroethane					CAS #: 75-00-3		
10.185	10.185 (0.647)	64	662413	40.0000	40.250	80.00- 120.00	100.00(A)
10.185	10.185 (0.647)	66	180449			0.00- 56.47	27.24

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
18 Isopentane					CAS #: 78-78-4		
10.354	10.354 (0.658)	57	1725335	40.0000	35.926	80.00- 120.00	100.00
10.354	10.354 (0.658)	43	2756528			135.48- 195.48	159.77
10.354	10.354 (0.658)	42	2384694			110.86- 170.86	138.22
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.004	11.004 (0.699)	101	3085051	40.0000	37.262	80.00- 120.00	100.00
11.004	11.004 (0.699)	103	1992701			33.91- 93.91	64.59
24 Ethanol					CAS #: 64-17-5		
11.919	11.919 (0.757)	45	979589	40.0000	39.949	80.00- 120.00	100.00
11.919	11.919 (0.757)	46	379145			6.93- 66.93	38.70
11.919	11.919 (0.757)	43	172137			0.00- 45.81	17.57
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.386	12.386 (0.787)	98	760567	40.0000	35.234	80.00- 120.00	100.00
12.386	12.386 (0.787)	61	2800543			350.72- 410.72	368.22
12.386	12.386 (0.787)	96	1201444			129.58- 189.58	157.97
28 Freon 113					CAS #: 76-13-1		
12.413	12.413 (0.788)	151	2233891	40.0000	36.947	80.00- 120.00	100.00
12.413	12.413 (0.788)	153	1401107			33.77- 93.77	62.72
12.413	12.413 (0.788)	101	2511768			82.21- 142.21	112.44
31 Acetone					CAS #: 67-64-1		
12.633	12.633 (0.802)	58	1069795	40.0000	35.244	80.00- 120.00	100.00
12.633	12.633 (0.802)	43	3321534			282.00- 342.00	310.48
33 Carbon Disulfide					CAS #: 75-15-0		
12.743	12.743 (0.809)	76	3393922	40.0000	38.500	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.210	13.210 (0.839)	76	483888	40.0000	40.132	80.00- 120.00	100.00(A)
13.210	13.210 (0.839)	41	2909186			599.84- 659.84	601.21
34 2-Propanol					CAS #: 67-63-0		
13.018	13.018 (0.827)	45	4373672	40.0000	40.756	80.00- 120.00	100.00(A)
13.018	13.018 (0.827)	43	667282			0.00- 46.02	15.26
13.018	13.018 (0.827)	59	145877			0.00- 33.30	3.34
37 Methylene Chloride					CAS #: 75-09-2		
13.484	13.484 (0.856)	84	1003710	40.0000	34.779	80.00- 120.00	100.00
13.484	13.484 (0.856)	49	2854225			254.12- 314.12	284.37
13.484	13.484 (0.856)	51	860733			56.45- 116.45	85.76
38 tert-butyl alcohol					CAS #: 75-65-0		
13.704	13.704 (0.870)	59	4390655	40.0000	37.900	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 tert-butyl alcohol (continued)							
13.704	13.704 (0.870)	41	868844			0.00- 51.49	19.79
13.704	13.704 (0.870)	57	456986			0.00- 40.80	10.41
39 MTBE					CAS #: 1634-04-4		
13.841	13.841 (0.879)	73	3327099	40.0000	35.749	80.00- 120.00	100.00
13.841	13.841 (0.879)	57	1450486			12.63- 72.63	43.60
13.841	13.841 (0.879)	41	1269972			8.96- 68.96	38.17
40 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.896	13.896 (0.883)	98	792707	40.0000	35.938	80.00- 120.00	100.00
13.896	13.896 (0.883)	61	2619949			297.51- 357.51	330.51
13.896	13.896 (0.883)	96	1269977			130.03- 190.03	160.21
43 Hexane					CAS #: 110-54-3		
14.226	14.226 (0.904)	57	3649208	40.0000	33.023	80.00- 120.00	100.00
14.226	14.226 (0.904)	43	2510062			42.37- 102.37	68.78
14.226	14.226 (0.904)	86	276351			0.00- 38.41	7.57
45 Isopropyl ether					CAS #: 108-20-3		
14.583	14.583 (0.926)	45	8649025	40.0000	37.866	80.00- 120.00	100.00
14.583	14.583 (0.926)	87	1065267			0.00- 42.22	12.32
14.583	14.583 (0.926)	59	791086			0.00- 38.61	9.15
46 1,1-Dichloroethane					CAS #: 75-34-3		
14.583	14.583 (0.926)	63	2971883	40.0000	37.033	80.00- 120.00	100.00
14.583	14.583 (0.926)	65	816372			0.00- 57.42	27.47
47 Vinyl Acetate					CAS #: 108-05-4		
14.637	14.637 (0.930)	86	313269	40.0000	43.463	80.00- 120.00	100.00(A)
14.610	14.610 (0.928)	42	685975			210.64- 270.64	218.97
14.610	14.610 (0.928)	43	10227344			3446.49-3506.49	3264.72
49 Ethyl-tert-butyl ether					CAS #: 637-92-3		
15.071	15.071 (0.957)	59	7007648	40.0000	38.787	80.00- 120.00	100.00
15.071	15.071 (0.957)	87	1652508			0.00- 53.82	23.58
15.071	15.071 (0.957)	41	1238544			0.00- 48.32	17.67
50 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.424	15.424 (0.980)	98	861729	40.0000	35.840	80.00- 120.00	100.00
15.424	15.424 (0.980)	61	2568984			267.29- 327.29	298.12
15.424	15.424 (0.980)	96	1358229			128.72- 188.72	157.62
51 2-Butanone					CAS #: 78-93-3		
15.403	15.403 (0.978)	72	608078	40.0000	40.027	80.00- 120.00	100.00(A)
15.403	15.403 (0.978)	43	4927369			804.58- 864.58	810.32

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
51 2-Butanone (continued)							
15.403	15.403 (0.978)	57	355713			28.64- 88.64	58.50
53 Tetrahydrofuran					CAS #: 109-99-9		
15.743	15.743 (1.000)	42	3059717	40.0000	38.663	80.00- 120.00	100.00
15.743	15.743 (1.000)	71	570870			0.00- 48.89	18.66
15.743	15.743 (1.000)	72	615306			0.00- 47.97	20.11
55 Chloroform					CAS #: 67-66-3		
15.836	15.836 (1.006)	83	2525408	40.0000	36.692	80.00- 120.00	100.00
15.836	15.836 (1.006)	85	1643042			32.85- 92.85	65.06
57 Cyclohexane					CAS #: 110-82-7		
16.083	16.083 (1.022)	84	1621870	40.0000	36.364	80.00- 120.00	100.00
16.083	16.083 (1.022)	56	4057505			218.68- 278.68	250.17
16.083	16.083 (1.022)	41	2009623			93.43- 153.43	123.91
58 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.052	16.052 (1.020)	97	2850078	40.0000	37.093	80.00- 120.00	100.00
16.052	16.052 (1.020)	99	1812175			32.55- 92.55	63.58
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.267	16.267 (1.033)	119	2548261	40.0000	46.434	80.00- 120.00	100.00(A)
16.267	16.267 (1.033)	117	2676678			74.89- 134.89	105.04
	Sum of Peak Amounts =			46.4			
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.535	16.535 (1.050)	56	3923692	40.0000	37.885	80.00- 120.00	100.00
16.535	16.535 (1.050)	57	11826537			270.88- 330.88	301.41
16.535	16.535 (1.050)	41	2749170			41.84- 101.84	70.07
64 Benzene					CAS #: 71-43-2		
16.562	16.562 (0.968)	78	3747926	40.0000	36.995	80.00- 120.00	100.00
16.562	16.562 (0.968)	77	846945			0.00- 52.95	22.60
66 tert-amyl methyl ether					CAS #: 994-05-8		
16.617	16.617 (0.971)	87	928041	40.0000	37.078	80.00- 120.00	100.00
16.617	16.617 (0.971)	73	3906810			401.74- 461.74	420.97
16.617	16.617 (0.971)	55	1916688			176.52- 236.52	206.53
68 1,2-Dichloroethane					CAS #: 107-06-2		
16.672	16.672 (0.974)	62	2390812	40.0000	37.555	80.00- 120.00	100.00
16.672	16.672 (0.974)	64	697166			0.00- 58.12	29.16
69 Heptane					CAS #: 142-82-5		
16.782	16.782 (0.981)	57	2294424	40.0000	34.770	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
69 Heptane (continued)							
16.782	16.782 (0.981)	100	400642			0.00- 47.88	17.46
16.782	16.782 (0.981)	43	4724070			180.46- 240.46	205.89
72 Trichloroethene					CAS #: 79-01-6		
17.523	17.523 (1.024)	130	1881288	40.0000	37.018	80.00- 120.00	100.00
17.523	17.523 (1.024)	95	1866587			71.46- 131.46	99.22
17.523	17.523 (1.024)	97	1190611			35.77- 95.77	63.29
73 Methylcyclohexane					CAS #: 108-87-2		
17.743	17.743 (1.037)	83	2332672	40.0000	38.730	80.00- 120.00	100.00
17.743	17.743 (1.037)	98	1105446			18.11- 78.11	47.39
17.743	17.743 (1.037)	55	3823411			129.45- 189.45	163.91
74 1,2-Dichloropropane					CAS #: 78-87-5		
17.935	17.935 (1.048)	63	2057547	40.0000	37.624	80.00- 120.00	100.00
17.935	17.935 (1.048)	62	1536467			44.27- 104.27	74.67
17.935	17.935 (1.048)	41	1262175			34.00- 94.00	61.34
75 1,4-Dioxane					CAS #: 123-91-1		
18.045	18.045 (1.055)	88	949930	40.0000	39.467	80.00- 120.00	100.00
18.045	18.045 (1.055)	58	1226927			101.60- 161.60	129.16
18.045	18.045 (1.055)	57	395515			13.84- 73.84	41.64
77 Bromodichloromethane					CAS #: 75-27-4		
18.347	18.347 (1.072)	83	2801043	40.0000	37.066	80.00- 120.00	100.00
18.347	18.347 (1.072)	85	1818577			33.15- 93.15	64.92
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.145	19.145 (1.119)	75	2471627	40.0000	37.980	80.00- 120.00	100.00
19.145	19.145 (1.119)	77	793349			1.23- 61.23	32.10
19.145	19.145 (1.119)	39	1892007			46.59- 106.59	76.55
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.346	19.346 (1.131)	43	6261002	40.0000	36.837	80.00- 120.00	100.00
19.346	19.346 (1.131)	58	2275566			5.80- 65.80	36.35
19.346	19.346 (1.131)	85	542922			0.00- 38.43	8.67
81 Toluene					CAS #: 108-88-3		
19.772	19.772 (1.155)	91	4798683	40.0000	36.780	80.00- 120.00	100.00
19.772	19.772 (1.155)	92	2856593			28.70- 88.70	59.53
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.212	20.212 (0.918)	75	2221382	40.0000	41.581	80.00- 120.00	100.00(A)
20.212	20.212 (0.918)	77	698051			1.04- 61.04	31.42
20.212	20.212 (0.918)	39	1591984			45.23- 105.23	71.67

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
84 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.534	20.534 (0.932)	97	1729233	40.0000	35.872	80.00- 120.00	100.00
20.534	20.534 (0.932)	99	1071725			33.51- 93.51	61.98
20.534	20.534 (0.932)	83	1409373			50.51- 110.51	81.50
86 Tetrachloroethene					CAS #: 127-18-4		
20.714	20.714 (0.940)	166	2508656	40.0000	37.659	80.00- 120.00	100.00
20.714	20.714 (0.940)	129	1793953			42.44- 102.44	71.51
20.714	20.714 (0.940)	131	1849443			39.70- 99.70	73.72
87 2-Hexanone					CAS #: 591-78-6		
20.821	20.821 (0.945)	58	2952698	40.0000	39.976	80.00- 120.00	100.00
20.821	20.821 (0.945)	43	5866740			168.09- 228.09	198.69
20.821	20.821 (0.945)	100	321308			0.00- 41.01	10.88
89 Dibromochloromethane					CAS #: 124-48-1		
21.180	21.180 (0.961)	129	3319309	40.0000	38.687	80.00- 120.00	100.00
21.180	21.180 (0.961)	127	2561247			47.32- 107.32	77.16
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.395	21.395 (0.971)	107	2735504	40.0000	38.780	80.00- 120.00	100.00
21.395	21.395 (0.971)	109	2549306			62.73- 122.73	93.19
93 Chlorobenzene					CAS #: 108-90-7		
22.056	22.056 (1.001)	112	3959931	40.0000	38.921	80.00- 120.00	100.00
22.056	22.056 (1.001)	114	1256384			3.73- 63.73	31.73
22.056	22.056 (1.001)	77	2125277			23.21- 83.21	53.67
95 Ethyl Benzene					CAS #: 100-41-4		
22.139	22.139 (1.005)	106	1909928	40.0000	39.414	80.00- 120.00	100.00
22.139	22.139 (1.005)	91	6028811			282.29- 342.29	315.66
96 m,p-Xylene					CAS #: 108-38-3		
22.303	22.303 (1.012)	106	2048310	40.0000	38.788	80.00- 120.00	100.00
22.303	22.303 (1.012)	91	4224543			172.44- 232.44	206.25
100 o-Xylene					CAS #: 95-47-6		
22.852	22.852 (1.037)	106	1915583	40.0000	38.479	80.00- 120.00	100.00
22.852	22.852 (1.037)	91	4168424			182.07- 242.07	217.61
101 Styrene					CAS #: 100-42-5		
22.880	22.880 (1.039)	104	3126169	40.0000	39.325	80.00- 120.00	100.00
22.852	22.852 (1.037)	78	1552645			19.39- 79.39	49.67
102 Bromoform					CAS #: 75-25-2		
23.174	23.174 (1.052)	173	3338242	40.0000	41.810	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
102 Bromoform (continued)							
23.174	23.174 (1.052)	171	1711789			22.28- 82.28	51.28
103 Cumene					CAS #: 98-82-8		
23.277	23.277 (1.057)	105	5896252	40.0000	39.842	80.00- 120.00	100.00
23.277	23.277 (1.057)	120	1702234			0.00- 59.48	28.87
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.689	23.689 (1.075)	83	3133469	40.0000	36.179	80.00- 120.00	100.00
23.689	23.689 (1.075)	85	1996388			32.49- 92.49	63.71
111 Propylbenzene					CAS #: 103-65-1		
23.767	23.767 (1.079)	91	5674009	40.0000	39.184	80.00- 120.00	100.00
23.767	23.767 (1.079)	120	1380418			0.00- 55.67	24.33
113 4-Ethyltoluene					CAS #: 622-96-8		
23.896	23.896 (1.085)	105	4042769	40.0000	36.588	80.00- 120.00	100.00
23.896	23.896 (1.085)	120	1326216			3.38- 63.38	32.80
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.947	23.947 (1.087)	105	3350104	40.0000	32.678	80.00- 120.00	100.00
23.947	23.947 (1.087)	120	1684649			21.28- 81.28	50.29
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.386	24.386 (1.107)	105	2837922	40.0000	26.659	80.00- 120.00	100.00
24.386	24.386 (1.107)	120	1393567			17.26- 77.26	49.11
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.756	24.756 (1.124)	146	2737216	40.0000	39.156	80.00- 120.00	100.00
24.756	24.756 (1.124)	148	1735487			33.35- 93.35	63.40
24.756	24.756 (1.124)	111	1067082			10.42- 70.42	38.98
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.868	24.868 (1.129)	146	2470977	40.0000	36.944	80.00- 120.00	100.00
24.868	24.868 (1.129)	148	1557523			33.78- 93.78	63.03
24.868	24.868 (1.129)	111	937902			7.61- 67.61	37.96
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.002	25.002 (1.135)	91	3856976	40.0000	42.504	80.00- 120.00	100.00(A)
25.002	25.002 (1.135)	126	836107			0.00- 51.90	21.68
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.271	25.271 (1.147)	146	2441079	40.0000	35.691	80.00- 120.00	100.00
25.271	25.271 (1.147)	148	1529458			34.92- 94.92	62.65
25.271	25.271 (1.147)	111	986073			10.09- 70.09	40.39

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.065	27.065 (1.229)	180	1950238	40.0000	33.505	80.00- 120.00	100.00
27.065	27.065 (1.229)	182	1851229			64.14- 124.14	94.92
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.177	27.177 (1.234)	225	1689117	40.0000	38.188	80.00- 120.00	100.00
27.177	27.177 (1.234)	223	1054422			34.80- 94.80	62.42
133 Naphthalene					CAS #: 91-20-3		
27.401	27.401 (1.244)	128	178122	4.00000	3.493	80.00- 120.00	100.00
27.401	27.401 (1.244)	127	23498			0.00- 45.63	13.19

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v092913.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m
Misc Info: 40ppbv (50ppbv)

Calibration Date: 29-SEP-2015
Calibration Time: 19:51
Client Smp ID: Level # 12
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	90777	54466	127088	92194	1.56
71 1,4-Difluorobenze	412207	247324	577090	428028	3.84
92 Chlorobenzene-d5	371144	222686	519602	375229	1.10

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.74	15.41	16.07	15.74	0.00
71 1,4-Difluorobenze	17.11	16.78	17.44	17.11	0.00
92 Chlorobenzene-d5	22.03	21.70	22.36	22.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/29Sep2015.b/v092913.d

Date : 29-SEP-2015 21:58

Client ID: Level # 12

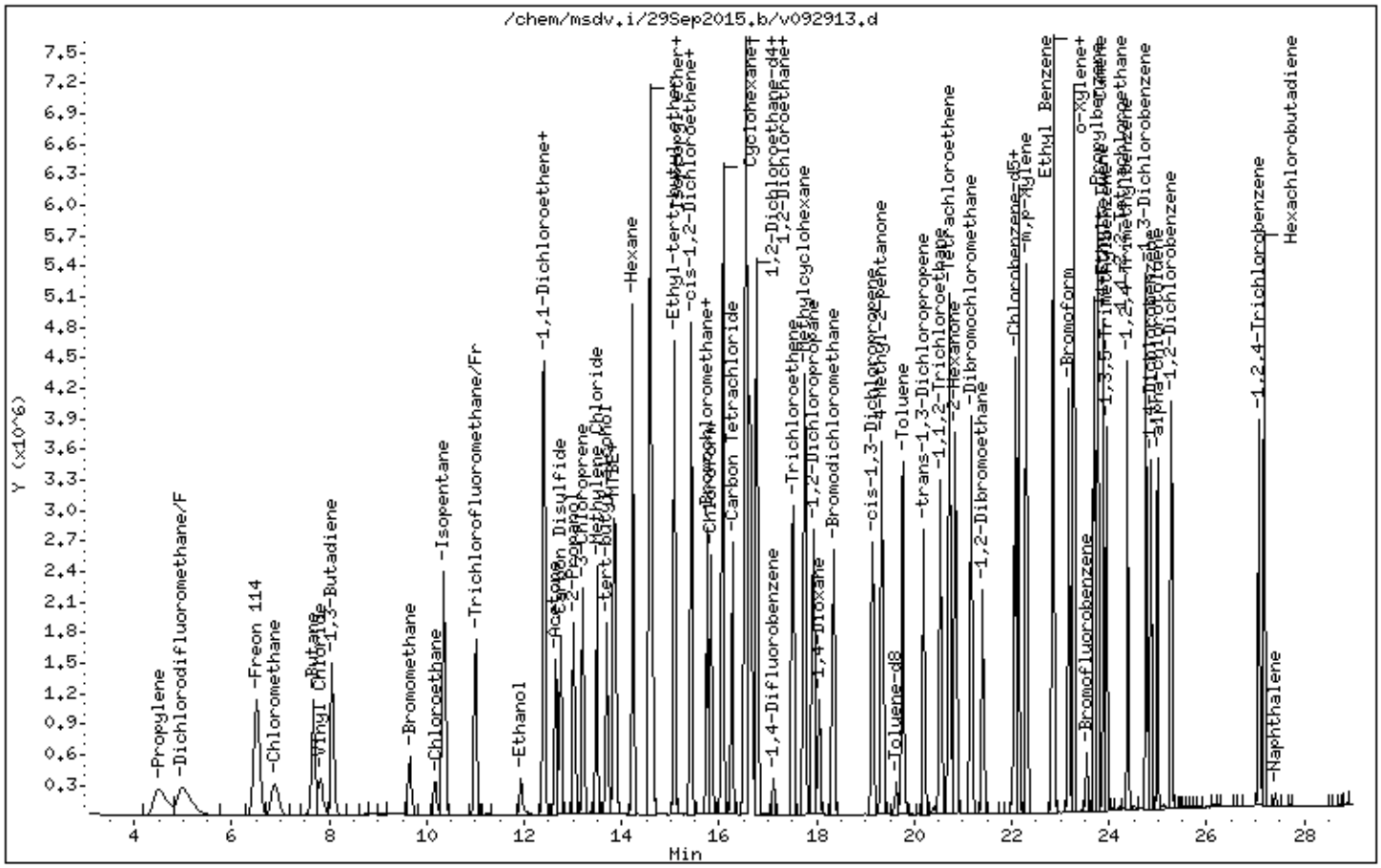
Instrument: msdv.i

Sample Info: 200mL# 2736-233

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2015 13:55
End Cal Date : 29-SEP-2015 21:15
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/29Sep2015.b/v15s0929a.m
Cal Date : 30-Sep-2015 10:49 ghehir
Curve Type : Average

Calibration File Names:
Level 1: /chem/msdv.i/29Sep2015.b/v092902sim.d
Level 2: /chem/msdv.i/29Sep2015.b/v092903sim.d
Level 3: /chem/msdv.i/29Sep2015.b/v092904sim.d
Level 4: /chem/msdv.i/29Sep2015.b/v092905sim.d
Level 5: /chem/msdv.i/29Sep2015.b/v092906sim.d
Level 6: /chem/msdv.i/29Sep2015.b/v092907sim.d
Level 7: /chem/msdv.i/29Sep2015.b/v092908sim.d
Level 8: /chem/msdv.i/29Sep2015.b/v092909sim.d
Level 9: /chem/msdv.i/29Sep2015.b/v092910sim.d
Level 10: /chem/msdv.i/29Sep2015.b/v092911sim.d
Level 11: /chem/msdv.i/29Sep2015.b/v092912sim.d

Compound	0.00300 Level 1	0.00500 Level 2	0.01000 Level 3	0.02000 Level 4	0.05000 Level 5	0.10000 Level 6	___ RRF	% RSD
	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	20.000 Level 11			
1 Dichlorodifluoromethane/Fr12	+++++	+++++	+++++	4.78614	4.33615	4.57741		
	4.06321	3.94130	3.99310	3.94302	3.89134		4.19146	8.034
M 141 Total Xylenes	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
2 Propylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
3 Freon 114	+++++	+++++	+++++	3.87761	3.45517	3.79280		
	3.41244	3.43698	3.49355	3.29497	3.24944		3.50162	6.357
4 Chloromethane	+++++	+++++	+++++	3.56866	3.51651	3.64394		
	3.55956	3.39277	3.25805	3.13244	3.07572		3.39346	6.336
5 Vinyl Chloride	+++++	+++++	2.94852	2.61038	2.30979	2.47478		
	2.26446	2.19917	2.25224	2.22455	2.18959		2.38594	10.610

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2015 13:55
End Cal Date : 29-SEP-2015 21:15
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/29Sep2015.b/v15s0929a.m
Cal Date : 30-Sep-2015 10:49 ghehir
Curve Type : Average

Compound	0.00300 Level 1	0.00500 Level 2	0.01000 Level 3	0.02000 Level 4	0.05000 Level 5	0.10000 Level 6	___ RRF	% RSD
	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	20.000 Level 11			
6 1,3-Butadiene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
7 Bromomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
8 Freon 22	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
9 Chloroethane	+++++	+++++	+++++	+++++	0.92011	0.84560		
	0.84025	0.86204	0.91337	0.89490	0.89094		0.88103	3.632
10 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
11 Trichlorofluoromethane/Fr11	+++++	+++++	+++++	4.61857	4.31817	4.79863		
	4.46453	4.47252	4.59579	4.35635	4.25989		4.48556	3.989
12 1,1-Dichloroethene	+++++	+++++	1.46126	1.64687	1.12211	1.22653		
	1.12585	1.10782	1.14194	1.08453	1.04673		1.21818	16.569
13 Freon 113	+++++	+++++	+++++	3.49011	3.35470	3.58398		
	3.29283	3.29053	3.32297	3.16983	3.08037		3.32317	4.843
14 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
15 Carbon Disulfide	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2015 13:55
End Cal Date : 29-SEP-2015 21:15
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/29Sep2015.b/v15s0929a.m
Cal Date : 30-Sep-2015 10:49 ghehir
Curve Type : Average

Compound	0.00300 Level 1	0.00500 Level 2	0.01000 Level 3	0.02000 Level 4	0.05000 Level 5	0.10000 Level 6	___ RRF	% RSD
	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	20.000 Level 11			
16 Acetone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
17 Ethanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
18 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
19 Pentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
20 Methylene Chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
21 MTBE	+++++	+++++	+++++	4.42483	4.13203	4.49367		
	4.11843	4.15252	4.27059	4.09296	4.00261		4.21096	4.062
22 trans-1,2-Dichloroethene	+++++	1.48294	2.00208	1.44003	1.29767	1.30562		
	1.14904	1.14965	1.16596	1.11126	1.08710		1.31913	20.939
23 2-Propanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
24 Hexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
25 1,1-Dichloroethane	+++++	+++++	4.43578	4.40650	4.04954	4.52882		
	4.23478	4.24009	4.33422	4.11540	4.02912		4.26380	4.142

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2015 13:55
End Cal Date : 29-SEP-2015 21:15
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/29Sep2015.b/v15s0929a.m
Cal Date : 30-Sep-2015 10:49 ghehir
Curve Type : Average

Compound	0.00300 Level 1	0.00500 Level 2	0.01000 Level 3	0.02000 Level 4	0.05000 Level 5	0.10000 Level 6	___ RRF	% RSD	
	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	20.000 Level 11				
26 Vinyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++	+++++	+++++		+++++	+++++	
27 Tetrahydrofuran	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++	+++++	+++++		+++++	+++++	
28 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++	+++++	+++++		+++++	+++++	
29 cis-1,2-Dichloroethene	+++++	2.55107	1.38326	1.40338	1.16336	1.31337			
	1.21765	1.27362	1.27248	1.21715	1.18572		1.39810	29.525	
30 2-Butanone	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++	+++++	+++++		+++++	+++++	
32 Chloroform	+++++	3.93031	3.80655	3.18116	3.44565	4.05175			
	3.65905	3.61465	3.71816	3.55402	3.45477		3.64161	6.963	
33 Cyclohexane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++	+++++	+++++	+++++		+++++	+++++	
34 1,1,1-Trichloroethane	+++++	+++++	4.20177	4.12373	4.49796	4.37945			
	4.05457	4.07017	4.13526	3.96153	3.87296		4.14415	4.710	
35 Carbon Tetrachloride	+++++	2.17775	1.75247	1.75684	1.99251	2.04422			
	2.14179	2.07357	3.91028	3.75978	3.69523		2.53044	34.816	<-
36 Benzene	+++++	2.04887	1.66249	1.39495	1.21803	1.26893			
	1.14501	1.12131	1.18131	1.11608	1.08829		1.32453	23.224	

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2015 13:55
End Cal Date : 29-SEP-2015 21:15
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/29Sep2015.b/v15s0929a.m
Cal Date : 30-Sep-2015 10:49 ghehir
Curve Type : Average

Compound	0.00300 Level 1	0.00500 Level 2	0.01000 Level 3	0.02000 Level 4	0.05000 Level 5	0.10000 Level 6	___ RRF	% RSD
	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	20.000 Level 11			
38 1,2-Dichloroethane	+++++	0.73051	0.69576	0.92997	0.73161	0.82308		
	0.76346	0.78119	0.82523	0.77465	0.76531		0.78208	8.391
39 Heptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
41 Trichloroethene	+++++	1.39707	0.93256	0.77497	0.74000	0.72501		
	0.65040	0.64858	0.68092	0.64339	0.62709		0.78200	29.977
42 1,2-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
43 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
44 Bromodichloromethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
45 cis-1,3-Dichloropropene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
46 4-Methyl-2-pentanone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
48 Toluene	+++++	+++++	1.78944	1.60407	1.73776	1.49802		
	1.40827	1.41789	1.44657	1.38854	1.34946		1.51556	10.486
49 trans-1,3-Dichloropropene	+++++	+++++	+++++	0.67022	0.82138	0.88260		
	0.75578	0.76636	0.85139	0.81337	0.80217		0.79541	8.212

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2015 13:55
End Cal Date : 29-SEP-2015 21:15
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/29Sep2015.b/v15s0929a.m
Cal Date : 30-Sep-2015 10:49 ghehir
Curve Type : Average

Compound	0.00300 Level 1	0.00500 Level 2	0.01000 Level 3	0.02000 Level 4	0.05000 Level 5	0.10000 Level 6	___ RRF	% RSD
	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	20.000 Level 11			
50 1,1,2-Trichloroethane	+++++	+++++	1.18469	0.88635	0.72670	0.68492		
	0.67215	0.67162	0.71249	0.66434	0.64904		0.76137	22.858
51 Tetrachloroethene	2.01428	1.57908	1.26040	1.16507	1.07055	1.06250		
	1.01141	1.00194	1.05078	0.99299	0.96668		1.19779	26.944
52 2-Hexanone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
53 Octane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
54 Dibromochloromethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
55 1,2-Dibromoethane	+++++	1.26558	0.97159	0.98678	1.00196	1.15329		
	1.06187	1.06111	1.12831	1.05775	1.04059		1.07288	8.273
57 Chlorobenzene	+++++	+++++	+++++	1.56386	1.55277	1.57371		
	1.49828	1.48286	1.55597	1.47633	1.45838		1.52027	3.018
58 Ethyl Benzene	+++++	+++++	0.64352	0.61565	0.59625	0.63119		
	0.60000	0.59902	0.62798	0.60432	0.59993		0.61310	2.816
59 m,p-Xylene	+++++	+++++	0.71502	0.66950	0.59625	0.64359		
	0.62012	0.61924	0.65954	0.63476	0.63694		0.64388	5.362
60 1,3-Dichloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2015 13:55
End Cal Date : 29-SEP-2015 21:15
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/29Sep2015.b/v15s0929a.m
Cal Date : 30-Sep-2015 10:49 ghehir
Curve Type : Average

Compound	0.00300 Level 1	0.00500 Level 2	0.01000 Level 3	0.02000 Level 4	0.05000 Level 5	0.10000 Level 6	RRF	% RSD
	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	20.000 Level 11			
61 o-Xylene	+++++	+++++	0.57482	0.61346	0.57544	0.68051		
	0.59854	0.59509	0.63010	0.60111	0.60462		0.60819	5.281
62 Styrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
63 Bromoform	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
64 Cumene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
65 Dibromomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
67 1,1,2,2-Tetrachloroethane	+++++	1.57037	1.34873	1.32080	1.26637	1.25219		
	1.22497	1.23079	1.29757	1.20544	1.18550		1.29027	8.601
68 Propylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
69 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
70 1,3,5-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
71 1,2,4-Trimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2015 13:55
End Cal Date : 29-SEP-2015 21:15
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/29Sep2015.b/v15s0929a.m
Cal Date : 30-Sep-2015 10:49 ghehir
Curve Type : Average

Compound	0.00300 Level 1	0.00500 Level 2	0.01000 Level 3	0.02000 Level 4	0.05000 Level 5	0.10000 Level 6	RRF	% RSD
	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	20.000 Level 11			
72 1,3-Dichlorobenzene	+++++	+++++	+++++	1.39648	1.05795	1.17918		
	0.98998	0.97279	1.03909	0.98080	0.98584		1.07526	13.627
73 1,4-Dichlorobenzene	+++++	1.30912	1.59128	1.33026	0.94333	1.10796		
	0.89383	0.86410	0.91723	0.86703	0.87778		1.07019	23.905
74 alpha-Chlorotoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
75 1,2-Dichlorobenzene	+++++	+++++	+++++	1.12432	0.89555	1.05617		
	0.88037	0.87212	0.91043	0.86949	0.87443		0.93536	10.505
76 1,2,4-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
77 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
78 Naphthalene	+++++	+++++	+++++	+++++	+++++	1.19985		
	0.84751	0.84680	0.54200	0.59259	0.60283		0.77193	32.155
$ 37 1,2-Dichloroethane-d4	1.63116	1.60745	1.62070	1.63904	1.66219	1.62535		
	1.63946	1.67337	1.62254	1.66712	1.76329		1.65015	2.602
$ 47 Toluene-d8	0.80242	0.81013	0.81119	0.81075	0.80308	0.81589		
	0.81172	0.80405	0.79858	0.81036	0.80842		0.80787	0.636
$ 66 Bromofluorobenzene	0.54701	0.55366	0.55414	0.53804	0.53551	0.57060		
	0.55229	0.55448	0.56569	0.57426	0.58152		0.55702	2.619

Calibration History

Method : /chem/msdv.i/29Sep2015.b/v15s0929a.m
Start Cal Date: 29-SEP-2015 13:55
End Cal Date : 29-SEP-2015 21:15

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.00300		
29-SEP-2015 13:55	3pptv	/chem/msdv.i/29Sep2015.b/v092902sim.d
Cal Level: 2 , Cal Amount: 0.00500		
29-SEP-2015 14:34	5pptv	/chem/msdv.i/29Sep2015.b/v092903sim.d
Cal Level: 3 , Cal Amount: 0.01000		
29-SEP-2015 15:09	10pptv	/chem/msdv.i/29Sep2015.b/v092904sim.d
Cal Level: 4 , Cal Amount: 0.02000		
29-SEP-2015 15:44	20	/chem/msdv.i/29Sep2015.b/v092905sim.d
Cal Level: 5 , Cal Amount: 0.05000		
29-SEP-2015 17:05	HiLoCRV	/chem/msdv.i/29Sep2015.b/v092906sim.d
Cal Level: 6 , Cal Amount: 0.10000		
29-SEP-2015 17:52	HiLoCRV	/chem/msdv.i/29Sep2015.b/v092907sim.d
Cal Level: 7 , Cal Amount: 0.50000		
29-SEP-2015 18:33	HiLoCRV	/chem/msdv.i/29Sep2015.b/v092908sim.d
Cal Level: 8 , Cal Amount: 1.00000		
29-SEP-2015 19:17	HiLoCRV	/chem/msdv.i/29Sep2015.b/v092909sim.d

Cal Level: 9 , Cal Amount: 5.00000		
29-SEP-2015 19:51	HiLoCRV	/chem/msdv.i/29Sep2015.b/v092910sim.d
Cal Level: 10, Cal Amount: 10.00000		
29-SEP-2015 20:36	HiLoCRV	/chem/msdv.i/29Sep2015.b/v092911sim.d
Cal Level: 11, Cal Amount: 20.00000		
29-SEP-2015 21:15	HiLoCRV	/chem/msdv.i/29Sep2015.b/v092912sim.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 9

Ccal Level: 9 , Ccal Amount: 5.000		
29-SEP-2015 19:51	HiLoCRV	/chem/msdv.i/29Sep2015.b/v092910sima.d
Ccal Level: 9 , Ccal Amount: 5.000		
29-SEP-2015 19:51	HiLoCRV	/chem/msdv.i/29Sep2015.b/v092910sim.d

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2015 13:55
End Cal Date : 29-SEP-2015 21:15
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Cal Date : 01-Oct-2015 14:04 sblack
Curve Type : Average

Calibration File Names:
Level 1: /chem/msdv.i/29Sep2015.b/v092902sim.d
Level 2: /chem/msdv.i/29Sep2015.b/v092903sim.d
Level 3: /chem/msdv.i/29Sep2015.b/v092904sim.d
Level 4: /chem/msdv.i/29Sep2015.b/v092905sim.d
Level 5: /chem/msdv.i/29Sep2015.b/v092906sim.d
Level 6: /chem/msdv.i/29Sep2015.b/v092907sim.d
Level 7: /chem/msdv.i/29Sep2015.b/v092908sim.d
Level 8: /chem/msdv.i/29Sep2015.b/v092909sim.d
Level 9: /chem/msdv.i/29Sep2015.b/v092910sim.d
Level 10: /chem/msdv.i/29Sep2015.b/v092911sim.d
Level 11: /chem/msdv.i/29Sep2015.b/v092912sim.d

GH 10/1/15

Compound	0.00300 Level 1	0.00500 Level 2	0.01000 Level 3	0.02000 Level 4	0.05000 Level 5	0.10000 Level 6	RRF	% RSD
	0.50000 Level 7	1.000 Level 8	5.000 Level 9	10.000 Level 10	20.000 Level 11			
1 Dichlorodifluoromethane/Fr12	+++++	+++++	+++++	4.78614	4.33615	4.57741		
	4.06321	3.94130	3.99310	3.94302	3.89134		4.19146	8.034
M 141 Total Xylenes	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
2 Propylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++	+++++		+++++	+++++
3 Freon 114	+++++	+++++	+++++	3.87761	3.45517	3.79280		
	3.41244	3.43698	3.49355	3.29497	3.24944		3.50162	6.357
4 Chloromethane	+++++	+++++	+++++	3.56866	3.51651	3.64394		
	3.55956	3.39277	3.25805	3.13244	3.07572		3.39346	6.336
5 Vinyl Chloride	+++++	+++++	2.94852	2.61038	2.30979	2.47478		
	2.26446	2.19917	2.25224	2.22455	2.18959		2.38594	10.610

Curve Name: V15S0929A

Initial Calibration Narrative

An initial calibration curve was analyzed on 9/29/15 on MSD-V.

The instrument was set up to do Full Scan and Selective Ion Monitoring (SIM) simultaneously.

Tune File: v092901.

ICAL: Zero (1) out: Carbon Tetrachloride:34.8%

ICV: Zero (1) out. Carbon Tetrachloride @ 188%.

- File # v092916sim; standard #2736-276; 5.0ppbv (50ppbv); 25mL load
- DOD: Carbon Tetrachloride out.
- In House controls: Carbon Tetrachloride and Naphthalene out.

Naphthalene was calibrated at 0.01ppbv, 0.05ppbv, 0.1ppbv, 0.5ppbv, 1.0ppbv, and 2.0ppbv.

Naphthalene is expired in the second source standard: CAR: F9A2A2185

~The quantitation ion peak (128 amu) is sufficiently resolved for accurate quantification of Naphthalene at the special reporting limit of 0.005ppbv and 0.01ppbv. However, the secondary mass ion peak (127 amu) for Naphthalene is not completely baseline-resolved. Identification of Naphthalene based on the presence and abundance ratio of confirmation ion is reliable at the lowest concentrations even when insufficient baseline resolution of the secondary mass ion peak (127 amu). The spectrum of Naphthalene in this ICAL point will be used as the reference to determine the ion ratio target in the samples for this ICAL.

The following compounds were calibrated down to a special RL of 0.003ppbv:

- Tetrachloroethane

The following compounds were calibrated down to a special RL of 0.005ppbv:

- Trichloroethene
- Benzene
- Trans-1,2-Dichloroethene
- Chloroform
- Carbon Tetrachloride
- 1,2-Dibromoethane
- 1,2-Dichloroethane*
- 1,1,2,2-Tetrachloroethane
- 1,4-Dichlorobenzene

The following compound was calibrated down to a special RL of 0.01ppbv:

- 1,1,2-Trichloroethane
- 1,1-Dichloroethane
- 1,1,1-Trichloroethane
- Toluene
- Ethyl Benzene
- o-Xylene

*The quantitation ion peak (62 amu) is sufficiently resolved for accurate quantification of 1,2-Dichloroethane (1,2-DCA) at the SIM reporting limit of 0.005 ppbv. However, the confirmation mass ion peak (64 amu) for 1,2-DCA is not baseline-resolved from the surrogate 1,2-Dichloroethane-d4 peak. Identification of 1,2-DCA based on the presence and abundance ratio of confirmation ion is less reliable at the lowest concentrations due to this interference with the surrogate's mass ion 64 peak.

MDL 2/19/15.
Naphthalene MDL 5/8/15.

Eurofins Air Toxics, Inc. **MSD-V** Naph Exp. in Stds CAR# F9A24 2158 **Logbook #2725**

BFB Verification of 176/174 m/z Ratio:	409177 / 423637
Tekmar Purge Flow:	
Vacuum:	NA 9/29/15

IS/S Std. #:	2936-260	Exp. Date:	12/22/15
BCM	LL: 9D777	STM:	100126
1,4-DFB	412267		412832
CB-d5	371144		352453

Verified CCV IS vs ICAL mid-point (-40%D): GH

File ID:	V092910
Compound:	Total
Initials:	GH

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}} = \frac{(\ 326994\ )}{(\ 412267\ )} \times \frac{(\ 5.00\ )}{(\ 0.94252\ )} = 4.979$

SOP# (Circle one): 6 / (83) / (38) / 91 / 109 Method (Circle one): (TO-14A/TO-15)/TO-17 Reported Result: 4.979

Method Name: V15L092918 / V15S092918.m

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
1	✓	V092901	BFB Tune Check	2299-805	50ng	2.0 ml	1.0	DB	9/29/15	1321	GH	
2	✓	02	ICAL Level 1	2736-248	0.003 ppbv	15 ml	1.00			1355	GH	Exp. 11/20/15 ✓ 10/1/15
3	✓	03	2	2736-248	0.005 ppbv	25 ml	1.00			1434	GH	
4	✓	04	3		0.01 ppbv	50 ml	1.00			1509	GH	
5	✓	05	4		0.02 ppbv	100 ml	1.00			1544	GH	
6	✓	06	5		0.05 ppbv	250 ml	1.00	GH		1705	GH	
7	✓	07	6	2736-249	0.1 ppbv	25 ml	1.00	GH		1752	GH	Exp. 11/20/15 ✓ 10/1/15
8	✓	08	7		0.5 ppbv	125 ml	1.00	GH		1833	GH	
9	✓	09	8		1.0 ppbv	250 ml	1.00	GH		1917	GH	
10	✓	10	9	2736-233	5.0 ppbv	25 ml	1.00	GH		1951	GH	Exp. 11/20/15 ✓ 10/1/15
11	✓	11	10		10 ppbv	50 ml	1.00	GH		2036	GH	
12	✓	12	11		20 ppbv	100 ml	1.00	GH		2115	GH	
13	✓	13	12		40 ppbv	200 ml	1.00	GH		2158	GH	
14	✓	14	System blank	35248	Num.	250 ml	1.00	GH		2238	GH	

Reviewed

9/29/15
Date

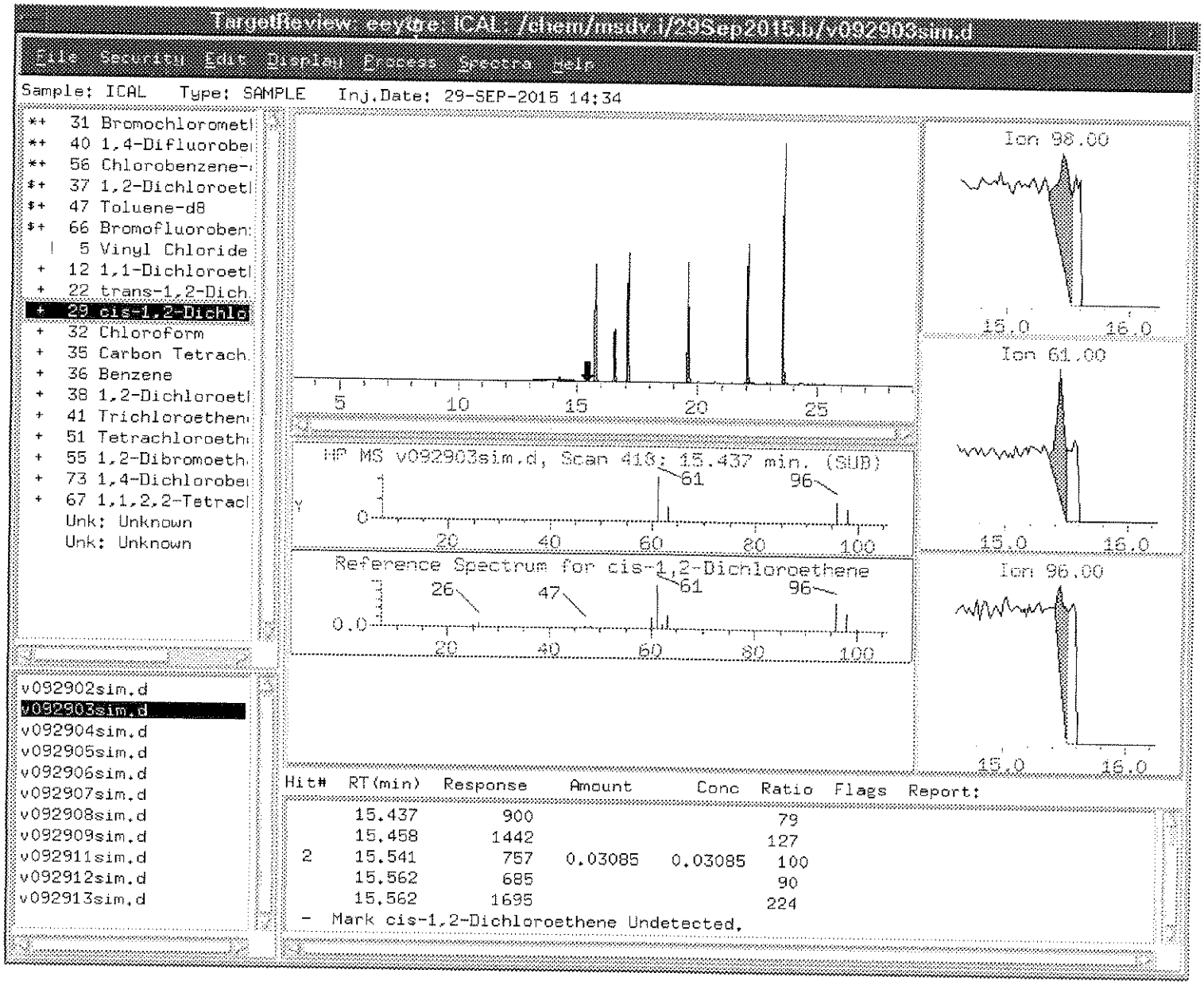
Eurofins Air Toxics, Inc. **MSD-V** **Logbook #2725**

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By Initials	Date Analyzed	Time Analyzed	Reviewed By Initials	Comments/Standard Expiration Date
15	✓	v092915	System blank	35249	humid	25mL	1.00	GH	9-29-15	2312	GH	
16	✓	16	ICV	2736-276	5.0ppbv	25mL	1.00	GH		0952	GH	1004 ↑ Exp 10/30/15*
17	X	17	System blank	35249	humid	25mL	1.00	GH		1054	GH	
18		18	System blank	35249	humid	25mL	1.00	GH				
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												

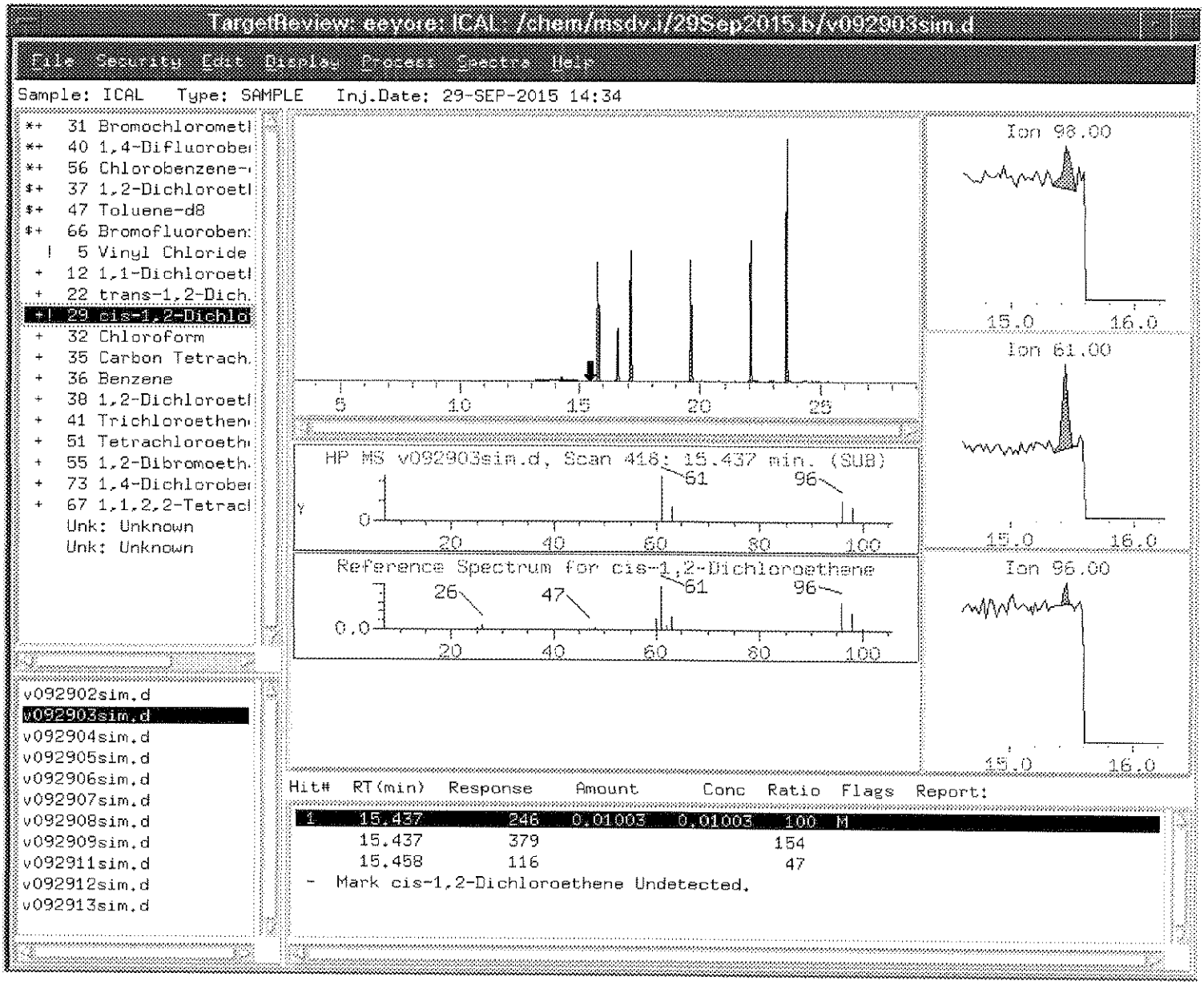
GH 9/30/15

Reviewed

9/30/15
Date


TargetReview ecyage ICAL: /chem/msdv.i/29Sep2015.b/v092903sim.d
File Security Edit Display Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 14:34
*+ 31 Bromochlorometl
*+ 40 1,4-Difluorobe
*+ 56 Chlorobenzene-
$+ 37 1,2-Dichloroetl
$+ 47 Toluene-d8
$+ 66 Bromofluoroben
| 5 Vinyl Chloride
+ 12 1,1-Dichloroetl
+ 22 trans-1,2-Dich
+ 29 cis-1,2-Dichlo
+ 32 Chloroform
+ 35 Carbon Tetrach
+ 36 Benzene
+ 38 1,2-Dichloroetl
+ 41 Trichloroethen
+ 51 Tetrachloroeth
+ 55 1,2-Dibromoeth
+ 73 1,4-Dichlorobe
+ 67 1,1,2,2-Tetracl
Unk: Unknown
Unk: Unknown
5 10 15 20 25
HP MS v092903sim.d, Scan 413; 15.437 min. (SUB)
61 96
0
20 40 60 80 100
Reference Spectrum for cis-1,2-Dichloroethene
26 47 61 96
0.0
20 40 60 80 100
Ion 98.00
15.0 16.0
Ion 61.00
15.0 16.0
Ion 96.00
15.0 16.0
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
15.437 900 79
15.458 1442 127
2 15.541 757 0.03085 0.03085 100
15.562 685 90
15.562 1695 224
- Mark cis-1,2-Dichloroethene Undetected.

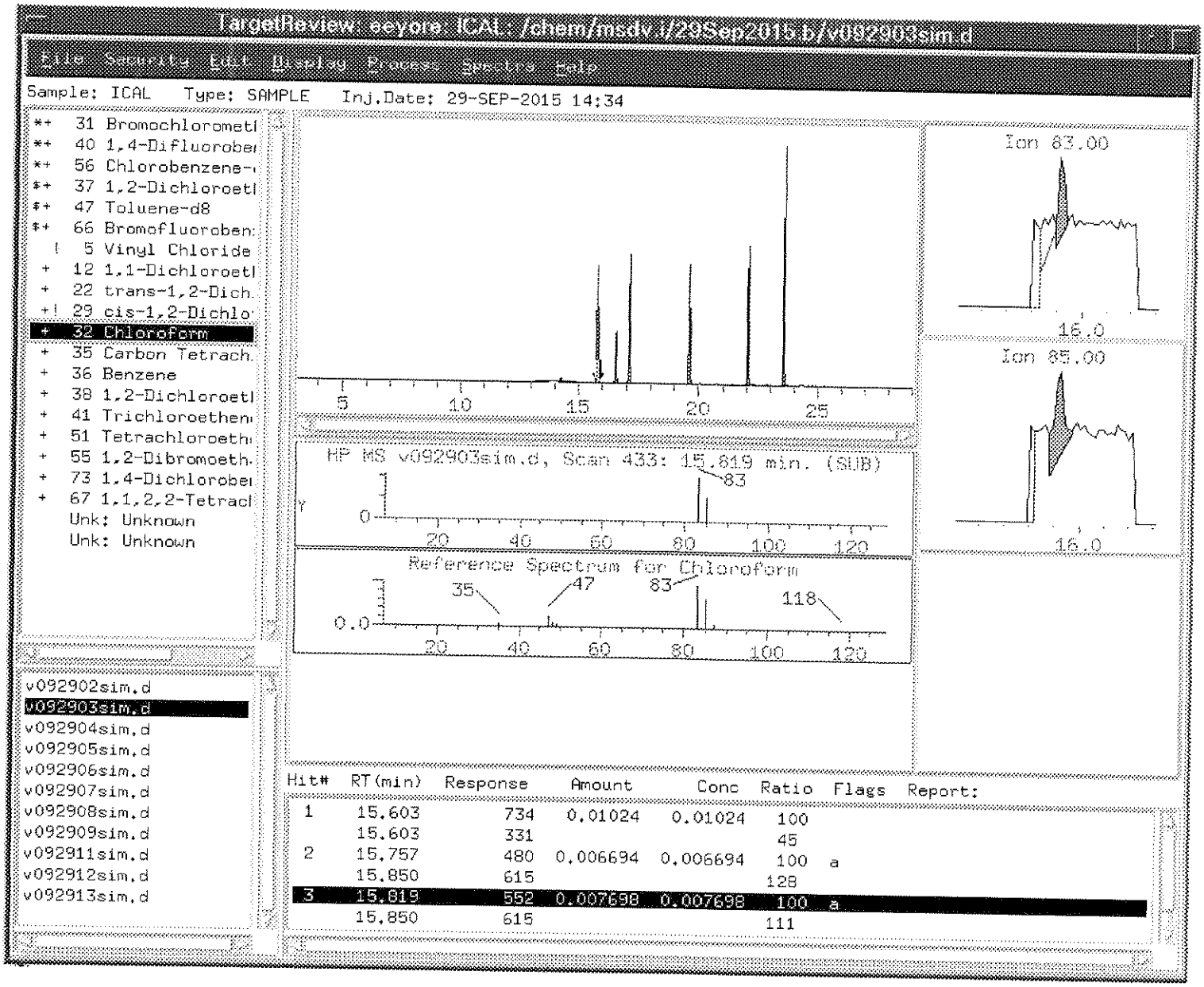
before



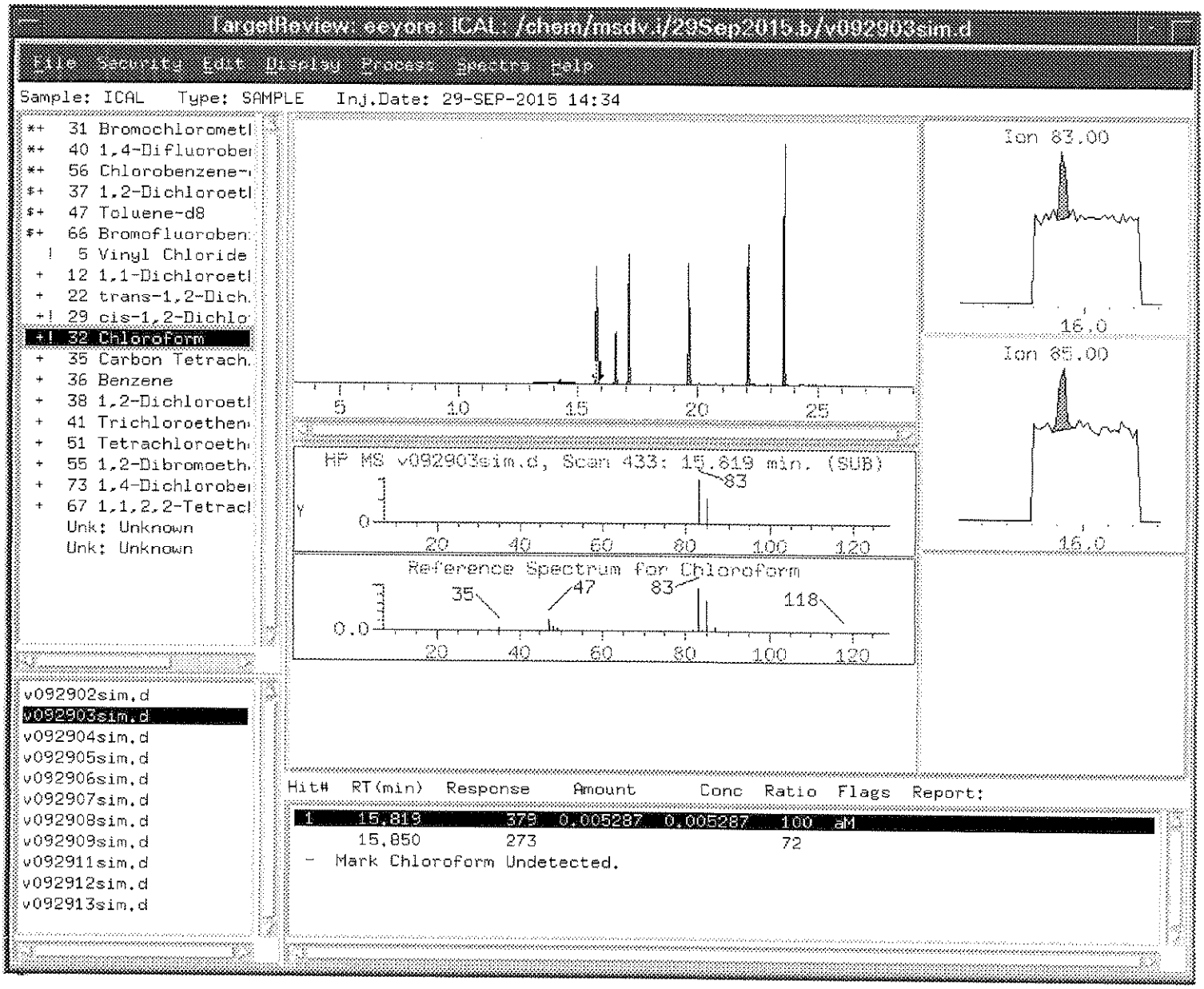
9/30/15
AG

After	
Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓

GH 9/30/15


TargetReview: eeyore: ICAL: /chem/msdv.i/29Sep2015.b/v092903sim.d
File Security Edit Display Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 14:34
*+ 31 Bromochlorometl
*+ 40 1,4-Difluorobe
*+ 56 Chlorobenzene-
$+ 37 1,2-Dichloroetl
$+ 47 Toluene-d8
$+ 66 Bromofluoroben
! 5 Vinyl Chloride
+ 12 1,1-Dichloroetl
+ 22 trans-1,2-Dich
+! 29 cis-1,2-Dichlo
+ 32 Chloroform
+ 35 Carbon Tetrach
+ 36 Benzene
+ 38 1,2-Dichloroetl
+ 41 Trichloroethen
+ 51 Tetrachloroeth
+ 55 1,2-Dibromoeth
+ 73 1,4-Dichlorobe
+ 67 1,1,2,2-Tetracl
Unk: Unknown
Unk: Unknown
5 10 15 20 25
Ion 83.00
16.0
Ion 85.00
16.0
HP MS v092903sim.d, Scan 433: 15.819 min. (SUB)
83
Y
0
20 40 60 80 100 120
Reference Spectrum for Chloroform
35 47 83 118
0.0
20 40 60 80 100 120
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 15.603 734 0.01024 0.01024 100
15.603 331 45
2 15.757 480 0.006694 0.006694 100 a
15.850 615 128
3 15.819 552 0.007698 0.007698 100 a
15.850 615 111

before

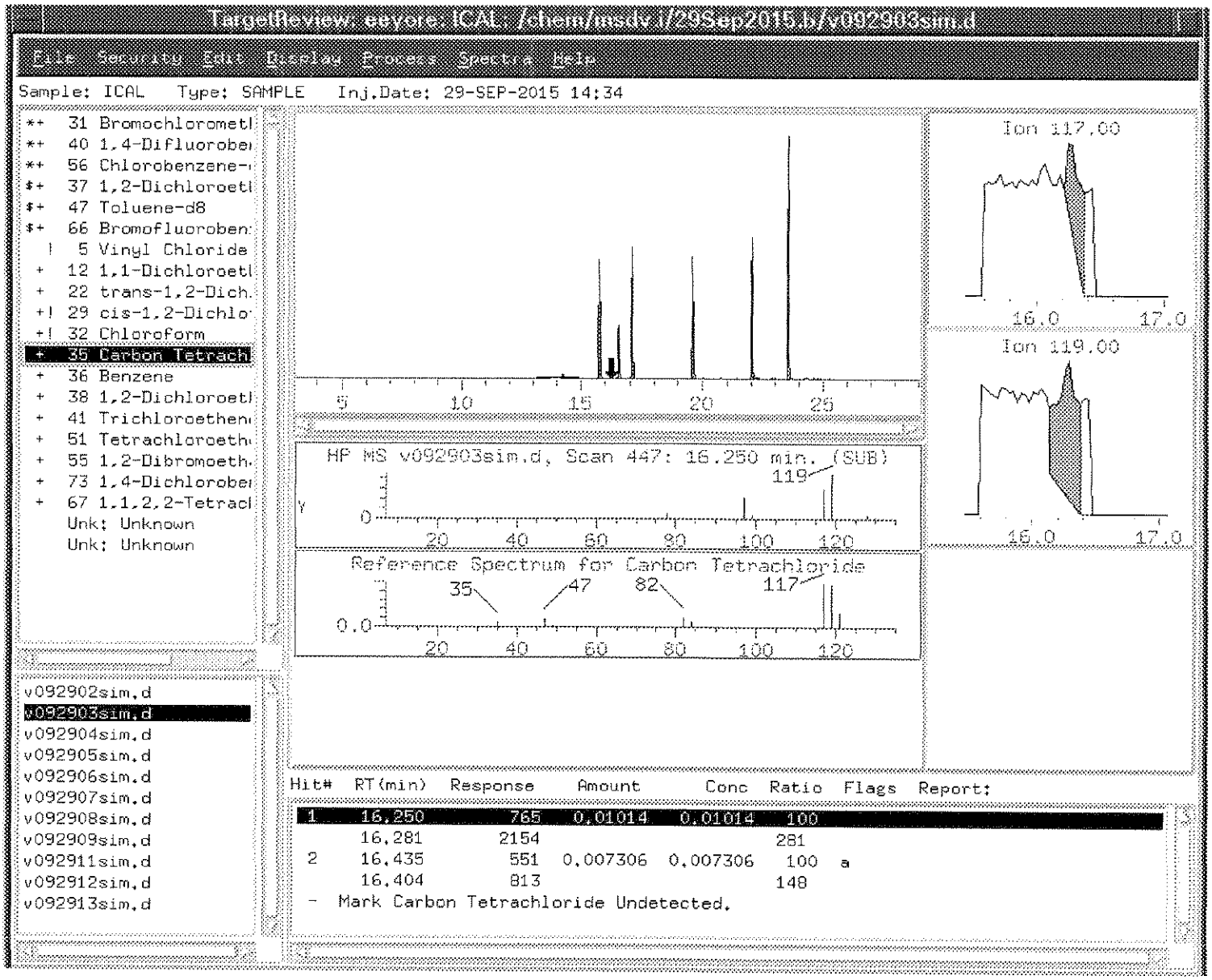


9/30/15

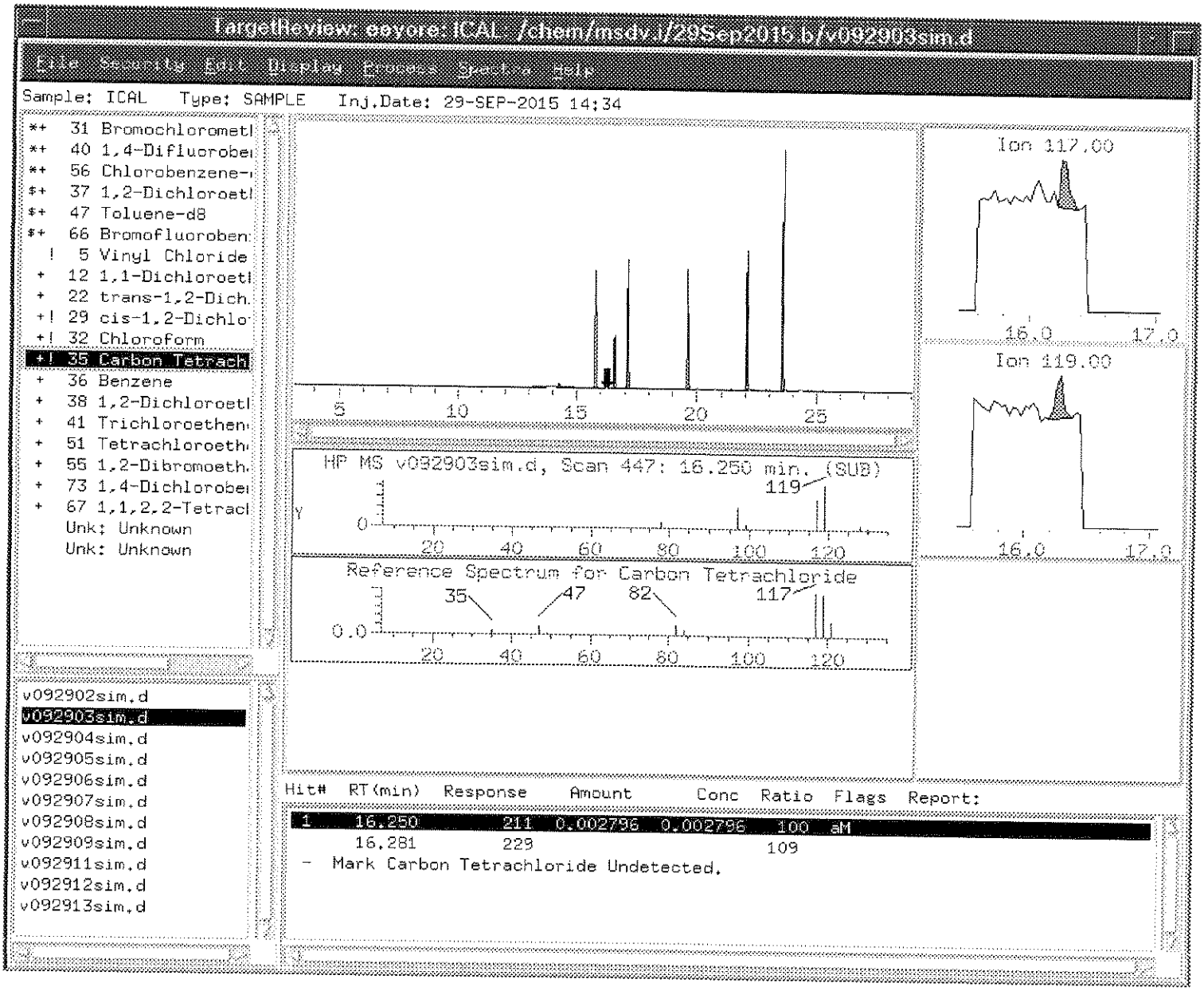
AK

After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓ GH 9/30/15


TargetReview: eeyore: ICAL: /chem/msdv1/29Sep2015.b/v092903sim.d
File Security Edit Display Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 14:34
*+ 31 Bromochlorometh
*+ 40 1,4-Difluorober
*+ 56 Chlorobenzene-
$+ 37 1,2-Dichloroeth
$+ 47 Toluene-d8
$+ 66 Bromofluoroben
! 5 Vinyl Chloride
+ 12 1,1-Dichloroeth
+ 22 trans-1,2-Dich
+! 29 cis-1,2-Dichlo
+! 32 Chloroform
+ 35 Carbon Tetrach
+ 36 Benzene
+ 38 1,2-Dichloroeth
+ 41 Trichloroethen
+ 51 Tetrachloroeth
+ 55 1,2-Dibromoeth
+ 73 1,4-Dichlorober
+ 67 1,1,2,2-Tetrach
Unk: Unknown
Unk: Unknown
5 10 15 20 25
Ion 117.00
16.0 17.0
Ion 119.00
16.0 17.0
HP MS v092903sim.d, Scan 447: 16.250 min. (SUB)
119
20 40 60 80 100 120
Reference Spectrum for Carbon Tetrachloride
35 47 82 117
20 40 60 80 100 120
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 16.250 765 0.01014 0.01014 100
16.281 2154 281
2 16.435 551 0.007306 0.007306 100 a
16.404 813 148
- Mark Carbon Tetrachloride Undetected.

before

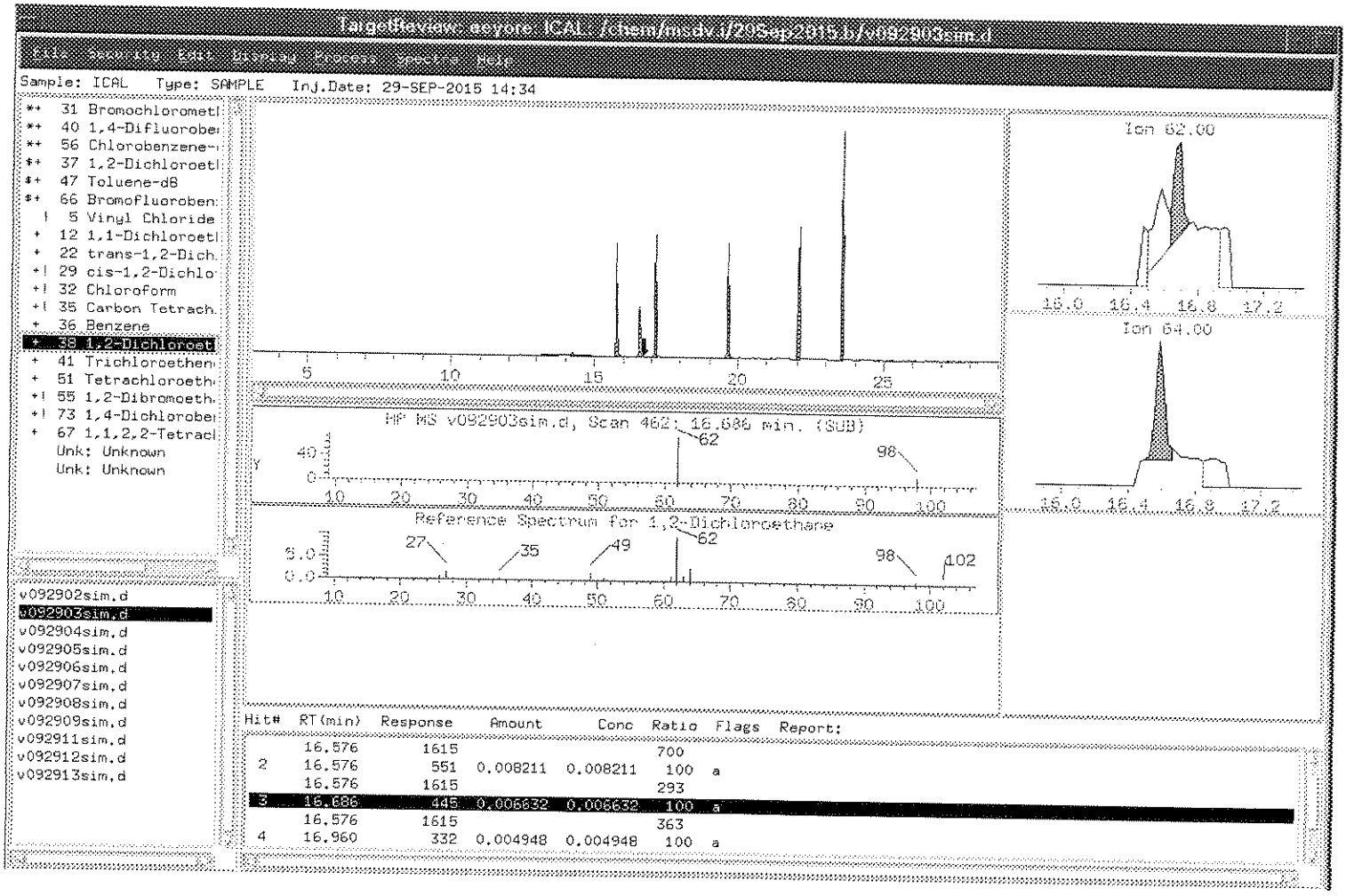


9/30/15
AK

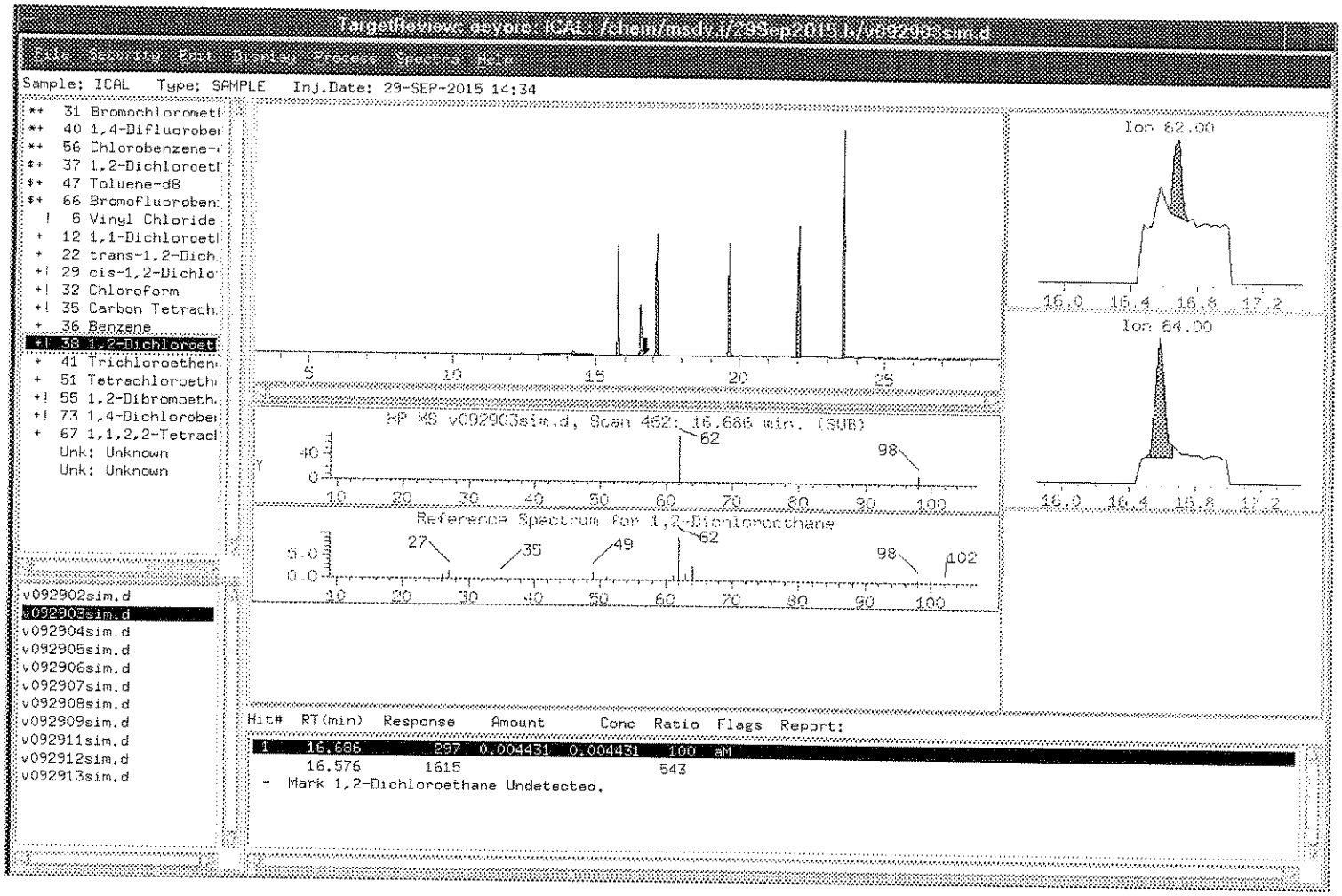
After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓

AK 9/30/15


Target4 View: beyore ICAL /chem/msdv.i/20Sep2015.b/v092803sim.d
File Spectra Edit Display Process Specify Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 14:34
31 Bromochlorometh
40 1,4-Difluorober
56 Chlorobenzene-d
37 1,2-Dichloroeth
47 Toluene-d8
66 Bromofluoroben
5 Vinyl Chloride
12 1,1-Dichloroeth
22 trans-1,2-Dich
29 cis-1,2-Dichlo
32 Chloroform
35 Carbon Tetrach
36 Benzene
39 1,2-Dichloroet
41 Trichloroethen
51 Tetrachloroeth
55 1,2-Dibromoeth
73 1,4-Dichlorober
67 1,1,2,2-Tetrach
Unk: Unknown
Unk: Unknown
HP MS v092903sim.d, Scan 462: 16.686 min. (SUB)
Reference Spectrum for 1,2-Dichloroethane
Ion 62.00
Ion 64.00
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
16.576 1615 700
2 16.576 551 0.008211 0.008211 100 a
16.576 1615 293
3 16.686 445 0.006632 0.006632 100 a
16.576 1615 363
4 16.960 332 0.004948 0.004948 100 a

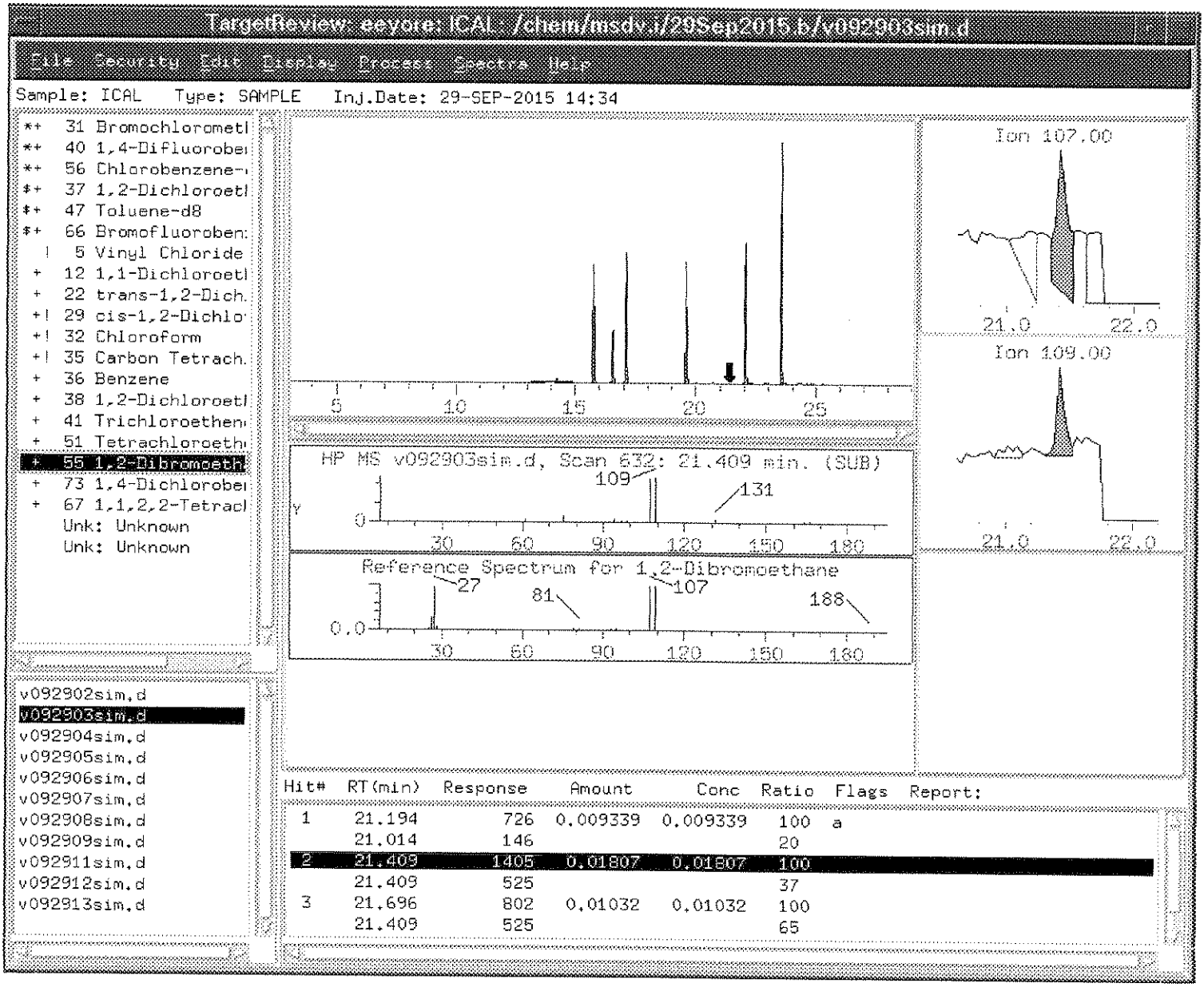
before



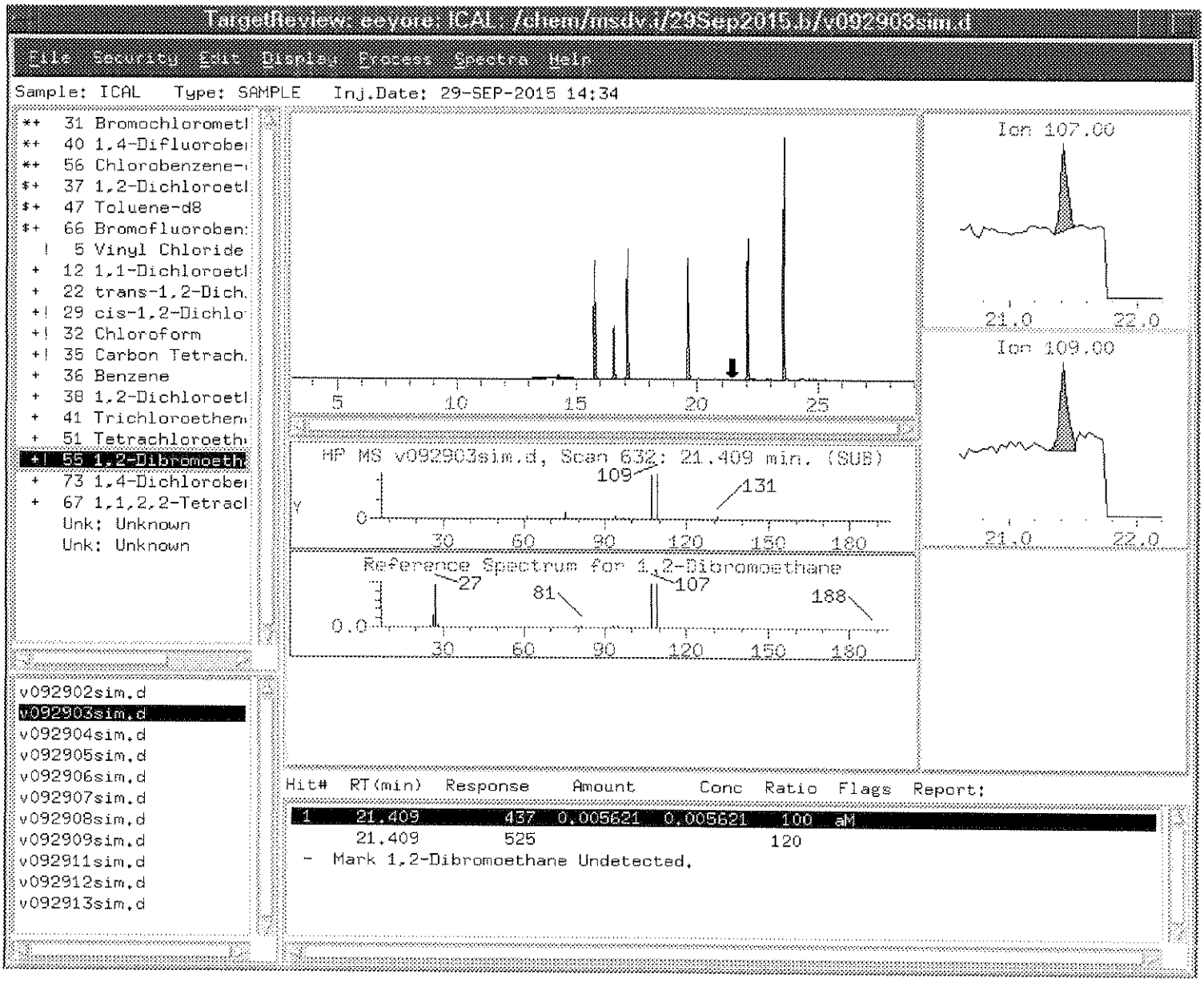
9/30/15
AK

After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓ GH 9/30/15


Targetfileview: eeyore: ICAL: /chem/msdv.i/29Sep2015.b/v092903sim.d
File Security Edit Display Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 14:34
*+ 31 Bromochlorometl
*+ 40 1,4-Difluorobe
*+ 56 Chlorobenzene-
$+ 37 1,2-Dichloroetl
$+ 47 Toluene-d8
$+ 66 Bromofluoroben
! 5 Vinyl Chloride
+ 12 1,1-Dichloroetl
+ 22 trans-1,2-Dich.
+! 29 cis-1,2-Dichlo
+! 32 Chloroform
+! 35 Carbon Tetrach.
+ 36 Benzene
+ 38 1,2-Dichloroetl
+ 41 Trichloroethen
+ 51 Tetrachloroeth
+ 55 1,2-Dibromoeth
+ 73 1,4-Dichlorobe
+ 67 1,1,2,2-Tetracl
Unk: Unknown
Unk: Unknown
5 10 15 20 25
Ion 107.00
21.0 22.0
Ion 109.00
21.0 22.0
HP MS v092903sim.d, Scan 632: 21.409 min. (SUB)
109
131
Y
0
30 60 90 120 150 180
Reference Spectrum for 1,2-Dibromoethane
27
81
107
188
0.0
30 60 90 120 150 180
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 21.194 726 0.009339 0.009339 100 a
21.014 146 20
2 21.409 1405 0.01807 0.01807 100
21.409 525 37
3 21.696 802 0.01032 0.01032 100
21.409 525 65

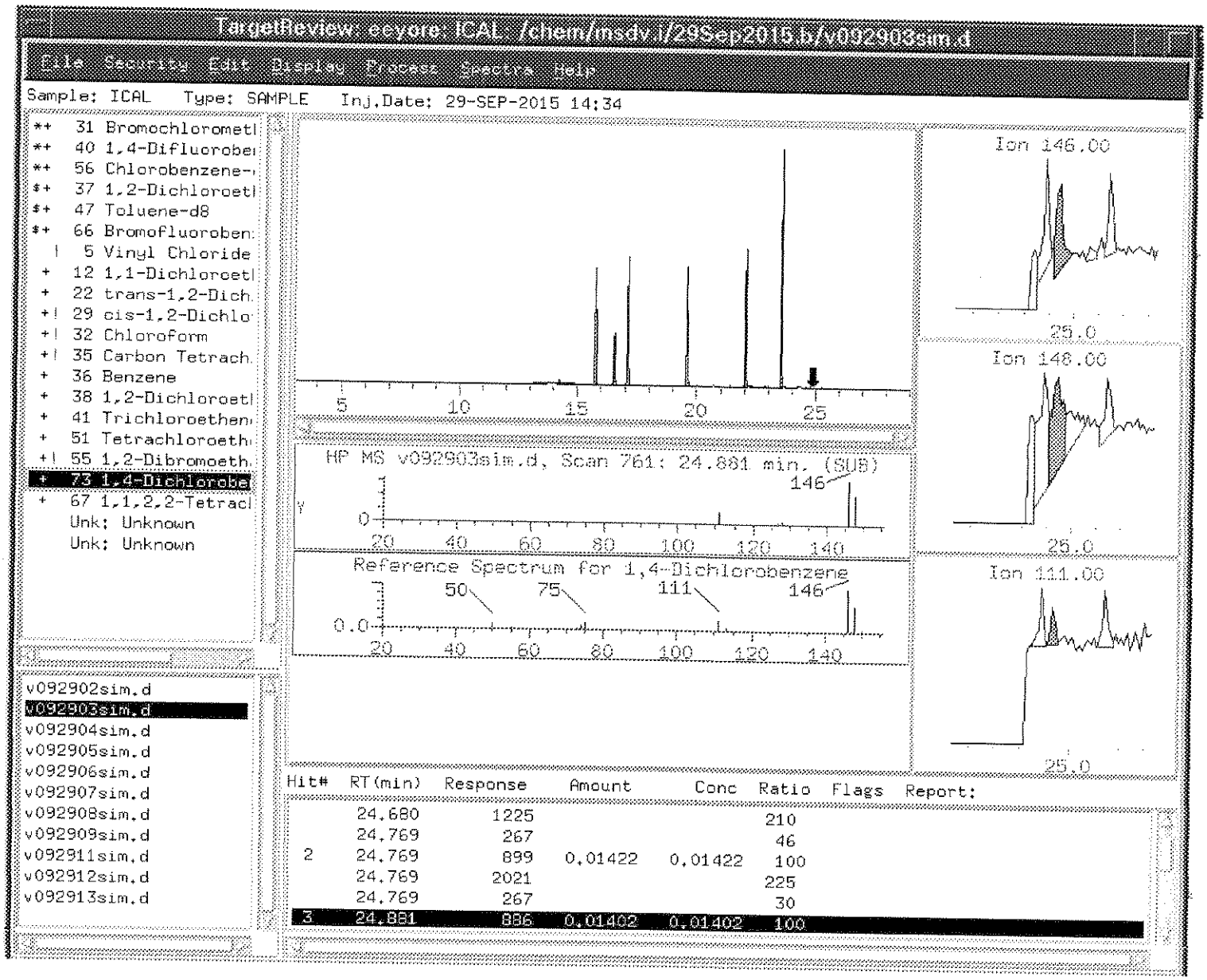
before



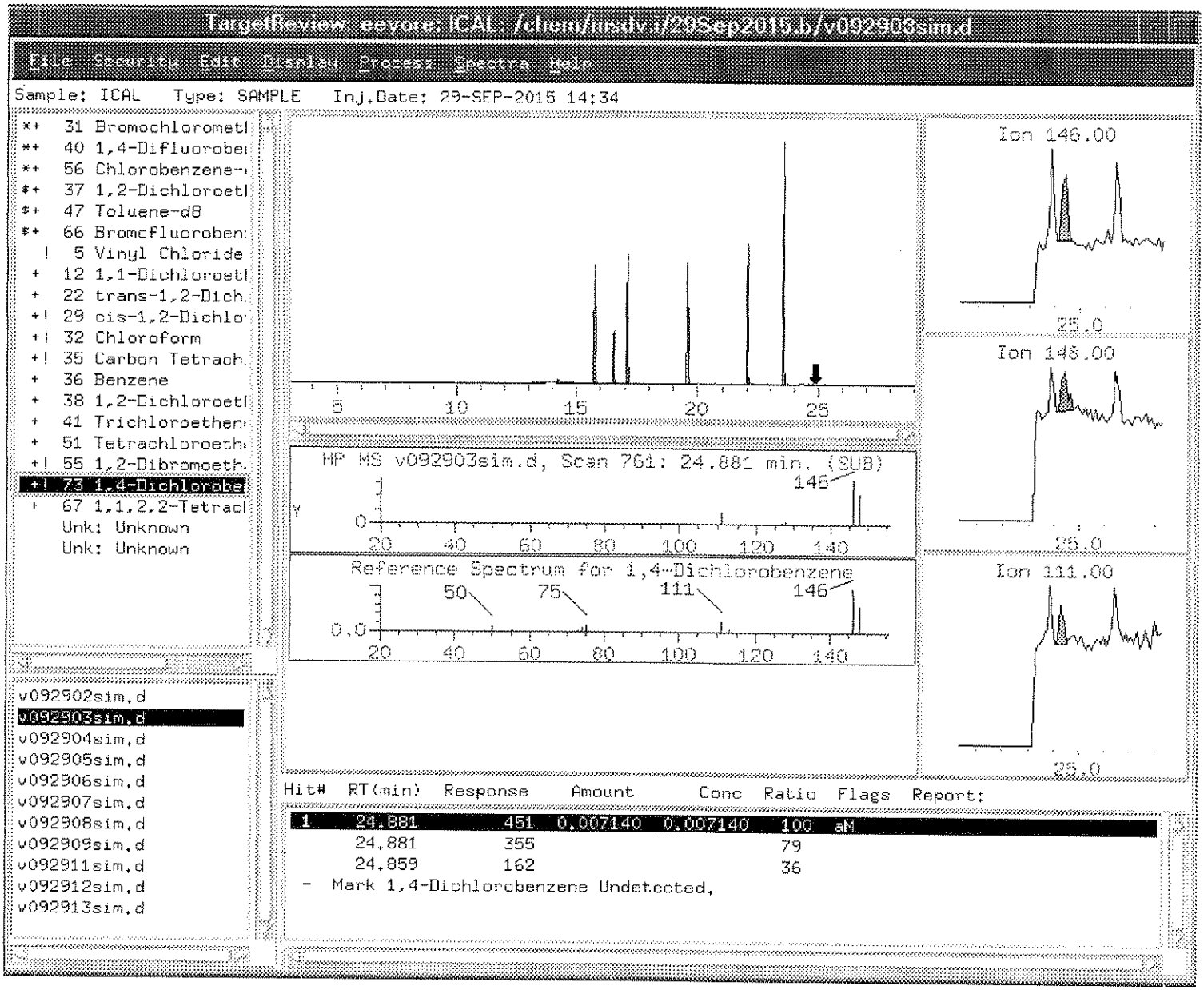
9/30/15

After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓ 9/30/15


TargetReview: ecyore: ICAL: /chem/msdv.i/29Sep2015.b/v092903sim.d
File Security Edit Display Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 14:34
*+ 31 Bromochloromethane
*+ 40 1,4-Difluorobenzene
*+ 56 Chlorobenzene-d5
$+ 37 1,2-Dichloroethane-d4
$+ 47 Toluene-d8
$+ 66 Bromofluorobenzene
| 5 Vinyl Chloride
+ 12 1,1-Dichloroethene
+ 22 trans-1,2-Dichloroethene
+| 29 cis-1,2-Dichloroethene
+| 32 Chloroform
+| 35 Carbon Tetrachloride
+ 36 Benzene
+ 38 1,2-Dichloroethane
+ 41 Trichloroethene
+ 51 Tetrachloroethene
+| 55 1,2-Dibromoethane
+ 73 1,4-Dichlorobenzene
+ 67 1,1,2,2-Tetrachloroethane
Unk: Unknown
Unk: Unknown
5 10 15 20 25
HP MS v092903sim.d, Scan 761: 24.881 min. (SUB)
146
0
20 40 60 80 100 120 140
Reference Spectrum for 1,4-Dichlorobenzene
50 75 111 146
0.0
20 40 60 80 100 120 140
Ion 146.00
25.0
Ion 148.00
25.0
Ion 111.00
25.0
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
24.680 1225 210
24.769 267 46
2 24.769 899 0.01422 0.01422 100
24.769 2021 225
24.769 267 30
3 24.881 886 0.01402 0.01402 100

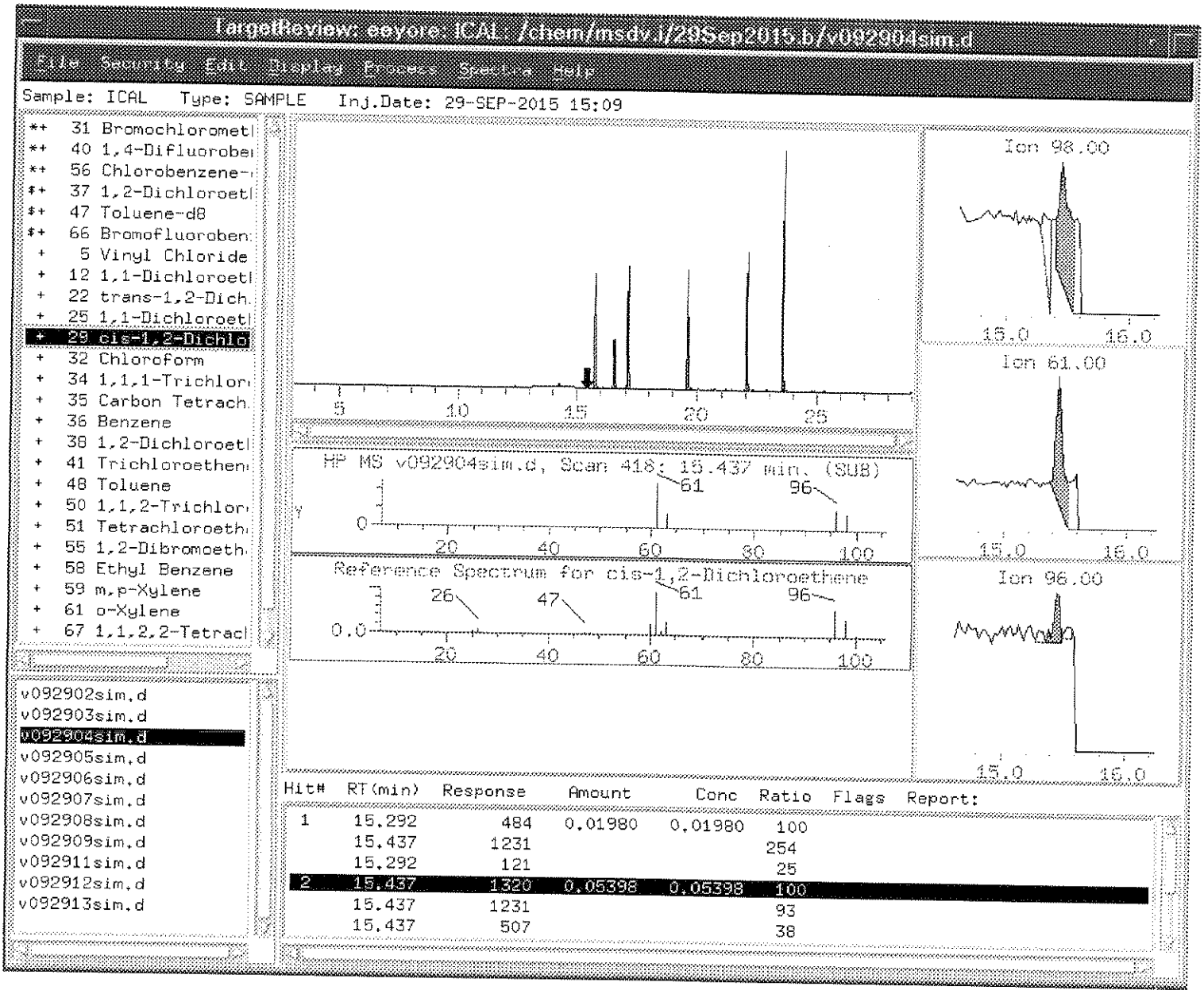
before



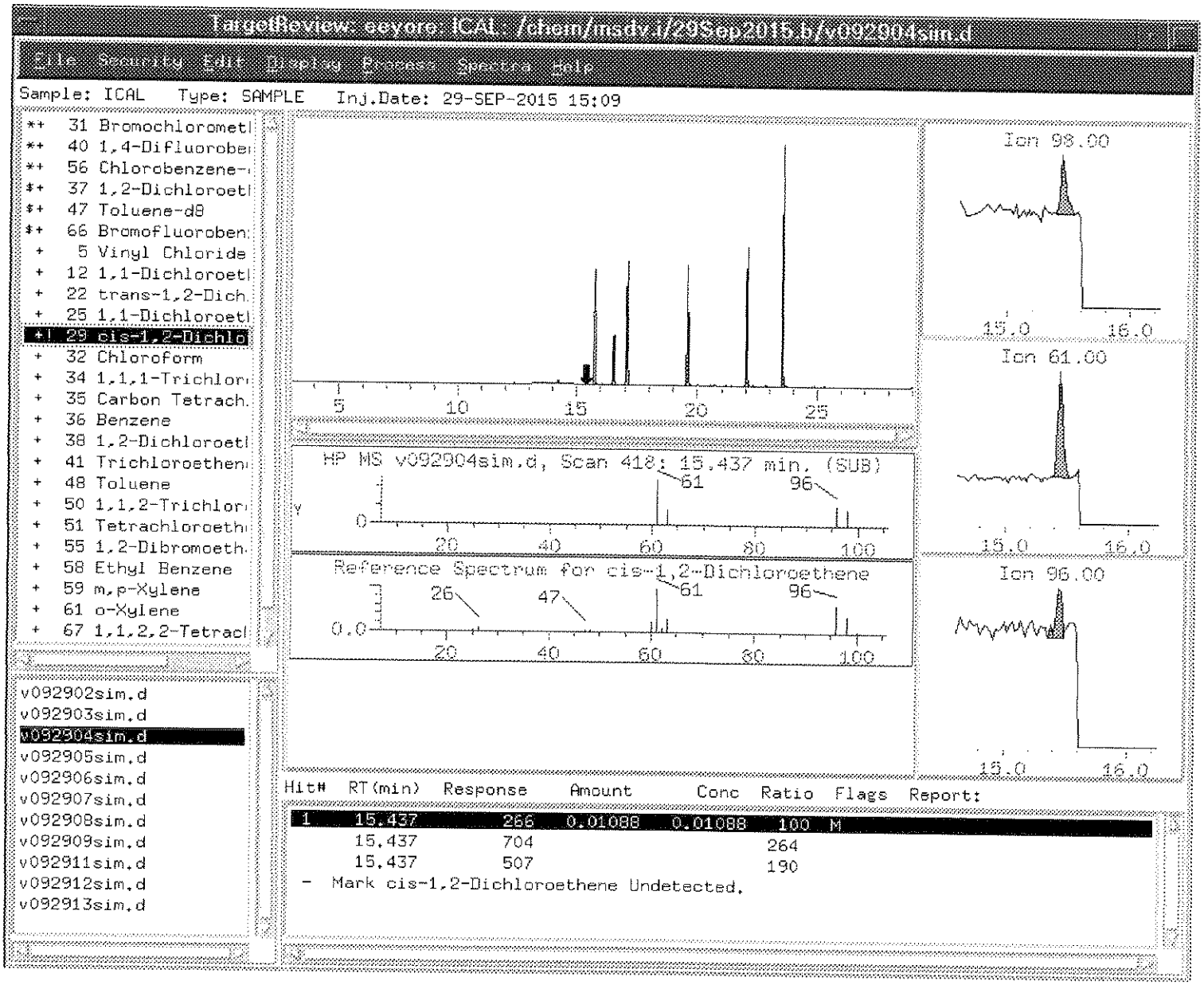
9/30/15
ACr

After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓ 9/30/15


TargetReview: eeyore: ICAL: /chem/msdv.i/29Sep2015.b/v092904sim.d
File Security Edit Display Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 15:09
** 31 Bromochlorometh
** 40 1,4-Difluorobe
** 56 Chlorobenzene-
$+ 37 1,2-Dichloroeth
$+ 47 Toluene-d8
$+ 66 Bromofluoroben
+ 5 Vinyl Chloride
+ 12 1,1-Dichloroeth
+ 22 trans-1,2-Dich
+ 25 1,1-Dichloroeth
+ 29 cis-1,2-Dichlo
+ 32 Chloroform
+ 34 1,1,1-Trichlor
+ 35 Carbon Tetrach
+ 36 Benzene
+ 38 1,2-Dichloroeth
+ 41 Trichloroethen
+ 48 Toluene
+ 50 1,1,2-Trichlor
+ 51 Tetrachloroeth
+ 55 1,2-Dibromoeth
+ 58 Ethyl Benzene
+ 59 m,p-Xylene
+ 61 o-Xylene
+ 67 1,1,2,2-Tetrac
5 10 15 20 25
HP MS v092904sim.d, Scan 418; 15.437 min. (SUB)
61
96
0
20 40 60 80 100
Reference Spectrum for cis-1,2-Dichloroethene
26
47
61
96
0.0
20 40 60 80 100
Ion 98.00
15.0 16.0
Ion 61.00
15.0 16.0
Ion 96.00
15.0 16.0
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 15.292 484 0.01980 0.01980 100
15.437 1231 254
15.292 121 25
2 15.437 1320 0.05398 0.05398 100
15.437 1231 93
15.437 507 38

before



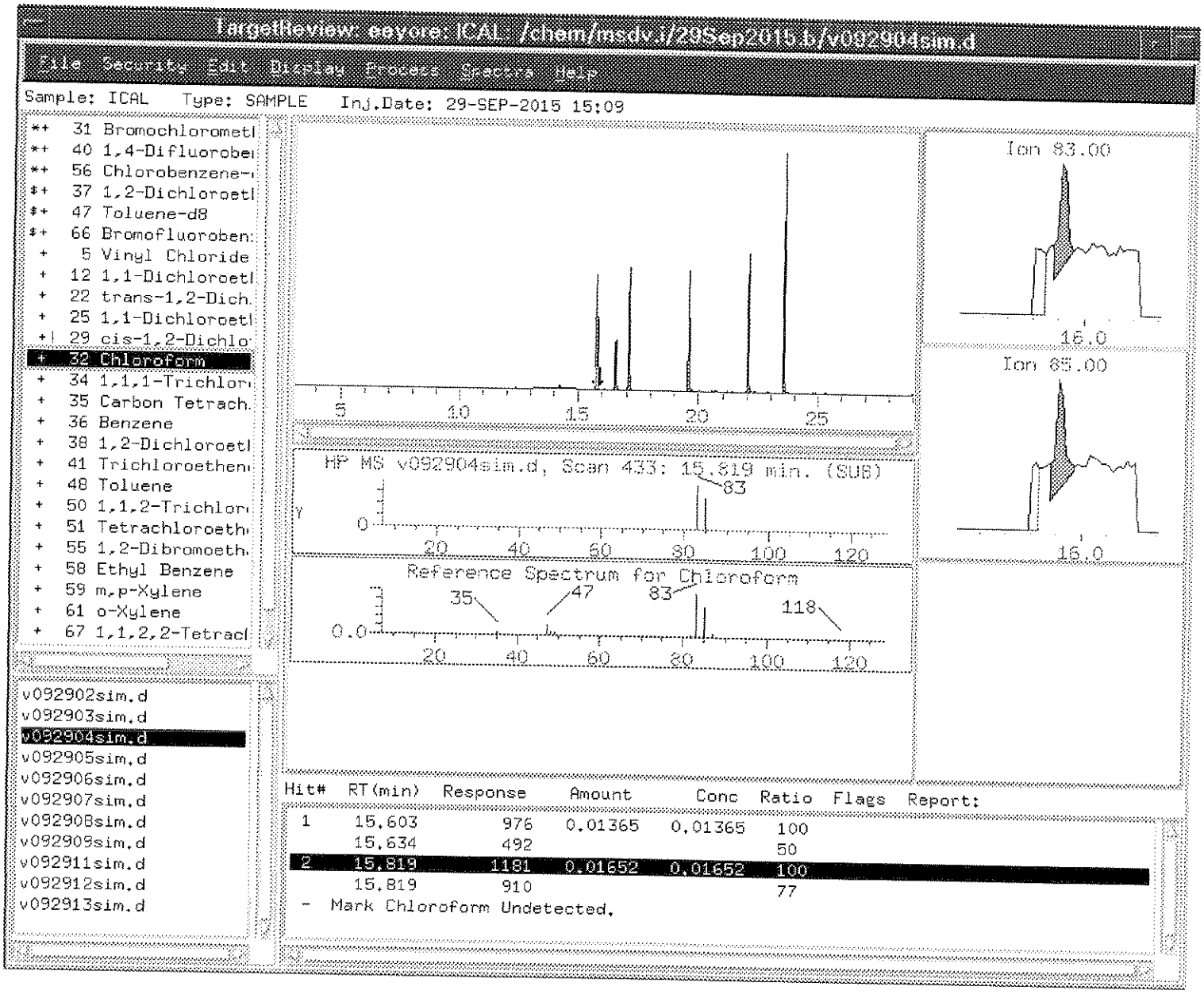
9/30/15

AEF

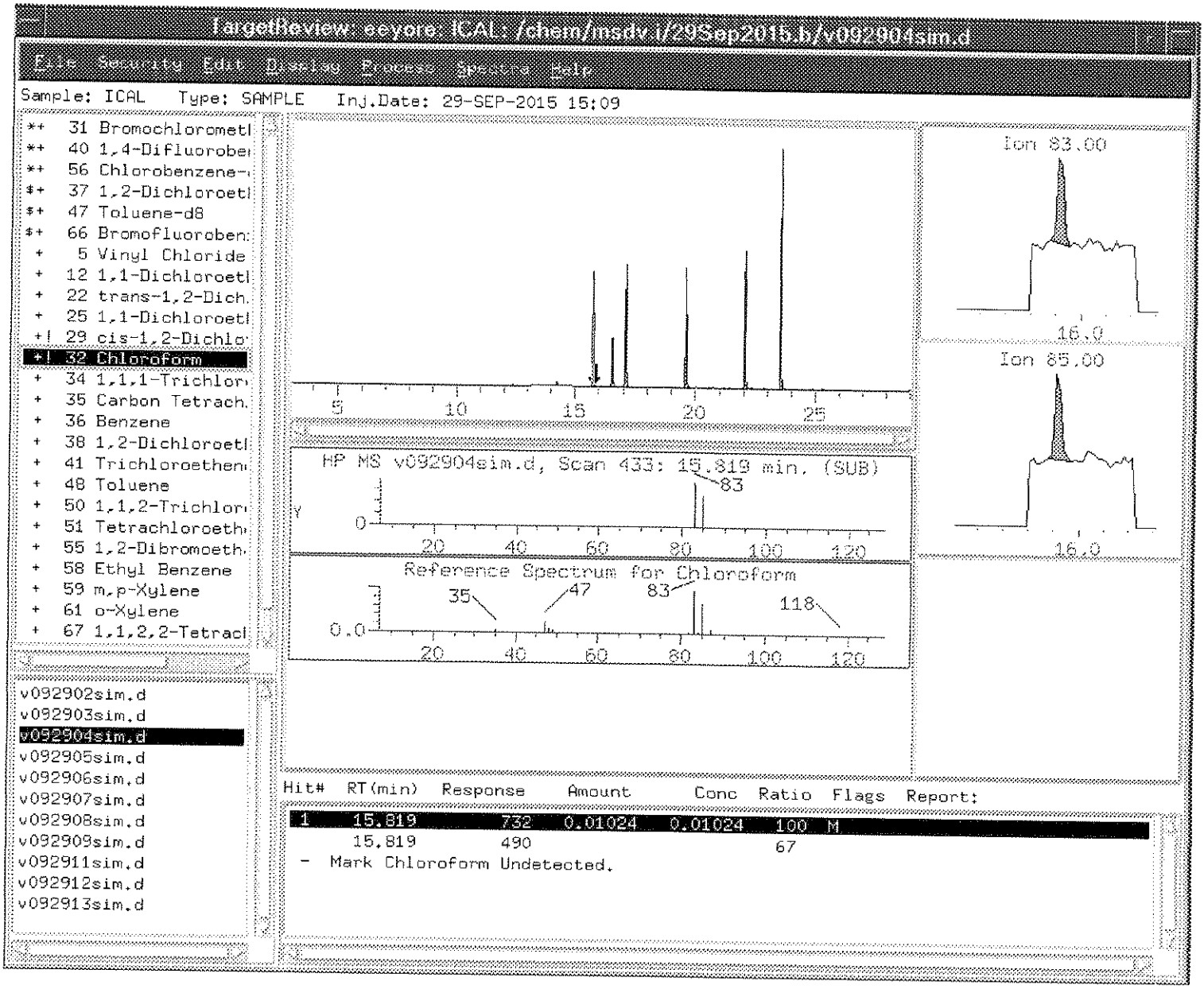
After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓

AEF 9/30/15


TargetReview: eeyore: ICAL /chem/msdv.i/29Sep2015.b/v092904sim.d
File Security Edit Display Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 15:09
*+ 31 Bromochloromethane
*+ 40 1,4-Difluorobenzene
*+ 56 Chlorobenzene-d5
$+ 37 1,2-Dichloroethane-d4
$+ 47 Toluene-d8
$+ 66 Bromofluorobenzene
+ 5 Vinyl Chloride
+ 12 1,1-Dichloroethene
+ 22 trans-1,2-Dichloroethene
+ 25 1,1-Dichloroethane
+ 29 cis-1,2-Dichloroethene
+ 32 Chloroform
+ 34 1,1,1-Trichloroethane
+ 35 Carbon Tetrachloride
+ 36 Benzene
+ 38 1,2-Dichloroethane
+ 41 Trichloroethene
+ 48 Toluene
+ 50 1,1,2-Trichloroethane
+ 51 Tetrachloroethene
+ 55 1,2-Dibromoethane
+ 58 Ethyl Benzene
+ 59 m,p-Xylene
+ 61 o-Xylene
+ 67 1,1,2,2-Tetrachloroethane
Ion 83.00
15.0
Ion 85.00
15.0
HP MS v092904sim.d, Scan 433: 15.819 min. (SUB)
83
Reference Spectrum for Chloroform
35
47
83
118
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 15.603 976 0.01365 0.01365 100
15.634 492 50
2 15.819 1181 0.01652 0.01652 100
15.819 910 77
- Mark Chloroform Undetected.

before

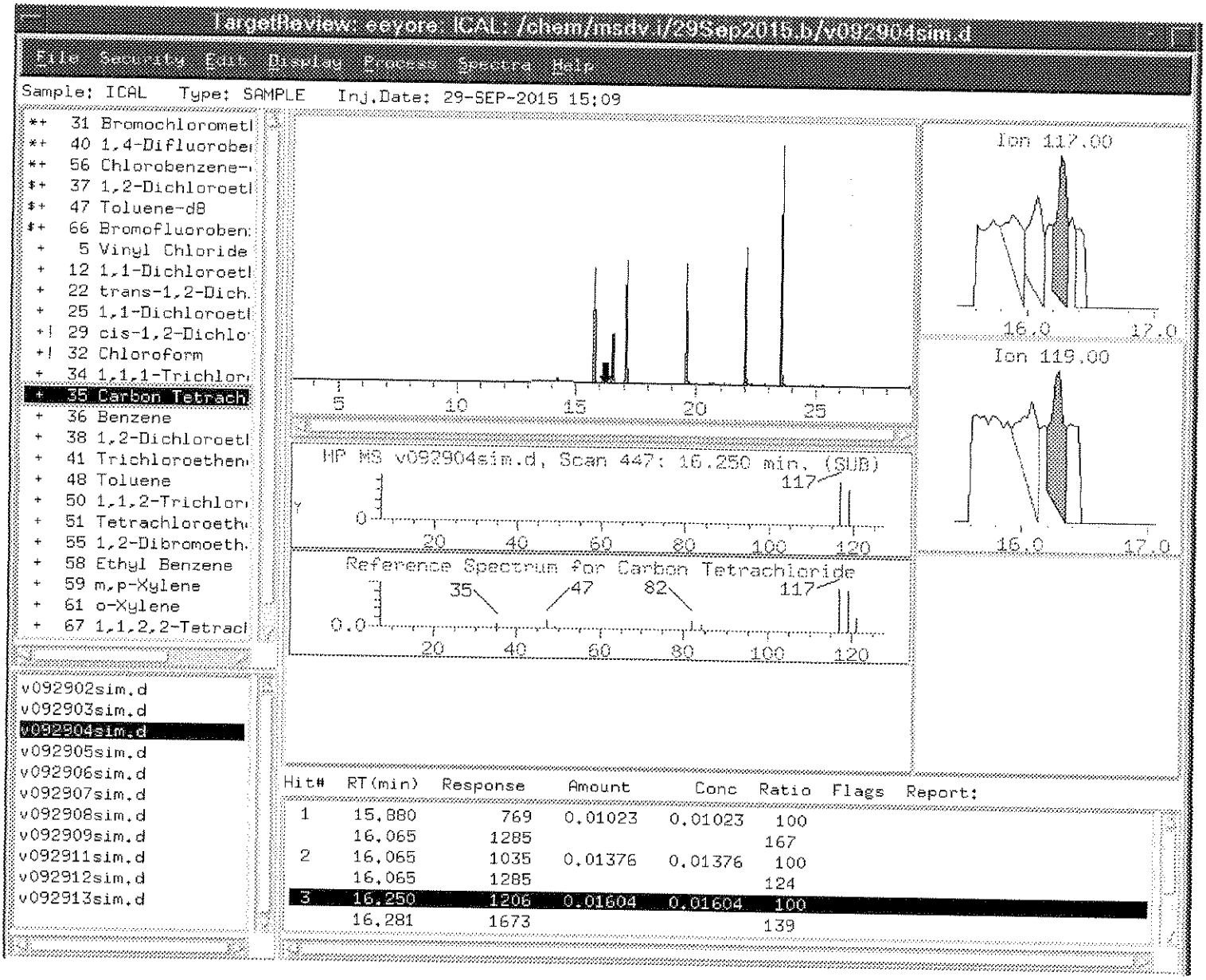


9/30/15
ACF

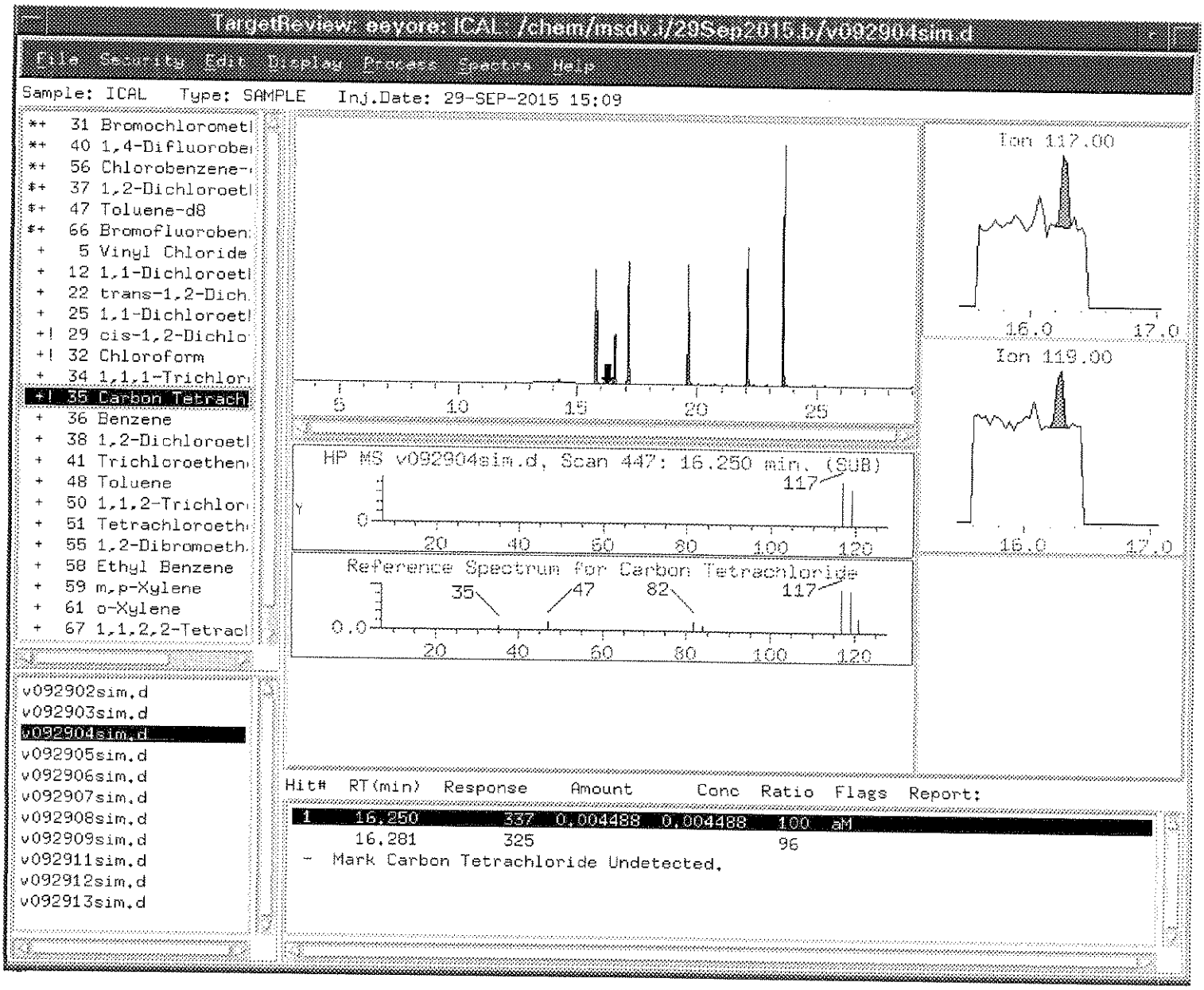
After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓

GH 9/30/15


TargetReview: eeyore ICAL: /chem/msdv1/29Sep2015.b/v092904sim.d
File Security Edit Display Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 15:09
** 31 Bromochlorometl
** 40 1,4-Difluorobe
** 56 Chlorobenzene-
$+ 37 1,2-Dichloroetl
$+ 47 Toluene-d8
$+ 66 Bromofluoroben
+ 5 Vinyl Chloride
+ 12 1,1-Dichloroetl
+ 22 trans-1,2-Dich
+ 25 1,1-Dichloroetl
+! 29 cis-1,2-Dichlo
+! 32 Chloroform
+ 34 1,1,1-Trichlor
+ 35 Carbon Tetrach
+ 36 Benzene
+ 38 1,2-Dichloroetl
+ 41 Trichloroethen
+ 48 Toluene
+ 50 1,1,2-Trichlor
+ 51 Tetrachloroeth
+ 55 1,2-Dibromoeth
+ 58 Ethyl Benzene
+ 59 m,p-Xylene
+ 61 o-Xylene
+ 67 1,1,2,2-Tetracl
Ion 117.00
Ion 119.00
HP MS v092904sim.d, Scan 447: 16.250 min, (SUB)
Reference Spectrum for Carbon Tetrachloride
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 15.880 769 0.01023 0.01023 100
16.065 1285 167
2 16.065 1035 0.01376 0.01376 100
16.065 1285 124
3 16.250 1206 0.01604 0.01604 100
16.281 1673 139

before

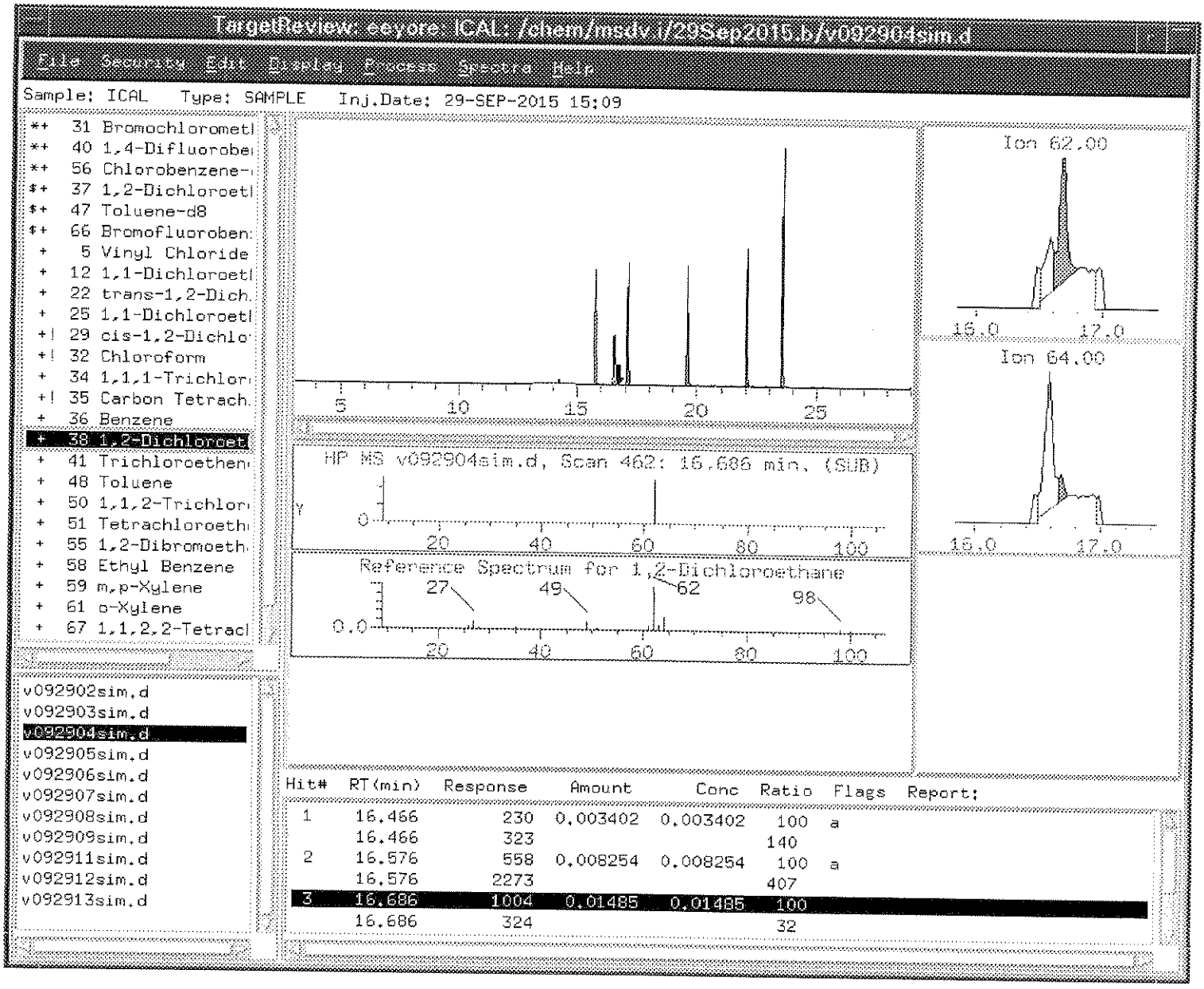


9/30/15

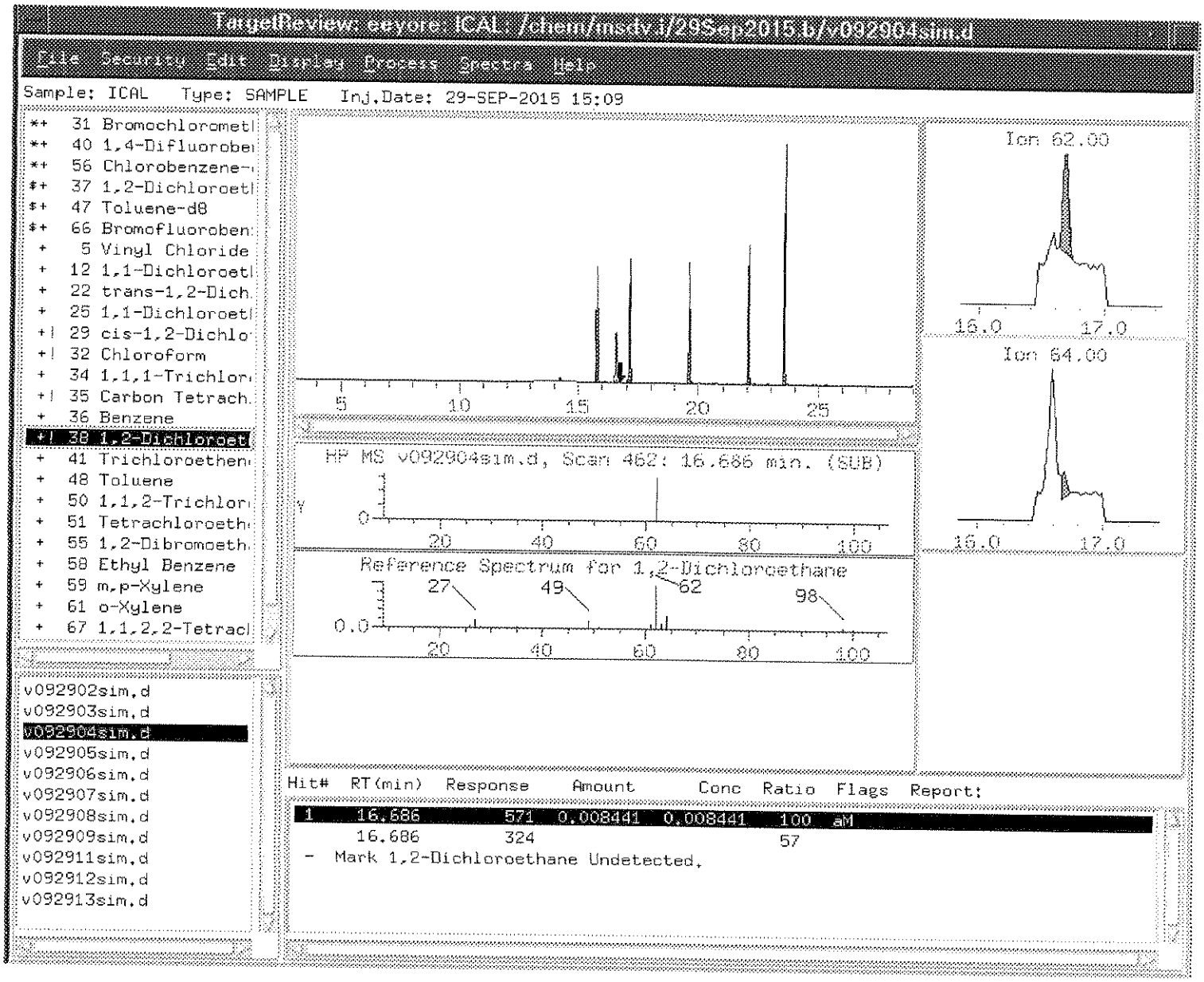
KG

After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓ GH 9/30/15


TargetReview: eeyore: ICAL: /chem/msdv.i/29Sep2015.b/v092904sim.d
File Security Edit Display Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 15:09
*+ 31 Bromochlorometh
*+ 40 1,4-Difluorobe
*+ 56 Chlorobenzene-
$+ 37 1,2-Dichloroeth
$+ 47 Toluene-d8
$+ 66 Bromofluoroben
+ 5 Vinyl Chloride
+ 12 1,1-Dichloroeth
+ 22 trans-1,2-Dich
+ 25 1,1-Dichloroeth
+! 29 cis-1,2-Dichlo
+! 32 Chloroform
+ 34 1,1,1-Trichlor
+! 35 Carbon Tetrach
+ 36 Benzene
+ 38 1,2-Dichloroet
+ 41 Trichloroethen
+ 48 Toluene
+ 50 1,1,2-Trichlor
+ 51 Tetrachloroeth
+ 55 1,2-Dibromoeth
+ 58 Ethyl Benzene
+ 59 m,p-Xylene
+ 61 o-Xylene
+ 67 1,1,2,2-Tetrac
5 10 15 20 25
Ion 62.00
16.0 17.0
Ion 64.00
16.0 17.0
HP MS v092904sim.d, Scan 462: 16.686 min. (SUB)
Y
0
20 40 60 80 100
Reference Spectrum for 1,2-Dichloroethane
27 49 62 98
0.0
20 40 60 80 100
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 16.466 230 0.003402 0.003402 100 a
16.466 323 140
2 16.576 558 0.008254 0.008254 100 a
16.576 2273 407
3 16.686 1004 0.01485 0.01485 100
16.686 324 32

before

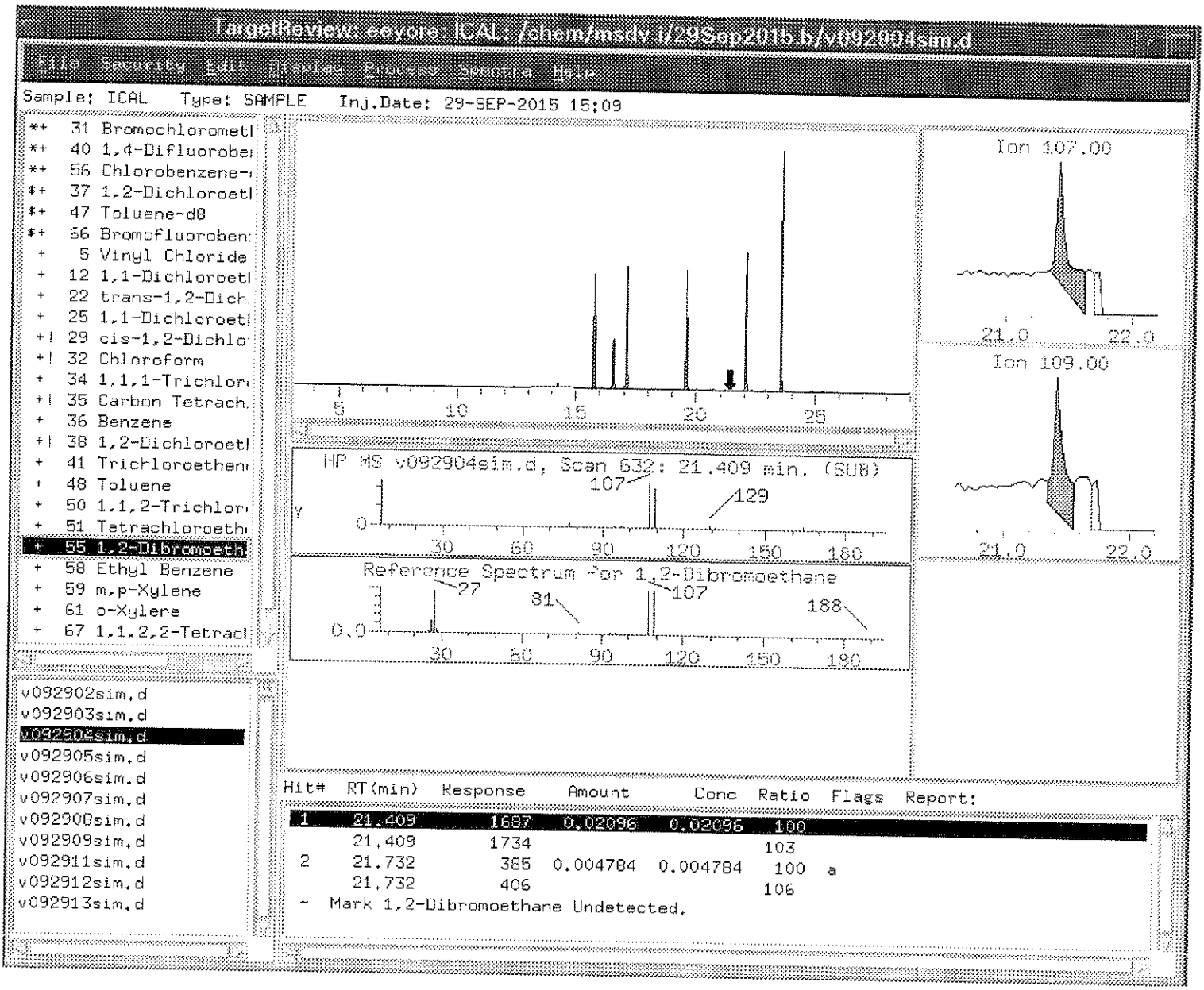


9/30/15
AK

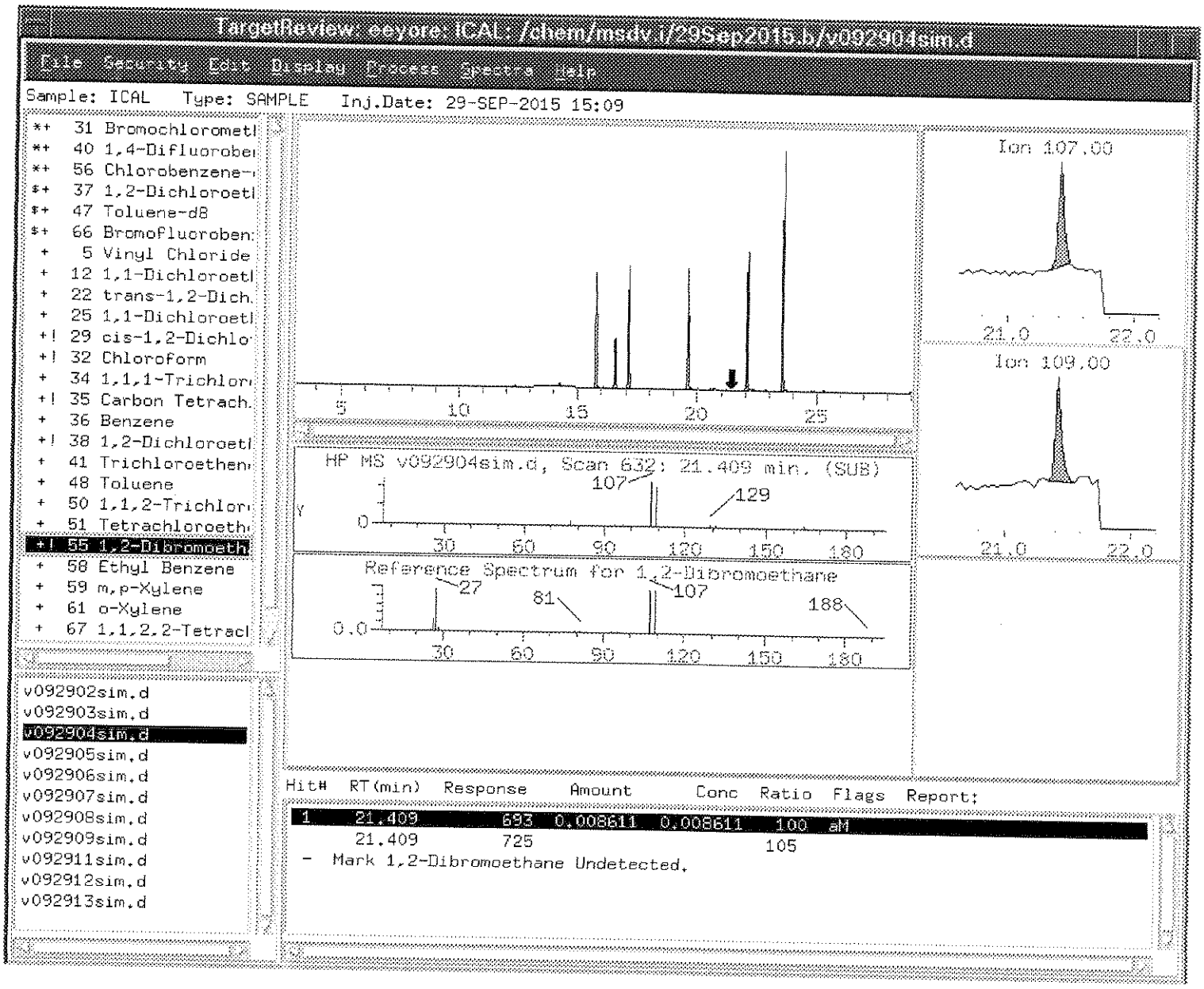
After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓

GH 9/30/15


TargetReview: eeyore ICAL: /chem/msdv.i/29Sep2015.b/v092904sim.d
File Security Edit Display Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 15:09
*+ 31 Bromochloromethane
*+ 40 1,4-Difluorobenzene
*+ 56 Chlorobenzene-d5
$+ 37 1,2-Dichloroethane-d4
$+ 47 Toluene-d8
$+ 66 Bromofluorobenzene
+ 5 Vinyl Chloride
+ 12 1,1-Dichloroethene
+ 22 trans-1,2-Dichloroethene
+ 25 1,1-Dichloroethane
+! 29 cis-1,2-Dichloroethene
+! 32 Chloroform
+ 34 1,1,1-Trichloroethane
+! 35 Carbon Tetrachloride
+ 36 Benzene
+! 38 1,2-Dichloroethane
+ 41 Trichloroethene
+ 48 Toluene
+ 50 1,1,2-Trichloroethane
+ 51 Tetrachloroethene
+ 55 1,2-Dibromoethane
+ 58 Ethyl Benzene
+ 59 m,p-Xylene
+ 61 o-Xylene
+ 67 1,1,2,2-Tetrachloroethane
Ion 107.00
21.0
22.0
Ion 109.00
21.0
22.0
5
10
15
20
25
HP MS v092904sim.d, Scan 632: 21.409 min. (SUB)
107
129
0
30
60
90
120
150
180
Reference Spectrum for 1,2-Dibromoethane
27
81
107
188
0.0
30
60
90
120
150
180
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 21.409 1687 0.02096 0.02096 100
21.409 1734 103
2 21.732 385 0.004784 0.004784 100 a
21.732 406 106
- Mark 1,2-Dibromoethane Undetected.

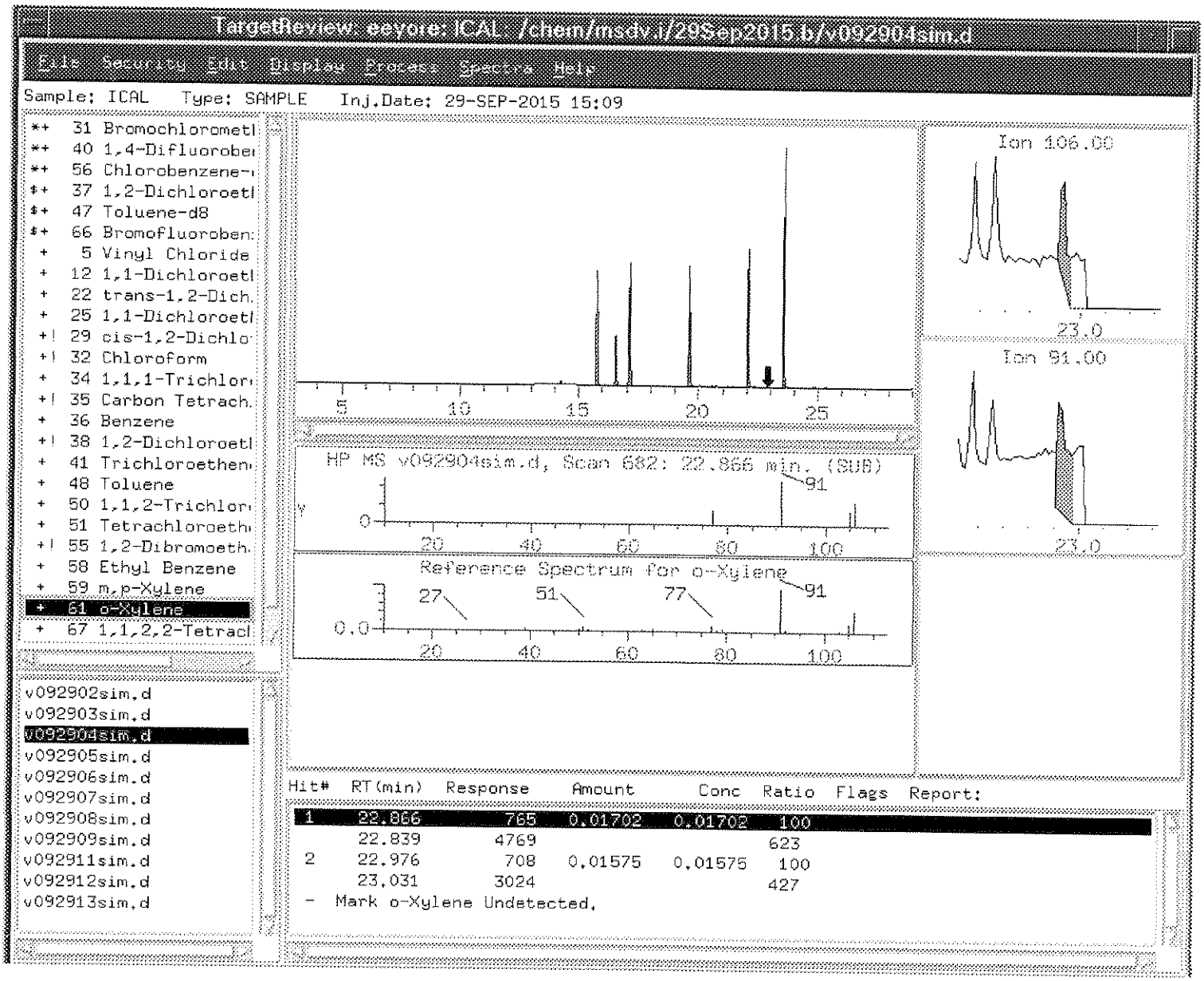
before



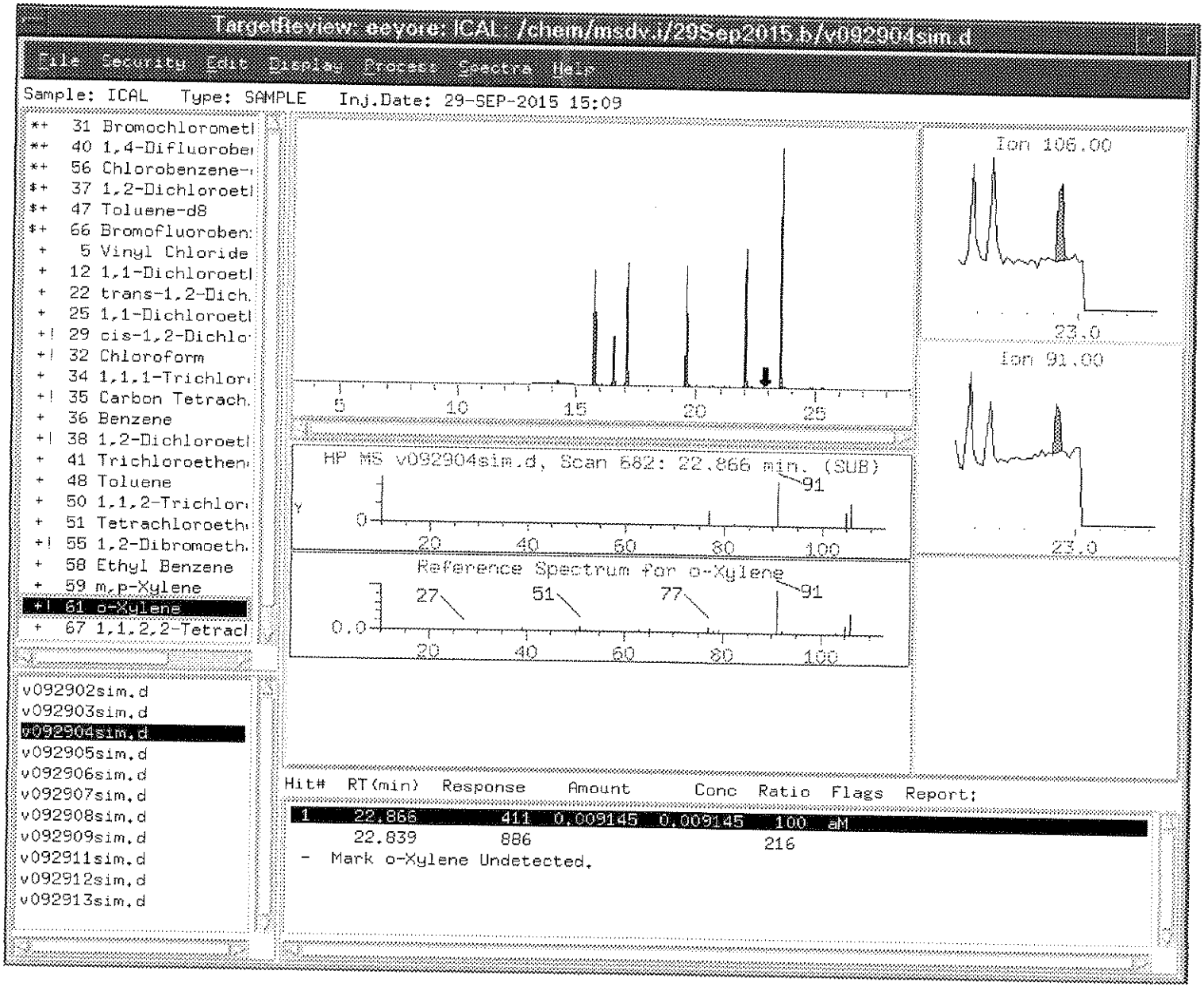
After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓ GH 9/30/15

9/30/15
AG


TargetReview: eeyore: ICAL /chem/msdv.i/29Sep2015.b/v092904sim.d
File Security Edit Display Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 15:09
*+ 31 Bromochlorometl
*+ 40 1,4-Difluorobe
*+ 56 Chlorobenzene-
$+ 37 1,2-Dichloroetl
$+ 47 Toluene-d8
$+ 66 Bromofluoroben
+ 5 Vinyl Chloride
+ 12 1,1-Dichloroetl
+ 22 trans-1,2-Dich
+ 25 1,1-Dichloroetl
+! 29 cis-1,2-Dichlo
+! 32 Chloroform
+ 34 1,1,1-Trichlor
+! 35 Carbon Tetrach
+ 36 Benzene
+! 38 1,2-Dichloroetl
+ 41 Trichloroethen
+ 48 Toluene
+ 50 1,1,2-Trichlor
+ 51 Tetrachloroeth
+! 55 1,2-Dibromoeth
+ 58 Ethyl Benzene
+ 59 m,p-Xylene
+ 61 o-Xylene
+ 67 1,1,2,2-Tetracl
5 10 15 20 25
Ion 106.00
23.0
Ion 91.00
23.0
HP MS v092904sim.d, Scan 682: 22.866 min. (SUB)
91
0
20 40 60 80 100
Reference Spectrum for o-Xylene
27 51 77 91
0.0
20 40 60 80 100
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 22.866 765 0.01702 0.01702 100
22.839 4769 623
2 22.976 708 0.01575 0.01575 100
23.031 3024 427
- Mark o-Xylene Undetected,

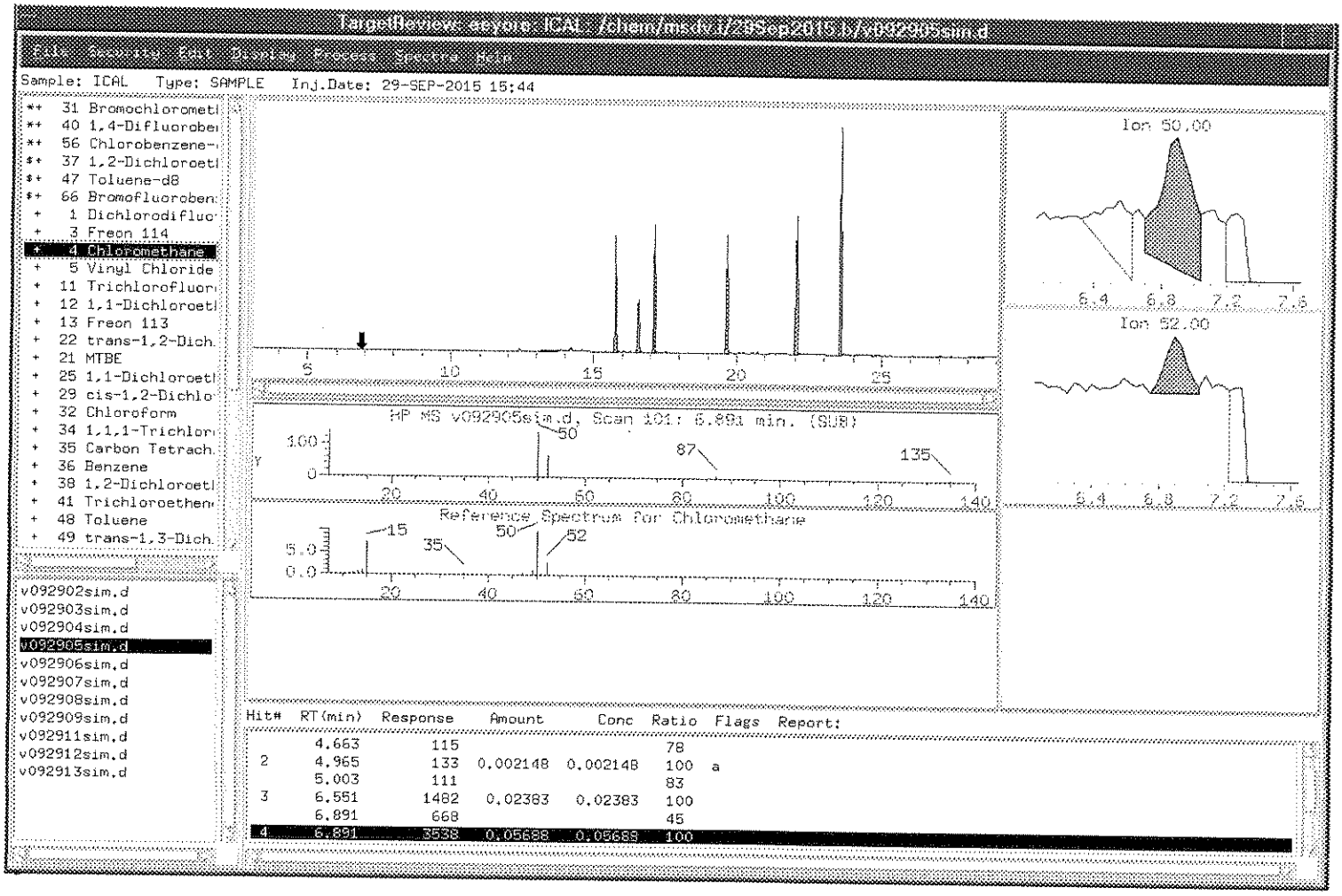
before



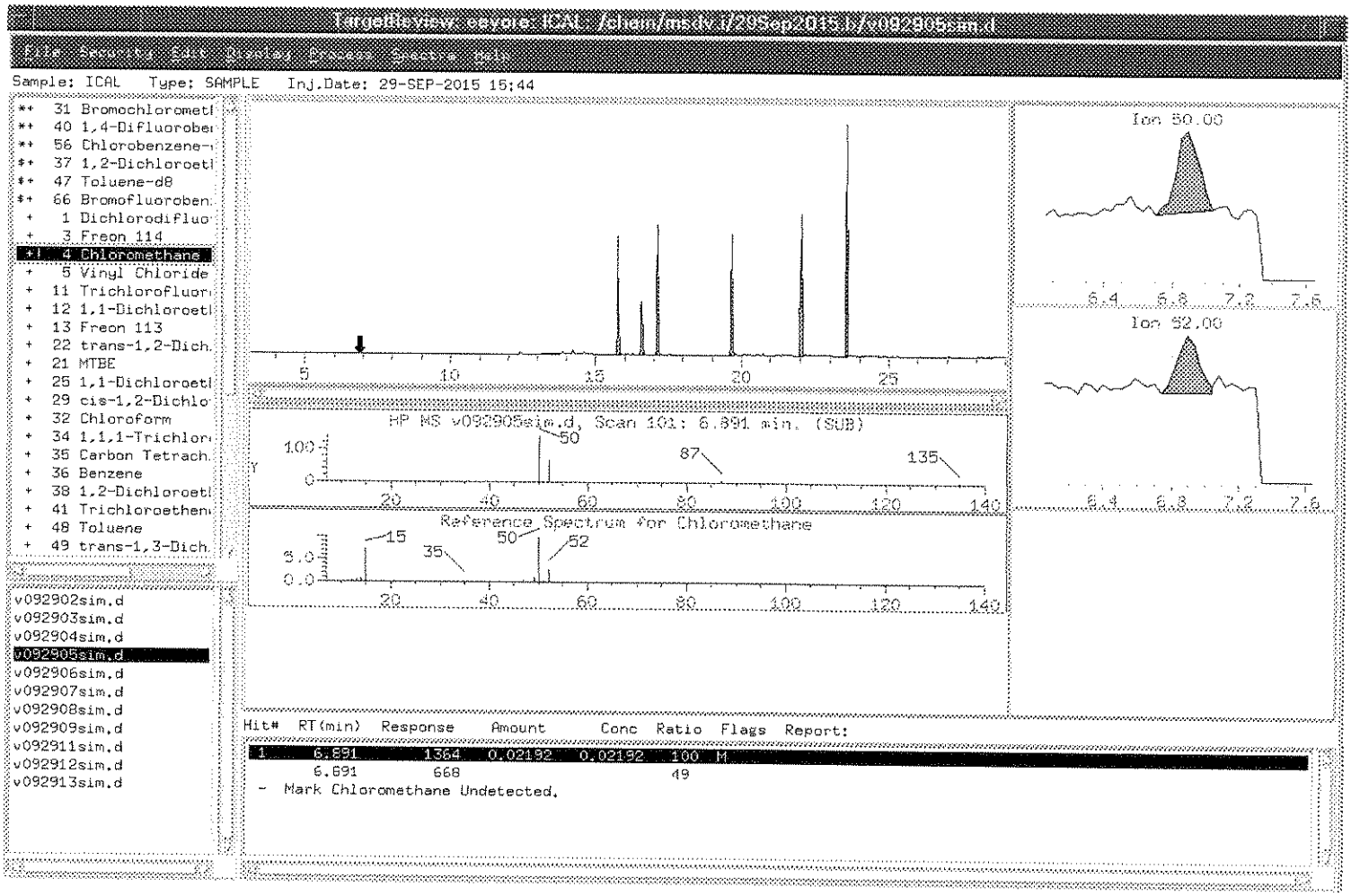
9/30/15
AG

After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓ 9/30/15


Target Review Report: ICAL /chem/ms.i/28Sep2015.b/v092905sim.d
File Sequence Edit Display Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 15:44
31 Bromochlorometh
40 1,4-Difluorober
56 Chlorobenzene-
37 1,2-Dichloroeth
47 Toluene-d8
66 Bromofluoroben
1 Dichlorodifluo
3 Freon 114
4 Chloromethane
5 Vinyl Chloride
11 Trichlorofluor
12 1,1-Dichloroeth
13 Freon 113
22 trans-1,2-Dich
21 MTBE
25 1,1-Dichloroeth
29 cis-1,2-Dichlo
32 Chloroform
34 1,1,1-Trichlor
35 Carbon Tetrach
36 Benzene
38 1,2-Dichloroeth
41 Trichloroethen
48 Toluene
49 trans-1,3-Dich
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Ion 50.00
Ion 52.00
HP MS v092905sim.d, Scan 101: 6.891 min. (SUB)
Reference Spectrum for Chloromethane
Hit# RT(min) Response Amount Conc Ratio Flags Report:
4.663 115 78
2 4.965 133 0.002148 0.002148 100 a
5.003 111 83
3 6.551 1482 0.02383 0.02383 100
6.891 668 45
4 6.891 3538 0.05688 0.05688 100

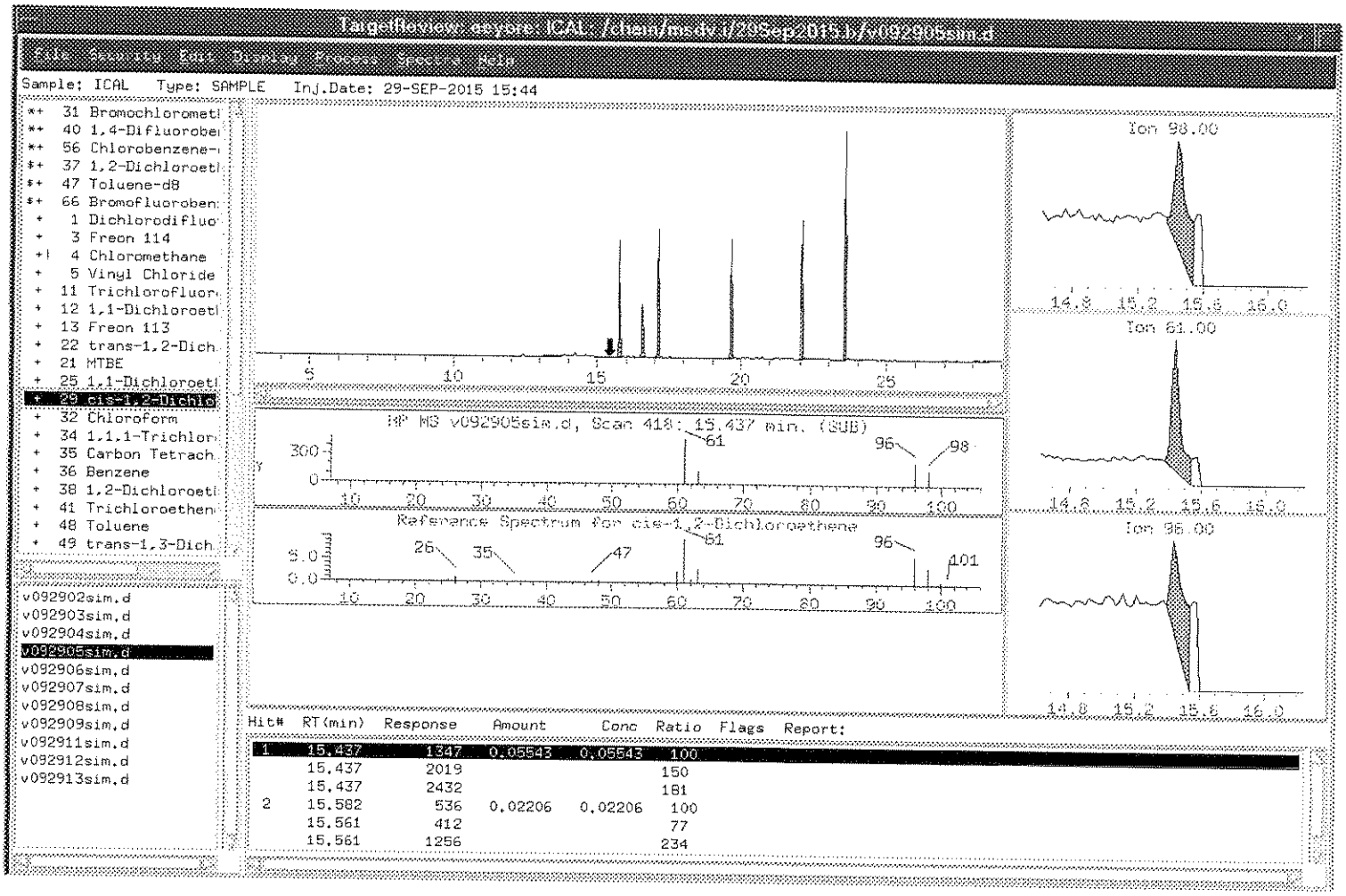
before



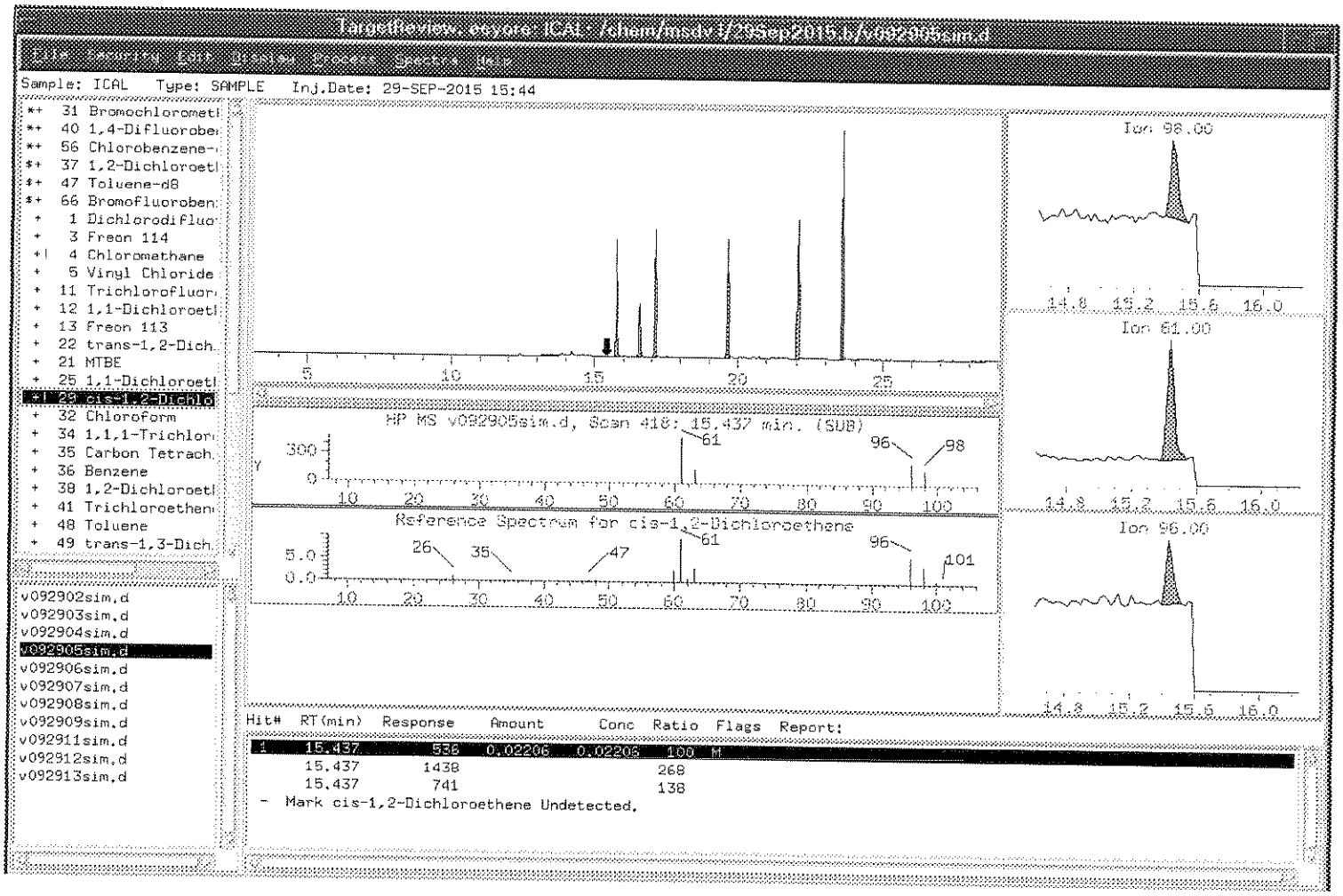
9/30/15
AG

After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓ 9/30/15


TargetReview: aeyore: ICAL: /chem/msdv.i/29Sep2015.b/v092905sim.d
File Security Edit Display Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 15:44
*+ 31 Bromochlorometh
*+ 40 1,4-Difluorobe
*+ 56 Chlorobenzene-
$+ 37 1,2-Dichloroeth
$+ 47 Toluene-d8
$+ 66 Bromofluoroben
+ 1 Dichlorodifluo
+ 3 Freon 114
+ 4 Chloromethane
+ 5 Vinyl Chloride
+ 11 Trichlorofluor
+ 12 1,1-Dichloroeth
+ 13 Freon 113
+ 22 trans-1,2-Dich
+ 21 MTBE
+ 25 1,1-Dichloroeth
+ 29 cis-1,2-Dichlo
+ 32 Chloroform
+ 34 1,1,1-Trichlor
+ 35 Carbon Tetrach
+ 36 Benzene
+ 38 1,2-Dichloroeth
+ 41 Trichloroethen
+ 48 Toluene
+ 49 trans-1,3-Dich
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Ion 98.00
Ion 61.00
Ion 96.00
HP MS v092905sim.d, Scan 418: 15.437 min. (SUB)
Reference Spectrum for cis-1,2-Dichloroethene
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 15.437 1347 0.05543 0.05543 100
15.437 2019 150
15.437 2432 181
2 15.582 536 0.02206 0.02206 100
15.561 412 77
15.561 1256 234

before

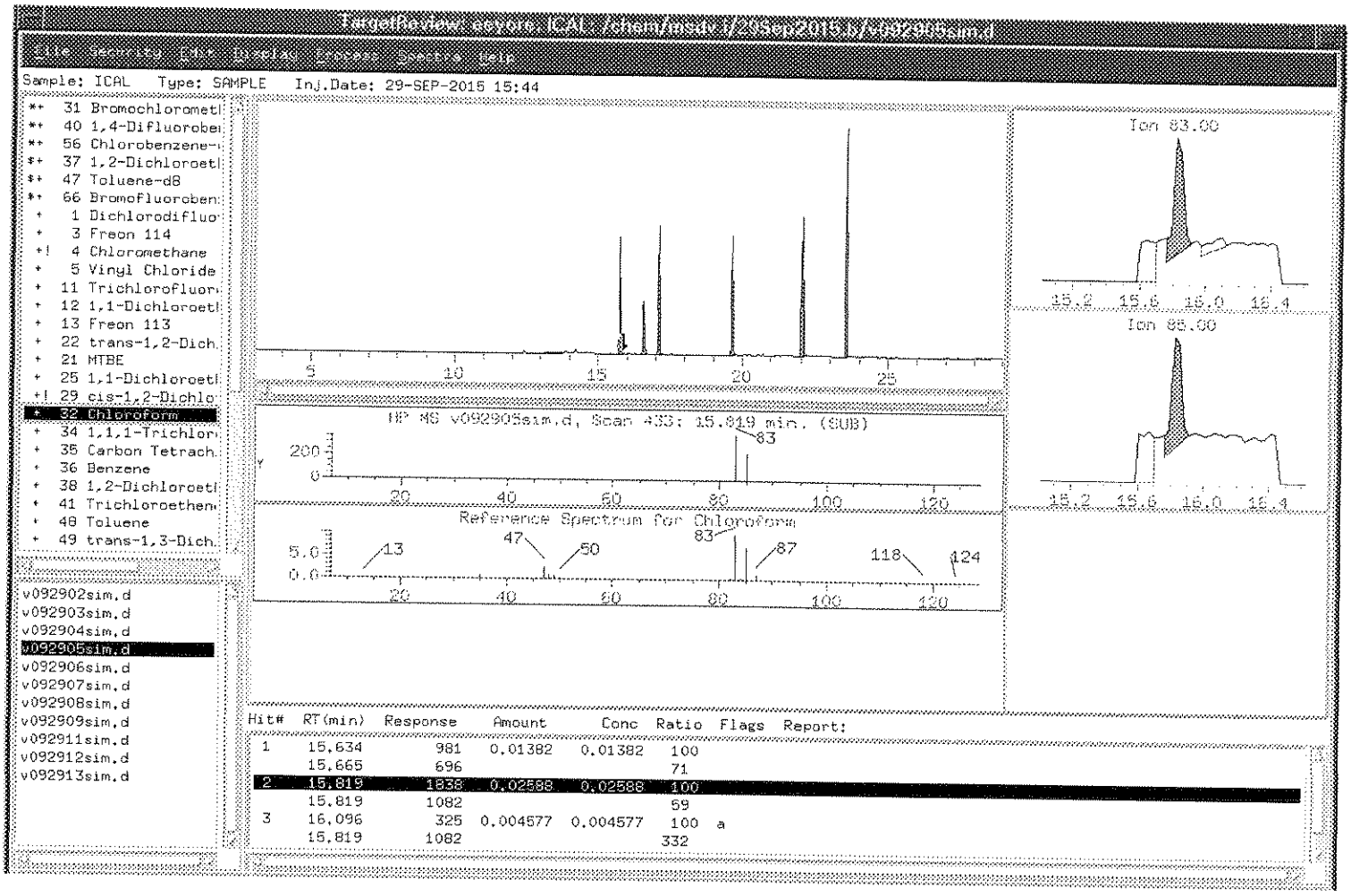


9/30/15

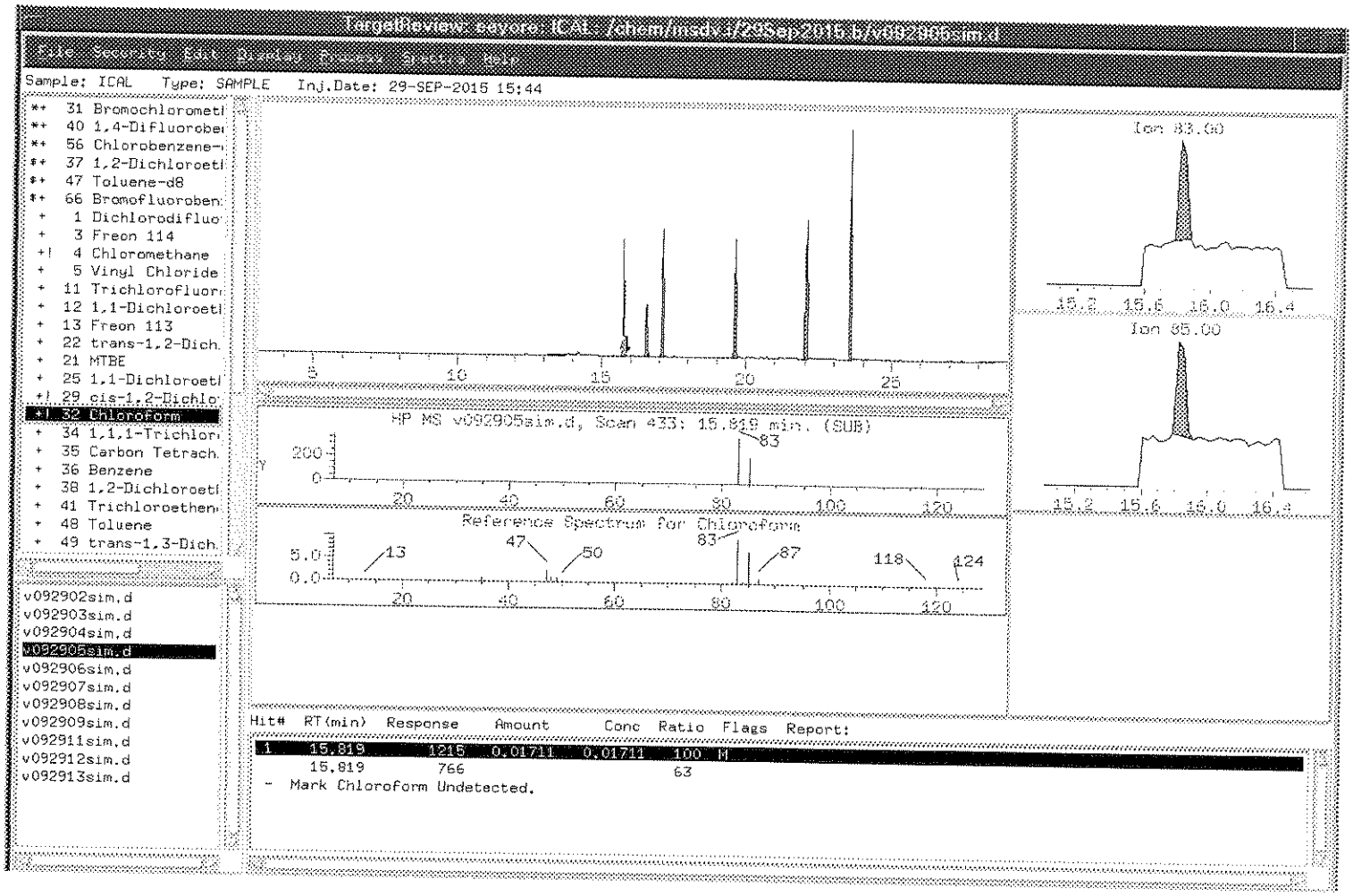
AC

After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓ GH 9/30/15


TargetReview: esyore, ICAL: /chem/msdv1/29Sep2015.b/v092905sim.d
File Security Edit Display Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 15:44
*+ 31 Bromochloromet
*+ 40 1,4-Difluorobe
*+ 56 Chlorobenzene-
*+ 37 1,2-Dichloroet
*+ 47 Toluene-d8
*+ 66 Bromofluoroben
+ 1 Dichlorodifluo
+ 3 Freon 114
+! 4 Chloromethane
+ 5 Vinyl Chloride
+ 11 Trichlorofluor
+ 12 1,1-Dichloroet
+ 13 Freon 113
+ 22 trans-1,2-Dich
+ 21 MTBE
+ 25 1,1-Dichloroet
+! 29 cis-1,2-Dichlo
+ 32 Chloroform
+ 34 1,1,1-Trichlor
+ 35 Carbon Tetrach
+ 36 Benzene
+ 38 1,2-Dichloroet
+ 41 Trichloroethen
+ 48 Toluene
+ 49 trans-1,3-Dich
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Ion 83.00
Ion 85.00
HP MS v092905sim.d, Scan 433: 15.819 min. (SUB)
Reference Spectrum for Chloroform
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 15.634 981 0.01382 0.01382 100
15.665 696 71
2 15.819 1838 0.02588 0.02588 100
15.819 1082 59
3 16.096 325 0.004577 0.004577 100 a
15.819 1082 332

before

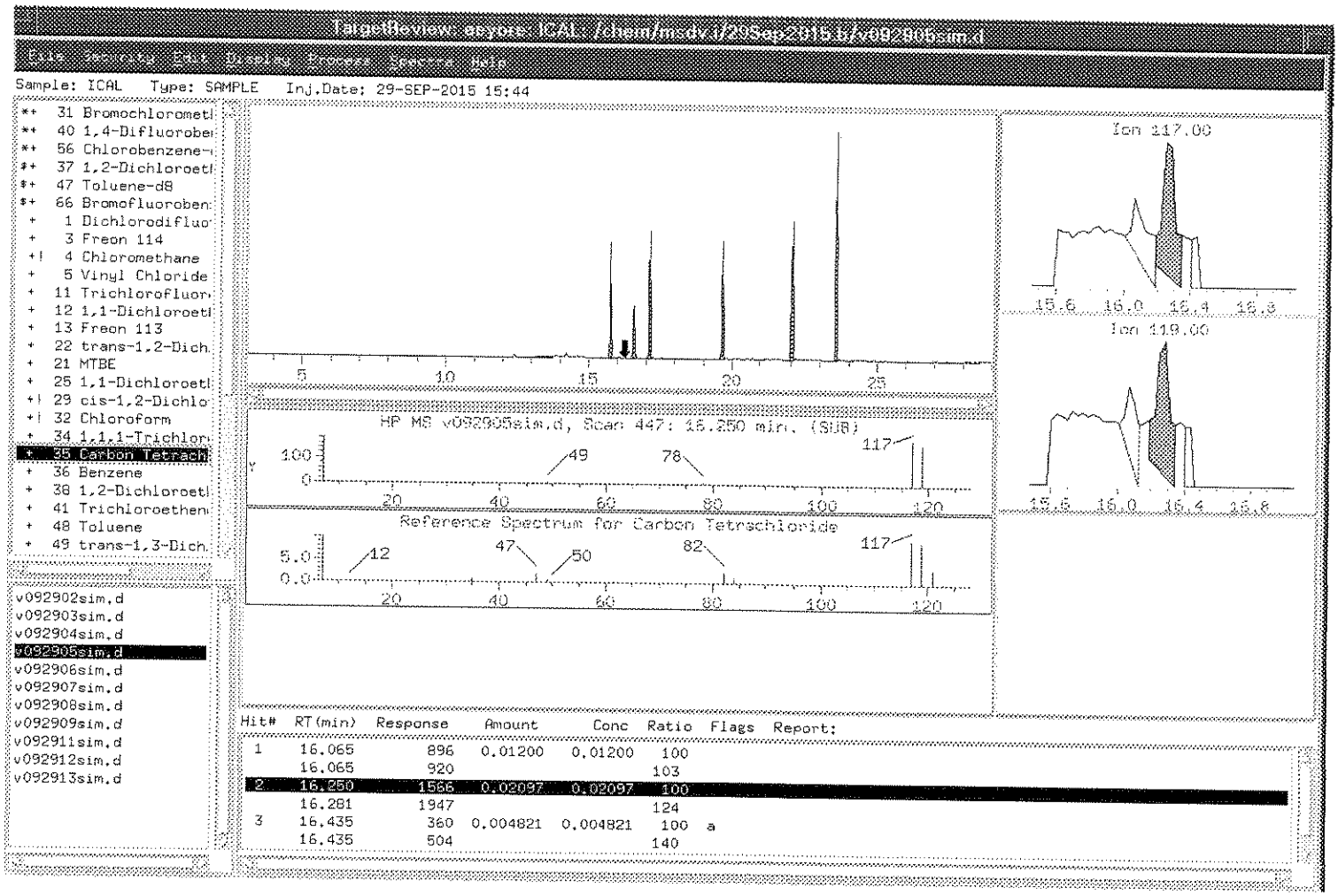


9/30/15

AC

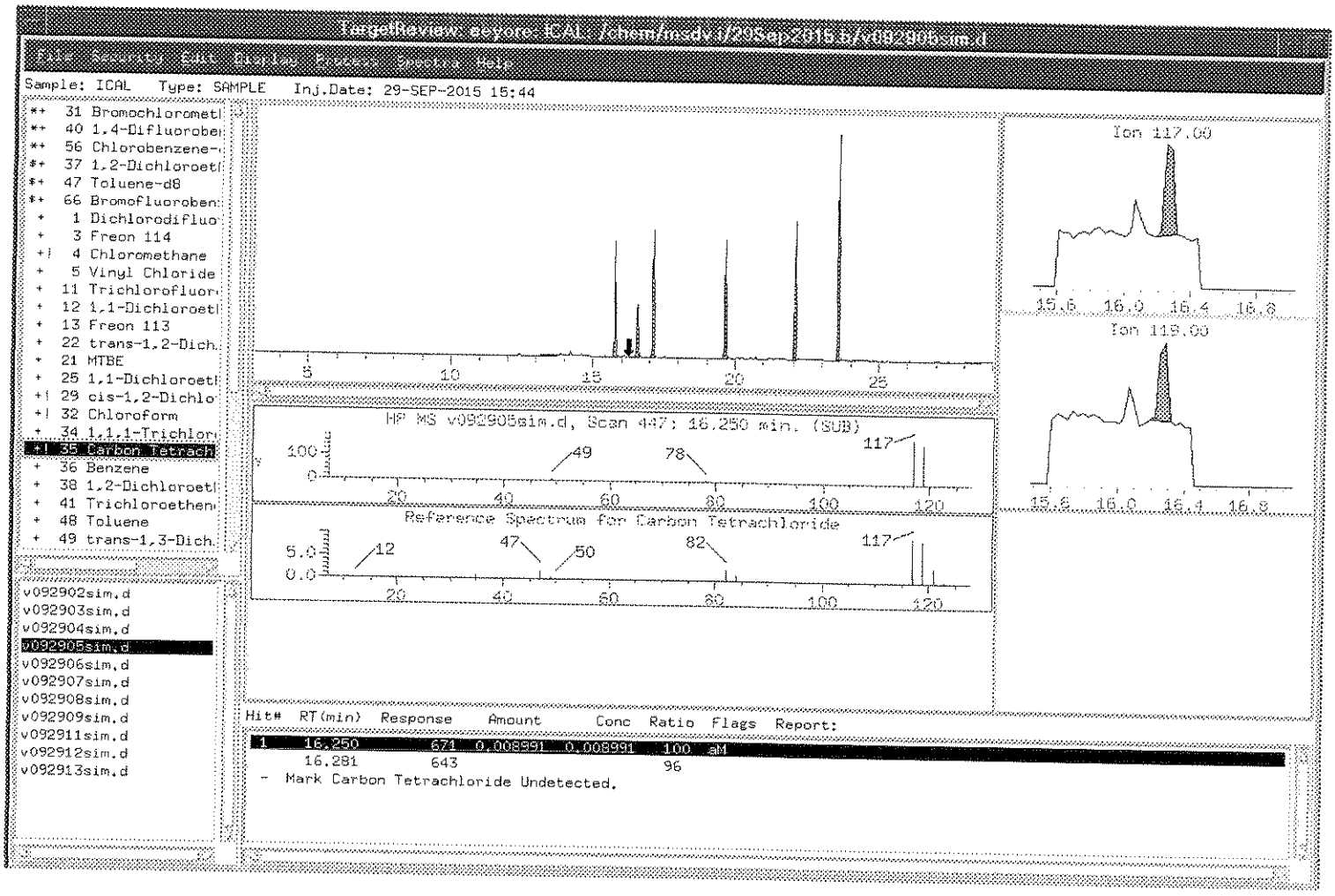
After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓ 9/30/15



After

before

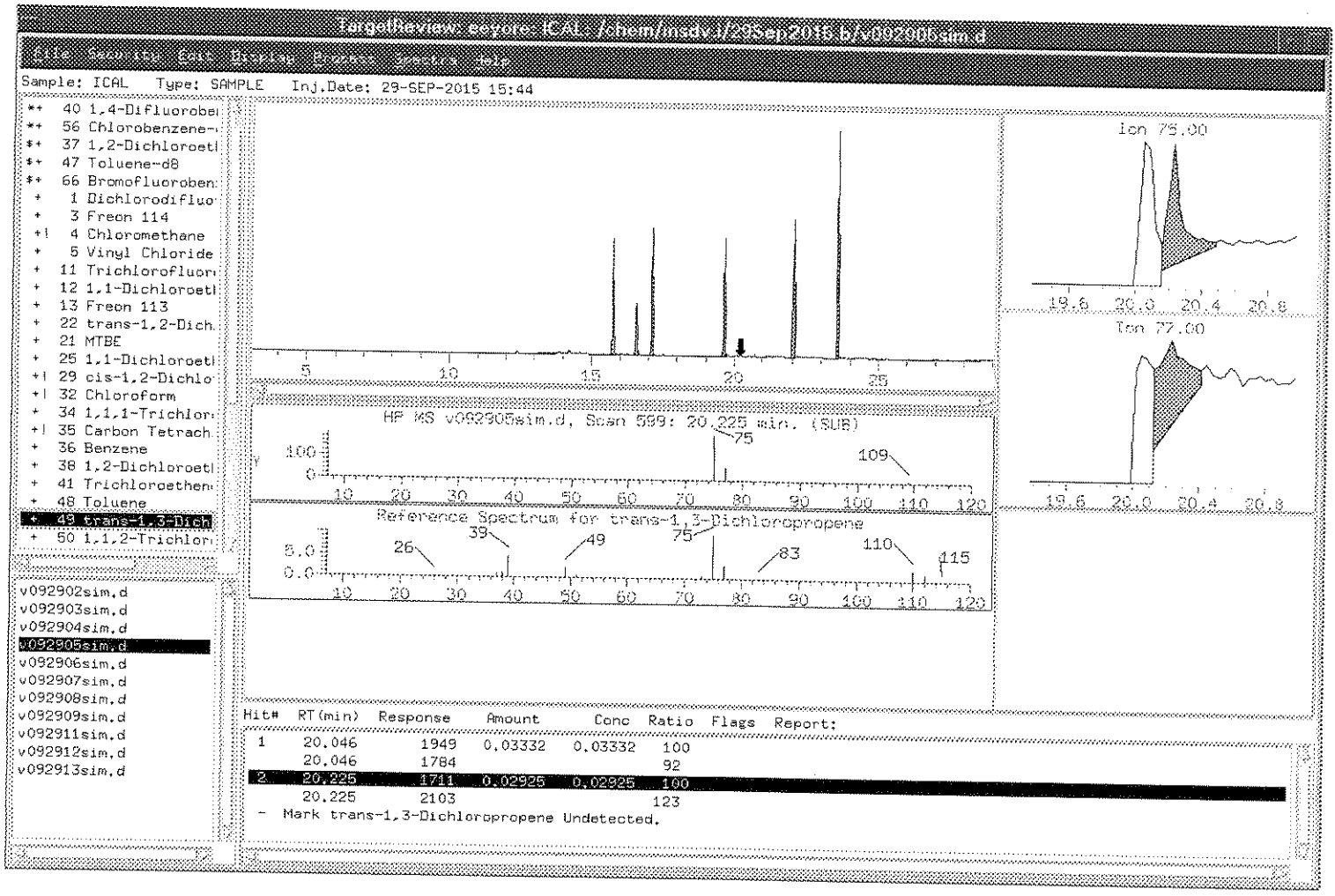


9/30/15

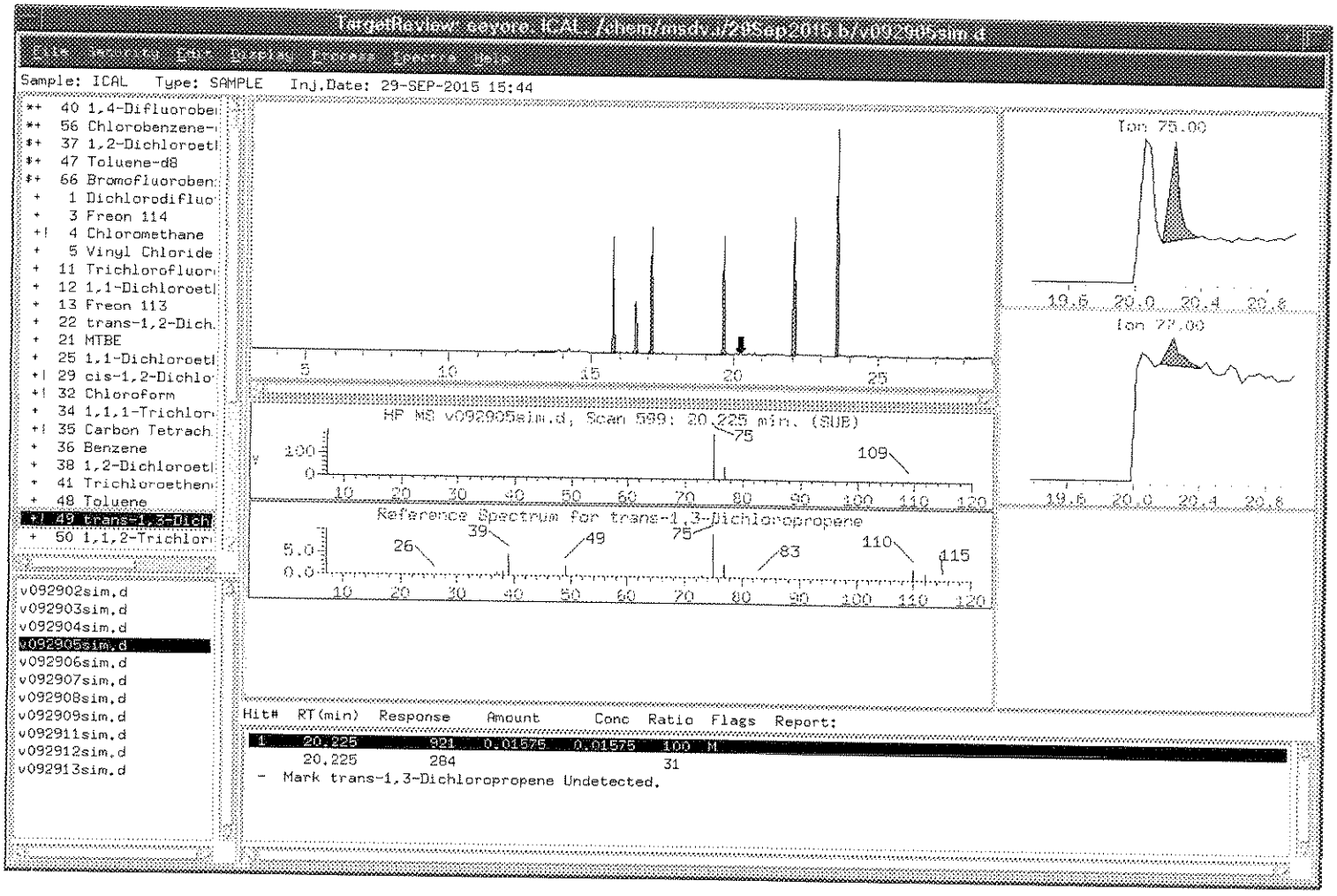
AS

After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓ AS 9/30/15


TargetReview: ecore: ICAL: /chem/msdv.i/29sep2015.b/v092905sim.d
File Sample(s) Edit Display Peaks Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 15:44
40 1,4-Difluorobe
56 Chlorobenzene-
37 1,2-Dichloroeth
47 Toluene-d8
66 Bromofluorobenz
1 Dichlorodifluo
3 Freon 114
4 Chloromethane
5 Vinyl Chloride
11 Trichlorofluor
12 1,1-Dichloroeth
13 Freon 113
22 trans-1,2-Dich
21 MTBE
25 1,1-Dichloroeth
29 cis-1,2-Dichlo
32 Chloroform
34 1,1,1-Trichlor
35 Carbon Tetrach
36 Benzene
38 1,2-Dichloroeth
41 Trichloroethen
48 Toluene
49 trans-1,3-Dich
50 1,1,2-Trichlor
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Ion 75.00
Ion 77.00
HP MS v092905sim.d, Scan 599: 20.225 min. (SUB)
Reference Spectrum for trans-1,3-Dichloropropene
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 20.046 1949 0.03332 0.03332 100
20.046 1784 92
2 20.225 1741 0.02925 0.02925 100
20.225 2103 123
- Mark trans-1,3-Dichloropropene Undetected.

before

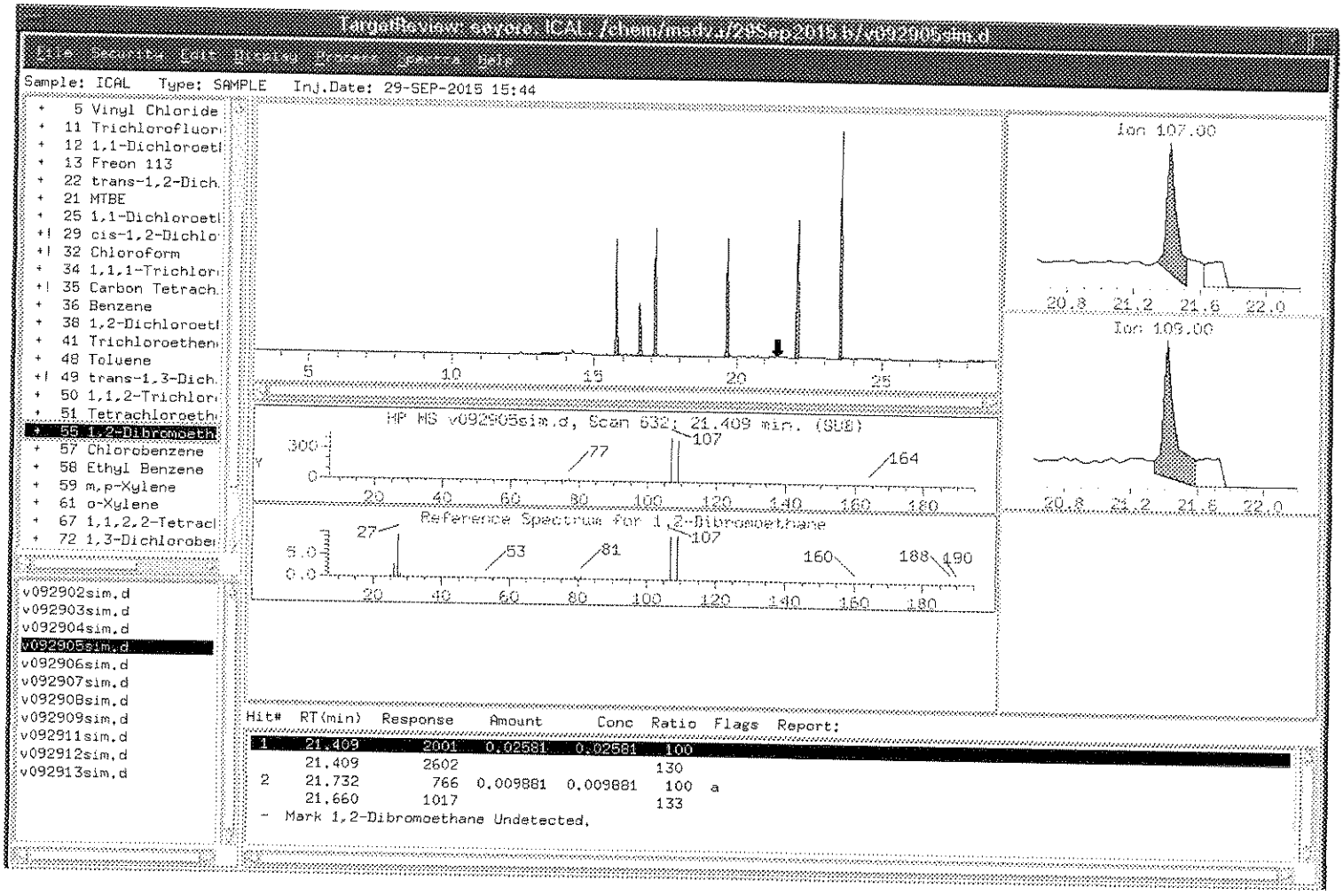


9/30/15

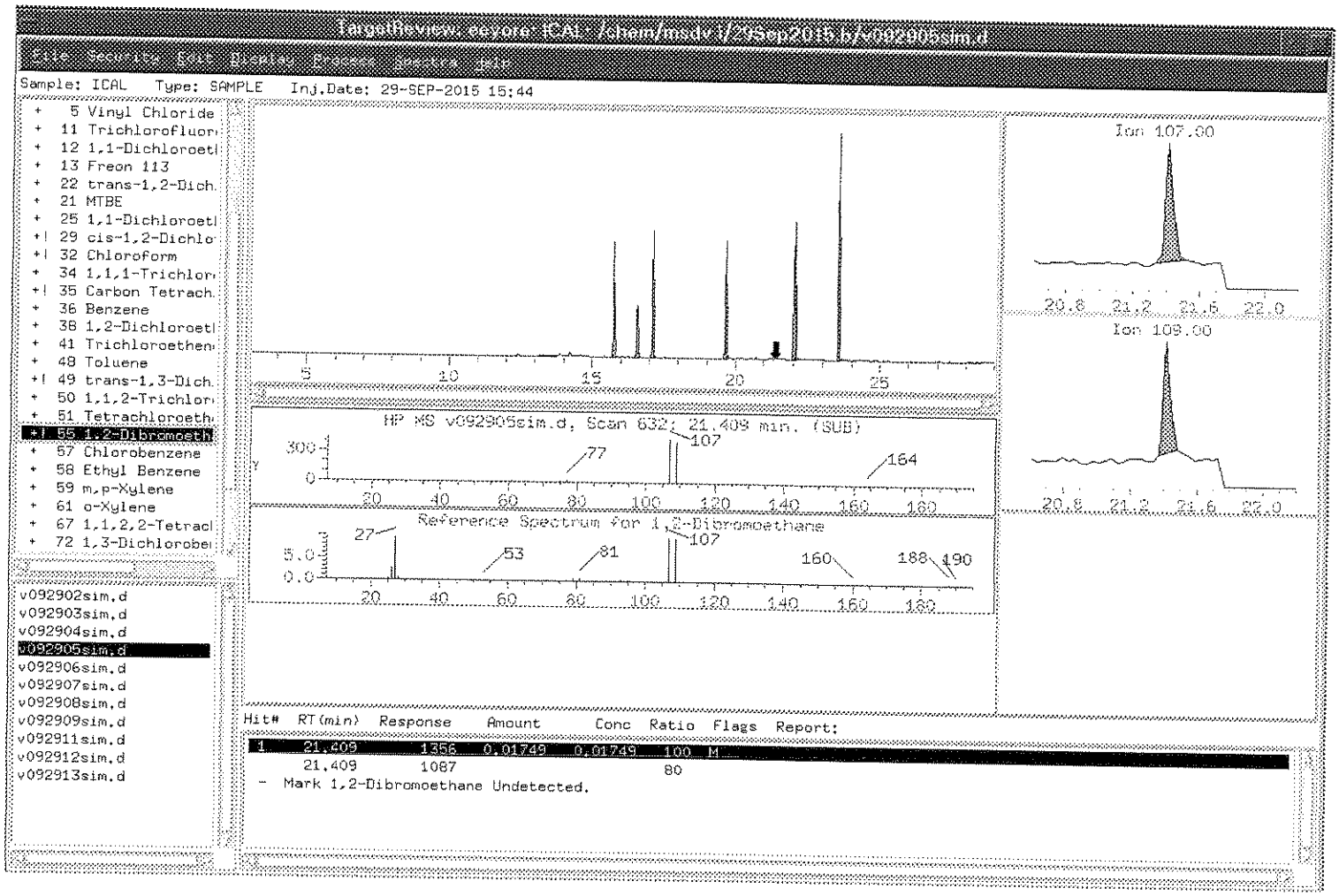
KT

After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓ GH 9/30/15


TargetReview: seyore, ICAL, /chem/msdv.i/29Sep2015 b/v092905sim.d
File Security Edit Display Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 15:44
+ 5 Vinyl Chloride
+ 11 Trichlorofluor
+ 12 1,1-Dichloroetl
+ 13 Freon 113
+ 22 trans-1,2-Dich
+ 21 MTBE
+ 25 1,1-Dichloroetl
+! 29 cis-1,2-Dichlo
+! 32 Chloroform
+ 34 1,1,1-Trichlor
+! 35 Carbon Tetrach
+ 36 Benzene
+ 38 1,2-Dichloroetl
+ 41 Trichloroethen
+ 48 Toluene
+! 49 trans-1,3-Dich
+ 50 1,1,2-Trichlor
+ 51 Tetrachloroeth
+ 55 1,2-Dibromoeth
+ 57 Chlorobenzene
+ 58 Ethyl Benzene
+ 59 m,p-Xylene
+ 61 o-Xylene
+ 67 1,1,2,2-Tetrac
+ 72 1,3-Dichlorobe
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Ion 107.00
Ion 109.00
HP MS v092905sim.d, Scan 632; 21.409 min. (SUB)
Reference Spectrum for 1,2-Dibromoethane
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 21.409 2001 0.02581 0.02581 100
21.409 2602 130
2 21.732 766 0.009881 0.009881 100 a
21.660 1017 133
- Mark 1,2-Dibromoethane Undetected.

before

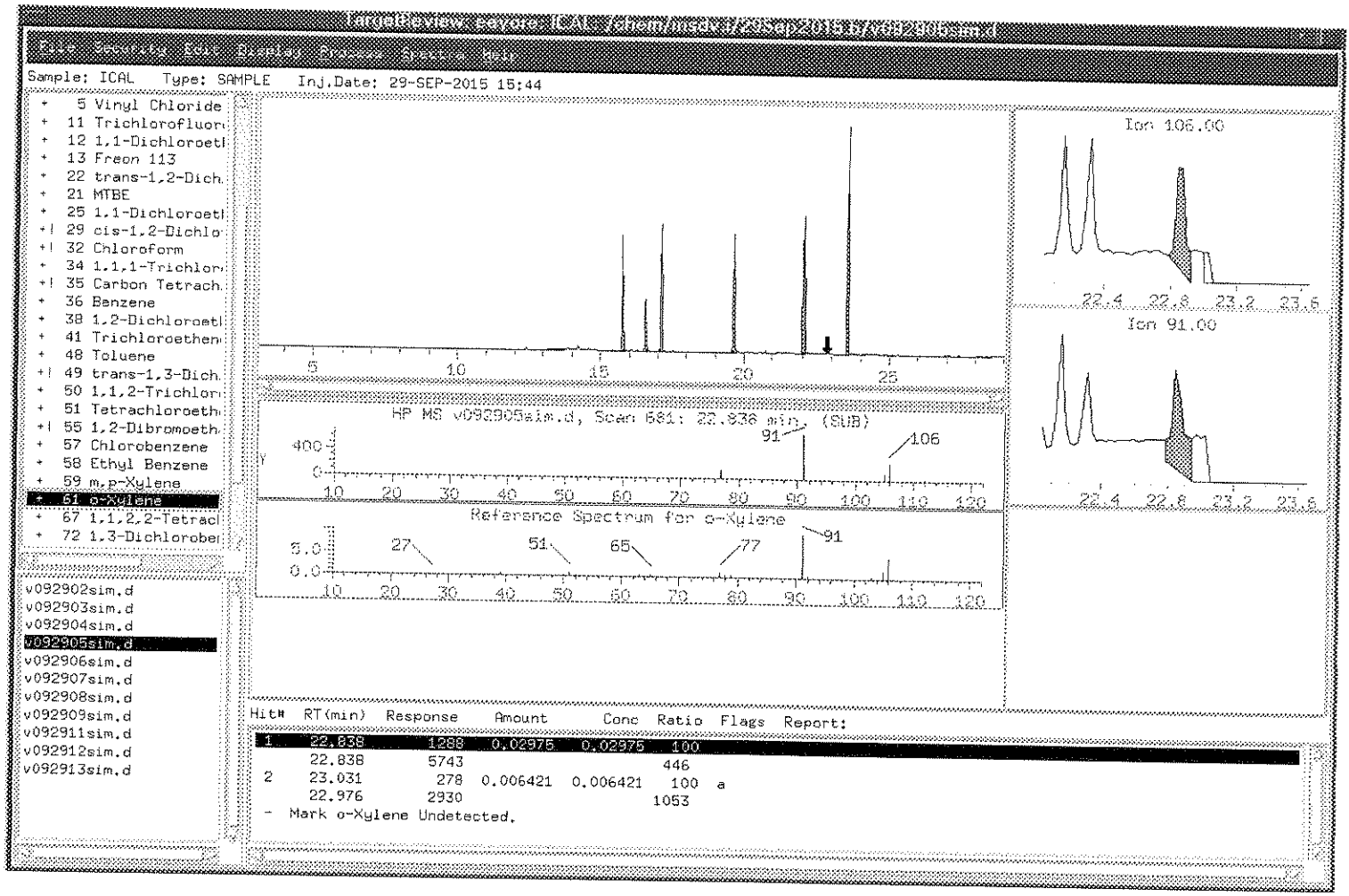


9/30/15

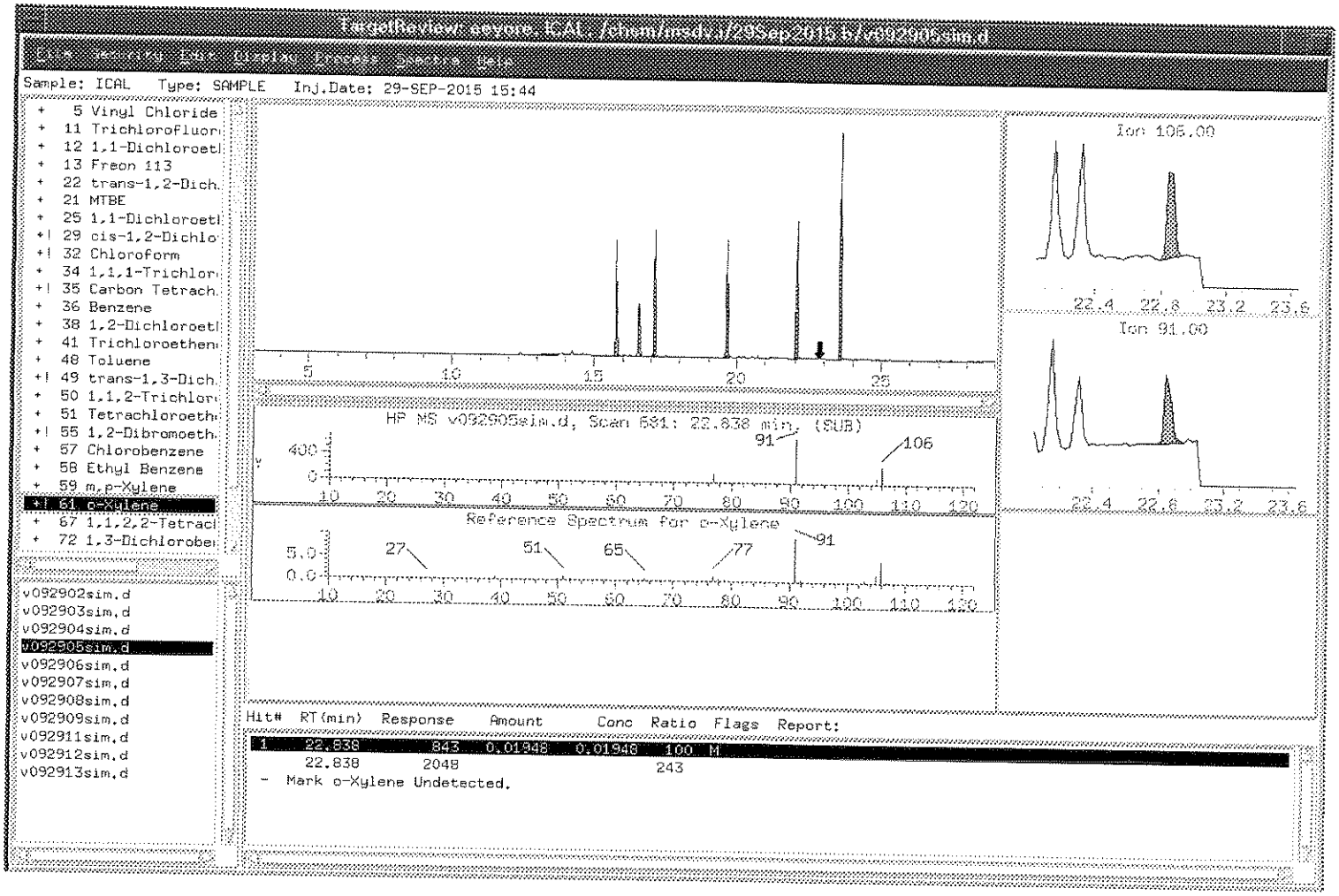
ACF

After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓ GH 9/30/15


TargetReview: eeyore: ICAL: /chem/msdv1/29Sep2015.b/v092905sim.d
File Security Edit Display Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 15:44
+ 5 Vinyl Chloride
+ 11 Trichlorofluor
+ 12 1,1-Dichloroetl
+ 13 Freon 113
+ 22 trans-1,2-Dich
+ 21 MTBE
+ 25 1,1-Dichloroetl
+! 29 cis-1,2-Dichlo
+! 32 Chloroform
+ 34 1,1,1-Trichlor
+! 35 Carbon Tetrach
+ 36 Benzene
+ 38 1,2-Dichloroetl
+ 41 Trichloroethen
+ 48 Toluene
+! 49 trans-1,3-Dich
+ 50 1,1,2-Trichlor
+ 51 Tetrachloroeth
+! 55 1,2-Dibromoeth
+ 57 Chlorobenzene
+ 58 Ethyl Benzene
+ 59 m,p-Xylene
+ 61 o-Xylene
+ 67 1,1,2,2-Tetrac
+ 72 1,3-Dichlorobe
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Ion 106.00
Ion 91.00
HP MS v092905sim.d, Scan 681: 22.838 min. (SUB)
Reference Spectrum for o-Xylene
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 22.838 1288 0.02975 0.02975 100
22.838 5743 446
2 23.031 278 0.006421 0.006421 100 a
22.976 2930 1053
- Mark o-Xylene Undetected.

before

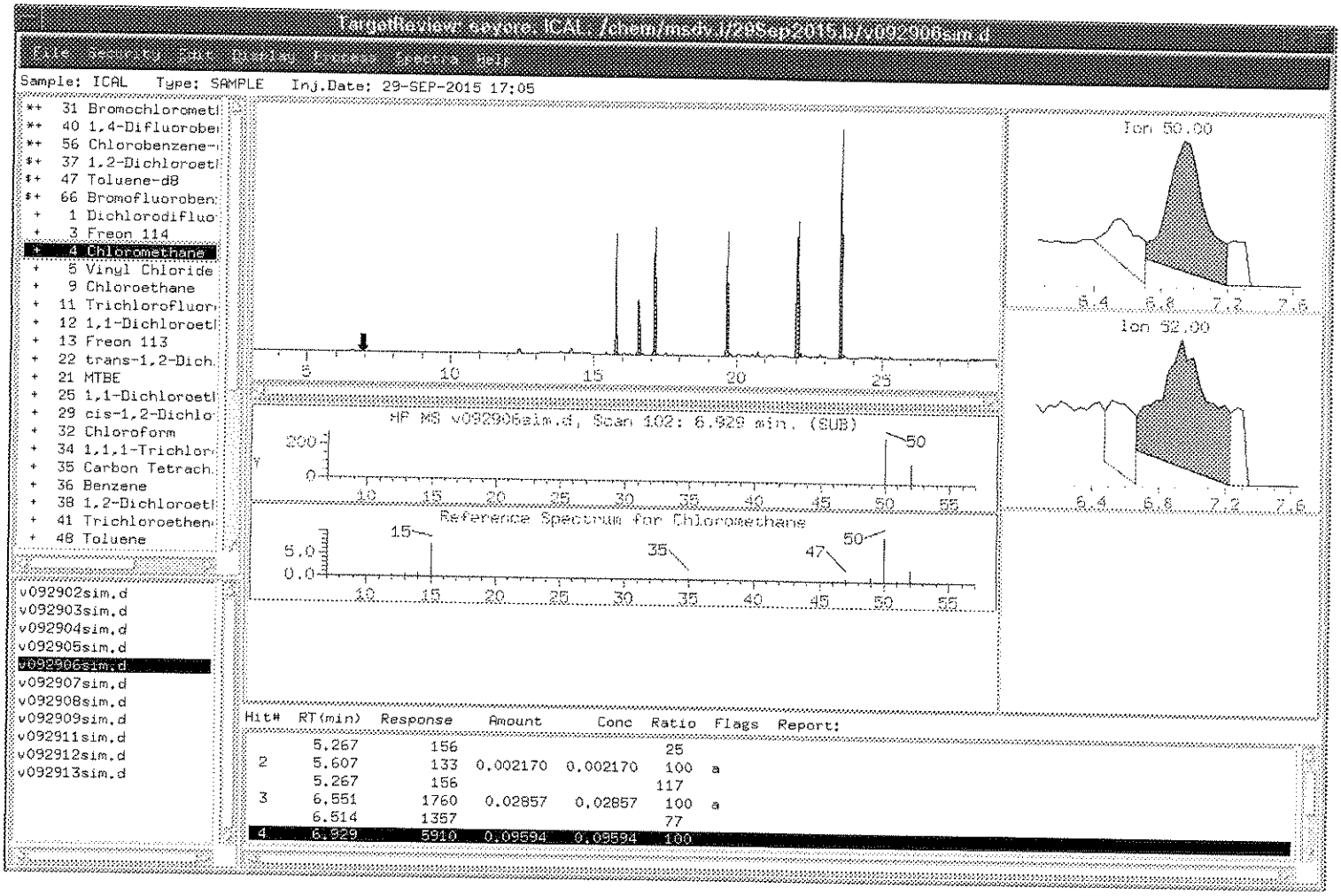


9/30/15

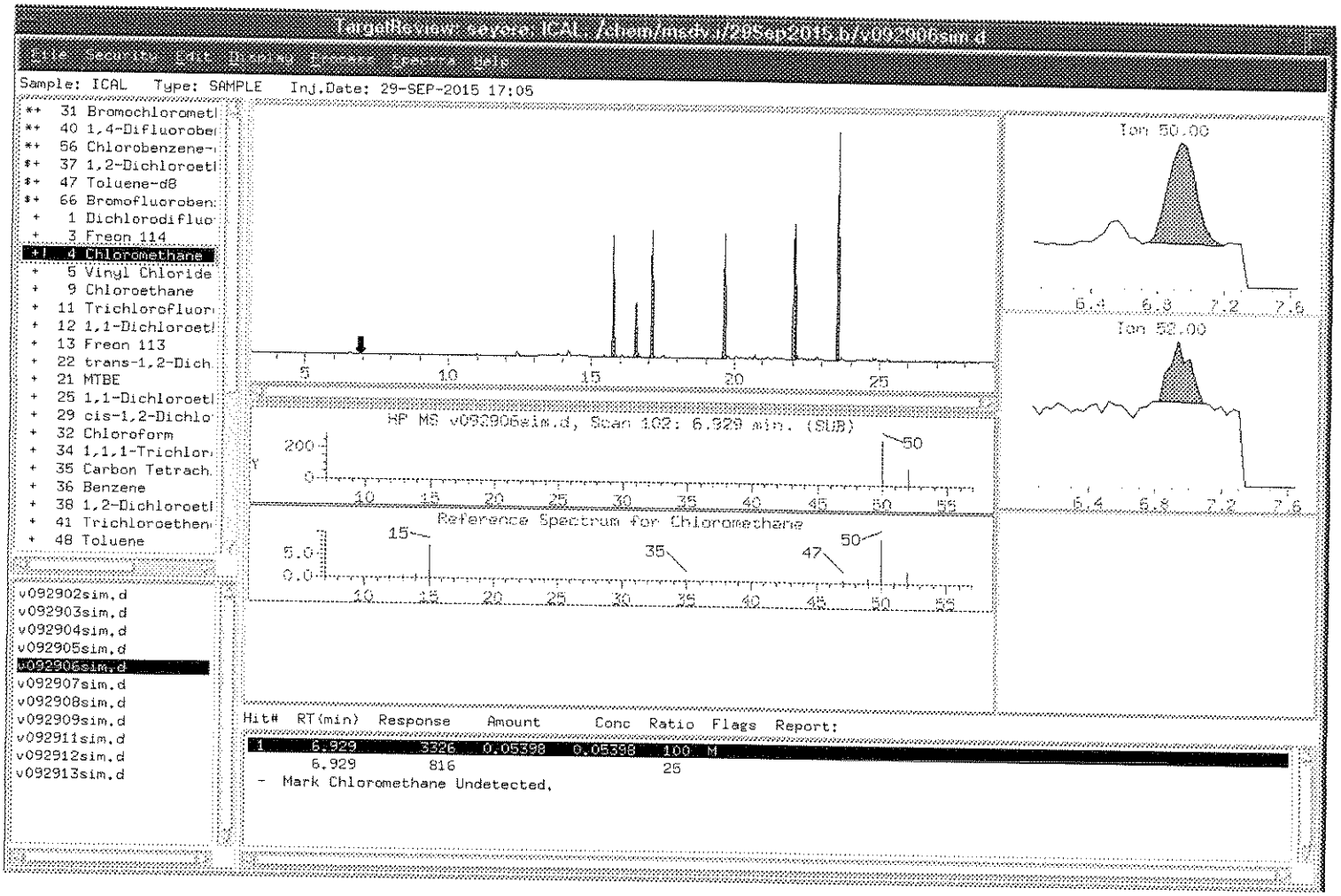
Acf

After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓ acf 9/30/15


TargetReview - Sequence: ICAL: /chem/msdv.i/29Sep2015.b/v092906sim.d
File Results Edit Review Tools Options Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 17:05
31 Bromochlorometh
40 1,4-Difluorober
56 Chlorobenzene-d
37 1,2-Dichloroeth
47 Toluene-d8
66 Bromofluoroben
1 Dichlorodifluo
3 Freon 114
4 Chloromethane
5 Vinyl Chloride
9 Chloroethane
11 Trichlorofluor
12 1,1-Dichloroeth
13 Freon 113
22 trans-1,2-Dich
21 MTBE
25 1,1-Dichloroeth
29 cis-1,2-Dichlo
32 Chloroform
34 1,1,1-Trichlor
35 Carbon Tetrach
36 Benzene
38 1,2-Dichloroeth
41 Trichloroethen
48 Toluene
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Ion 50.00
Ion 52.00
HP MS v092906sim.d, Scan 102: 6.829 min, (SUB)
Reference Spectrum for Chloromethane
Hit# RT(min) Response Amount Conc Ratio Flags Report:
5.267 156 25
2 5.607 133 0.002170 0.002170 100 a
5.267 156 117
3 6.551 1760 0.02857 0.02857 100 a
6.514 1357 77
4 6.829 5910 0.09594 0.09594 100

before

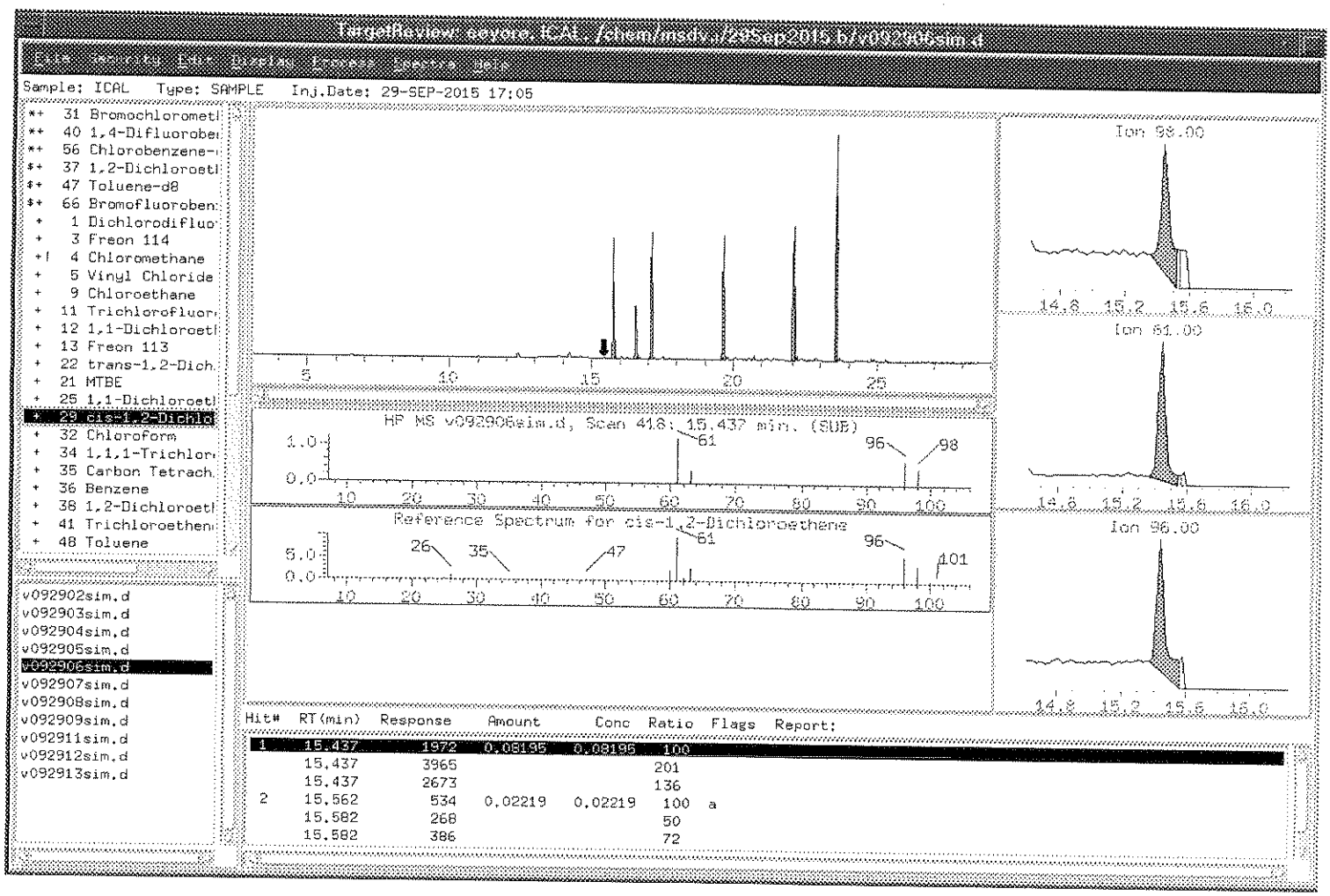


9/30/15

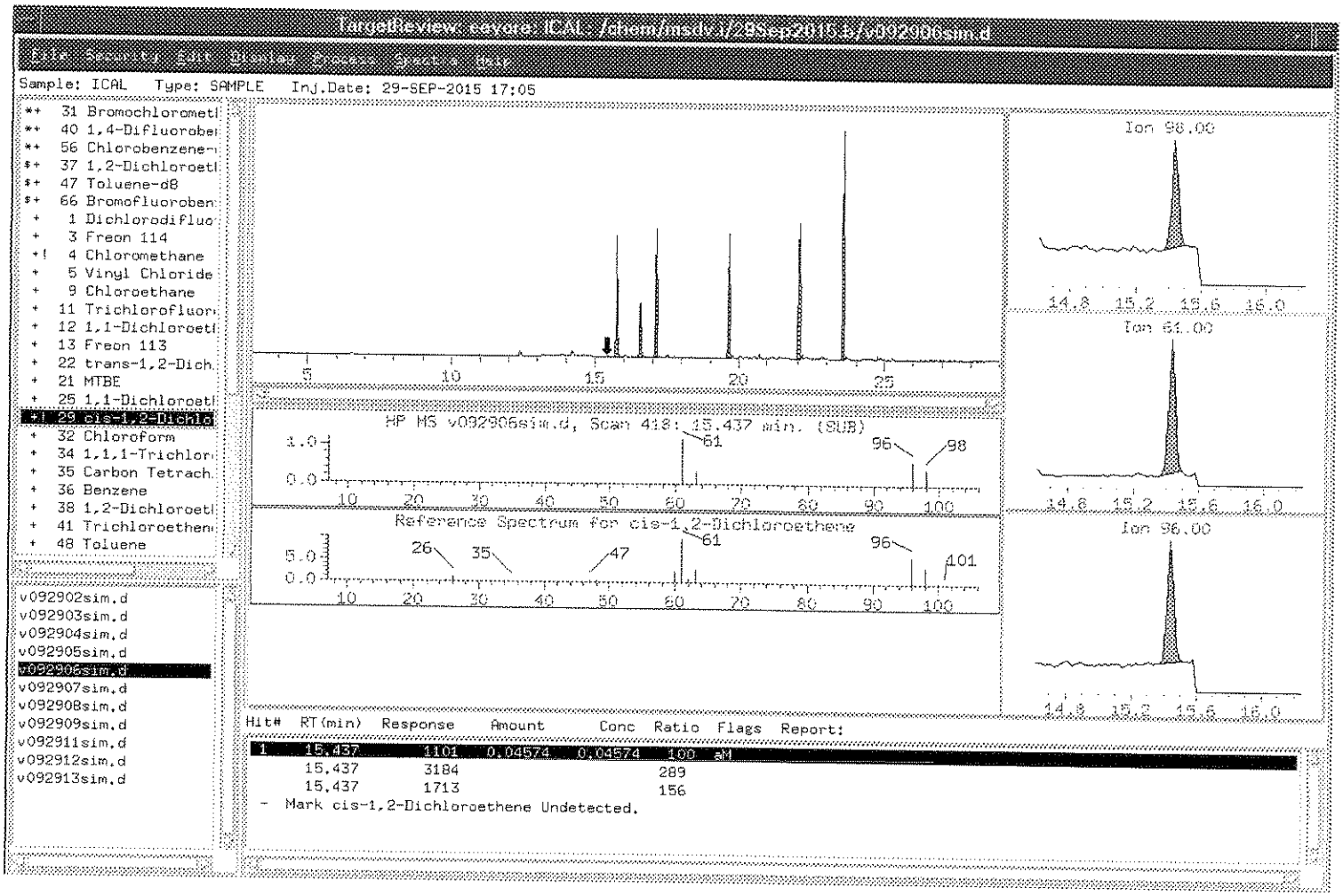
ACS

After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓ GH 9/30/15


TargetReview: seyore, ICAL, /chem/msdv,/29Sep2015 b/v092906sim.d
File Security Edit Display Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 17:05
*+ 31 Bromochloromet
*+ 40 1,4-Difluorobe
*+ 56 Chlorobenzene-
$+ 37 1,2-Dichloroet
$+ 47 Toluene-d8
$+ 66 Bromofluoroben
+ 1 Dichlorodifluo
+ 3 Freon 114
+! 4 Chloromethane
+ 5 Vinyl Chloride
+ 9 Chloroethane
+ 11 Trichlorofluor
+ 12 1,1-Dichloroet
+ 13 Freon 113
+ 22 trans-1,2-Dich
+ 21 MTBE
+ 25 1,1-Dichloroet
+ 29 cis-1,2-Dichlo
+ 32 Chloroform
+ 34 1,1,1-Trichlor
+ 35 Carbon Tetrach
+ 36 Benzene
+ 38 1,2-Dichloroet
+ 41 Trichloroethen
+ 48 Toluene
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
HP MS v092906sim.d, Scan 418: 15.437 min. (SUB)
Reference Spectrum for cis-1,2-Dichloroethene
Ion 98.00
Ion 61.00
Ion 96.00
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 15.437 1972 0.08195 0.08195 100
15.437 3965 201
15.437 2673 136
2 15.562 534 0.02219 0.02219 100 a
15.582 268 50
15.582 386 72

before



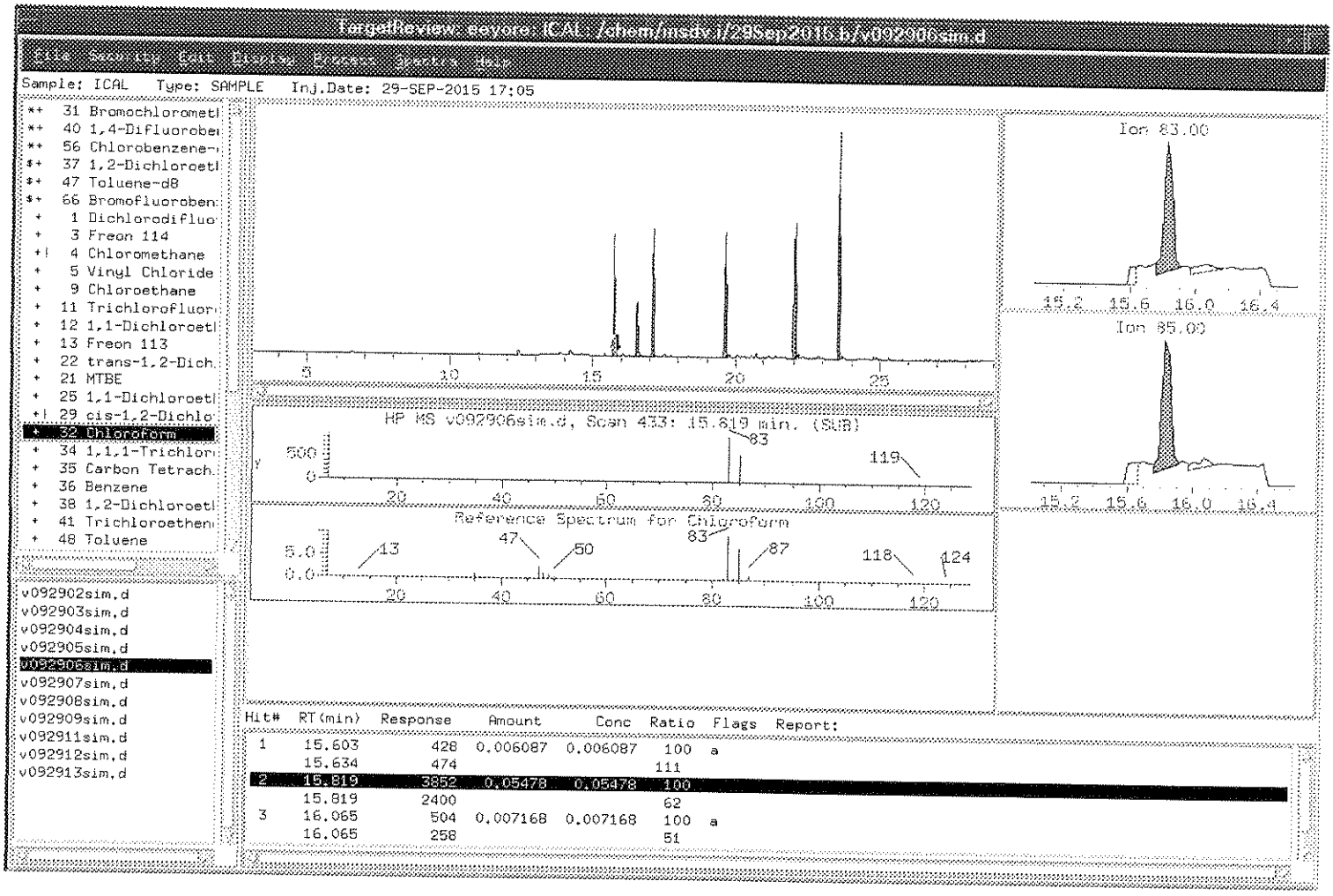
After

9/30/15

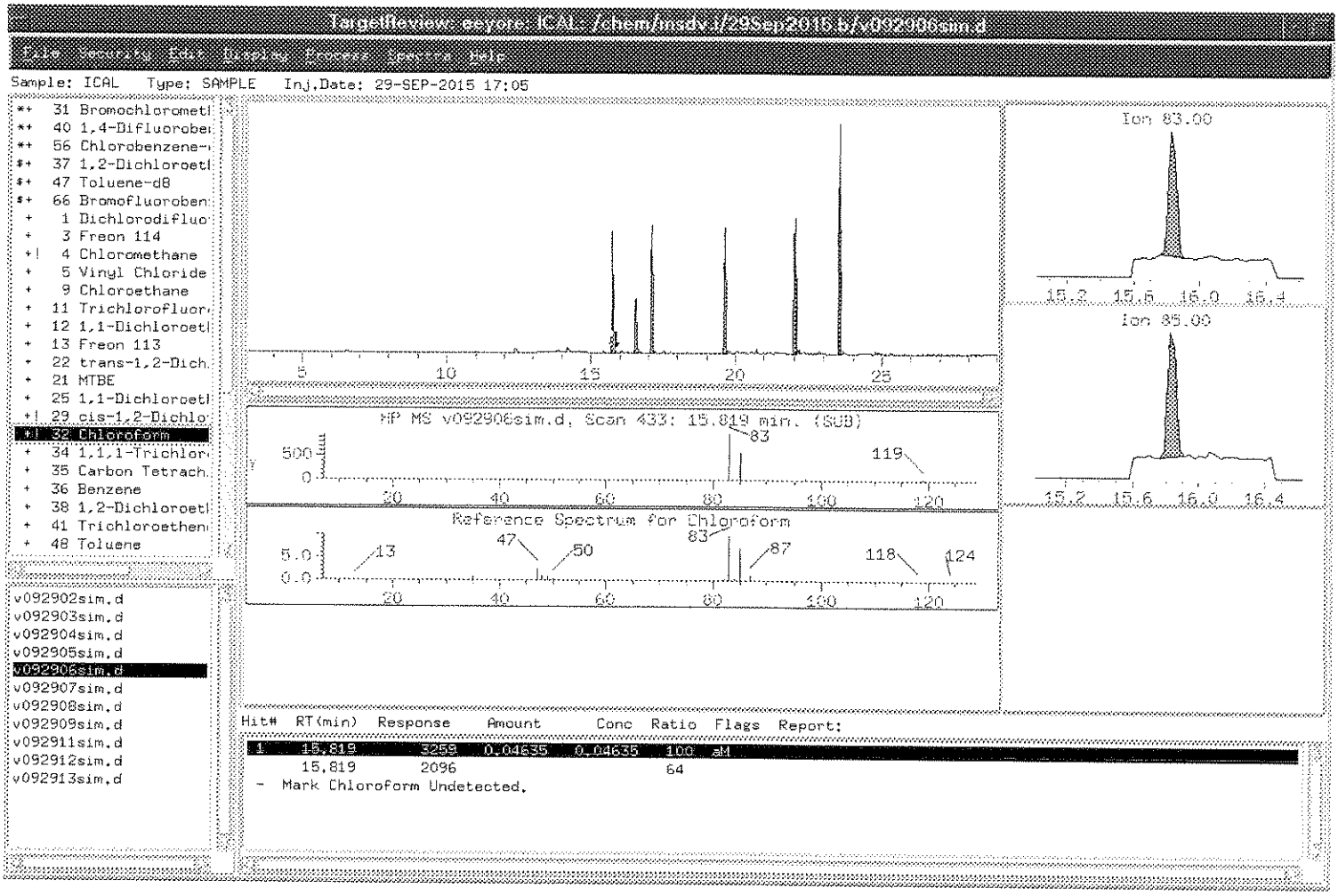
AG

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓

9/29/30/15


TargetReview: eevora: ICAL: /chem/insdv.i/29sep2016.b/v092906sim.d
File Search Edit Display Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 17:05
31 Bromochlorometh
40 1,4-Difluorober
56 Chlorobenzene-
37 1,2-Dichloroeth
47 Toluene-d8
66 Bromofluorobenz
1 Dichlorodifluo
3 Freon 114
4 Chloromethane
5 Vinyl Chloride
9 Chloroethane
11 Trichlorofluor
12 1,1-Dichloroeth
13 Freon 113
22 trans-1,2-Dich
21 MTBE
25 1,1-Dichloroeth
29 cis-1,2-Dichlo
32 Chloroform
34 1,1,1-Trichlor
35 Carbon Tetrach
36 Benzene
38 1,2-Dichloroeth
41 Trichloroethen
48 Toluene
Ion 83.00
Ion 85.00
HP MS v092906sim.d, Scan 433: 15.819 min. (SUB)
Reference Spectrum for Chloroform
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 15.603 428 0.006087 0.006087 100 a
15.634 474 111
2 15.819 3852 0.05478 0.05478 100
15.819 2400 62
3 16.065 504 0.007168 0.007168 100 a
16.065 258 51

before

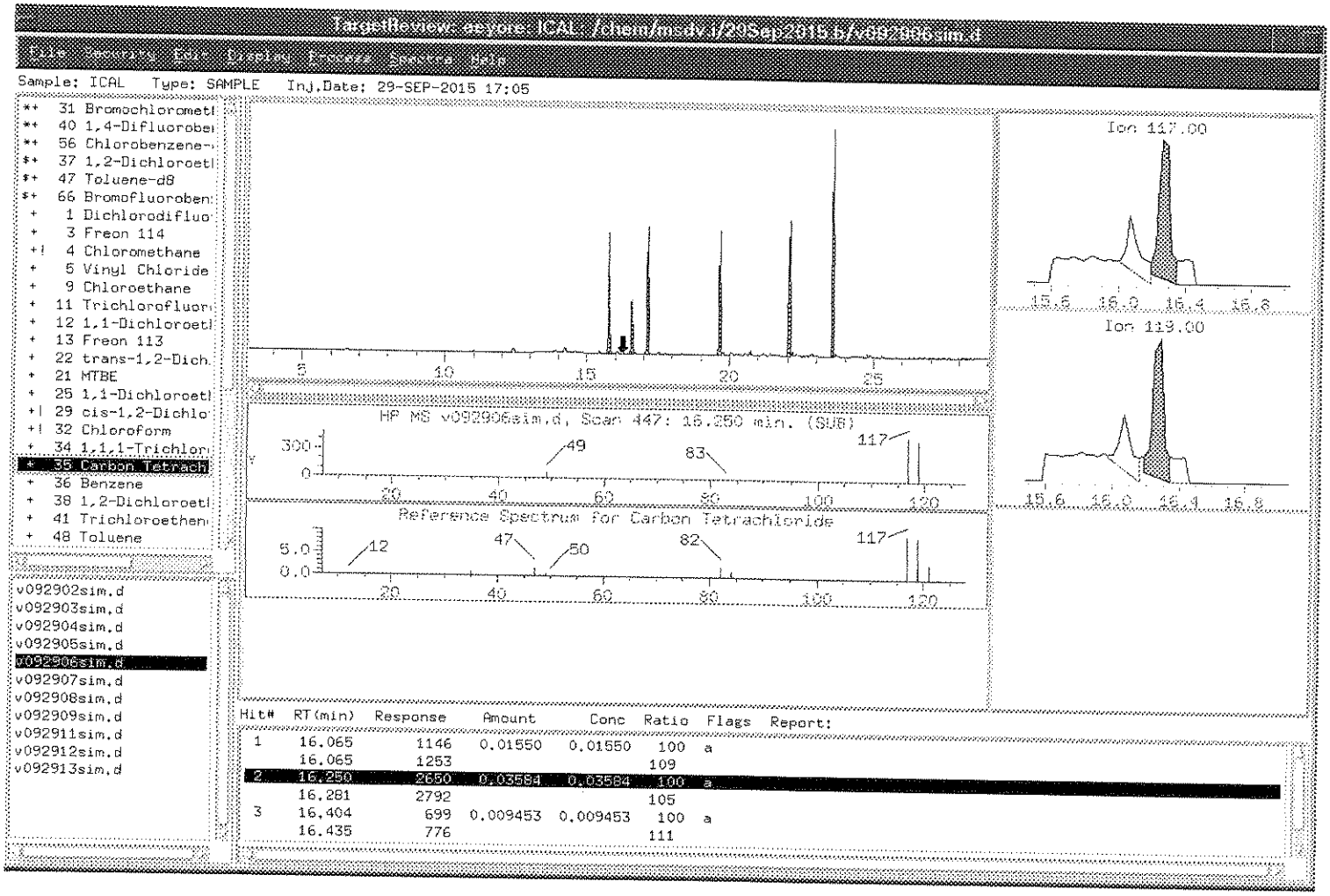


9/30/15
Aer

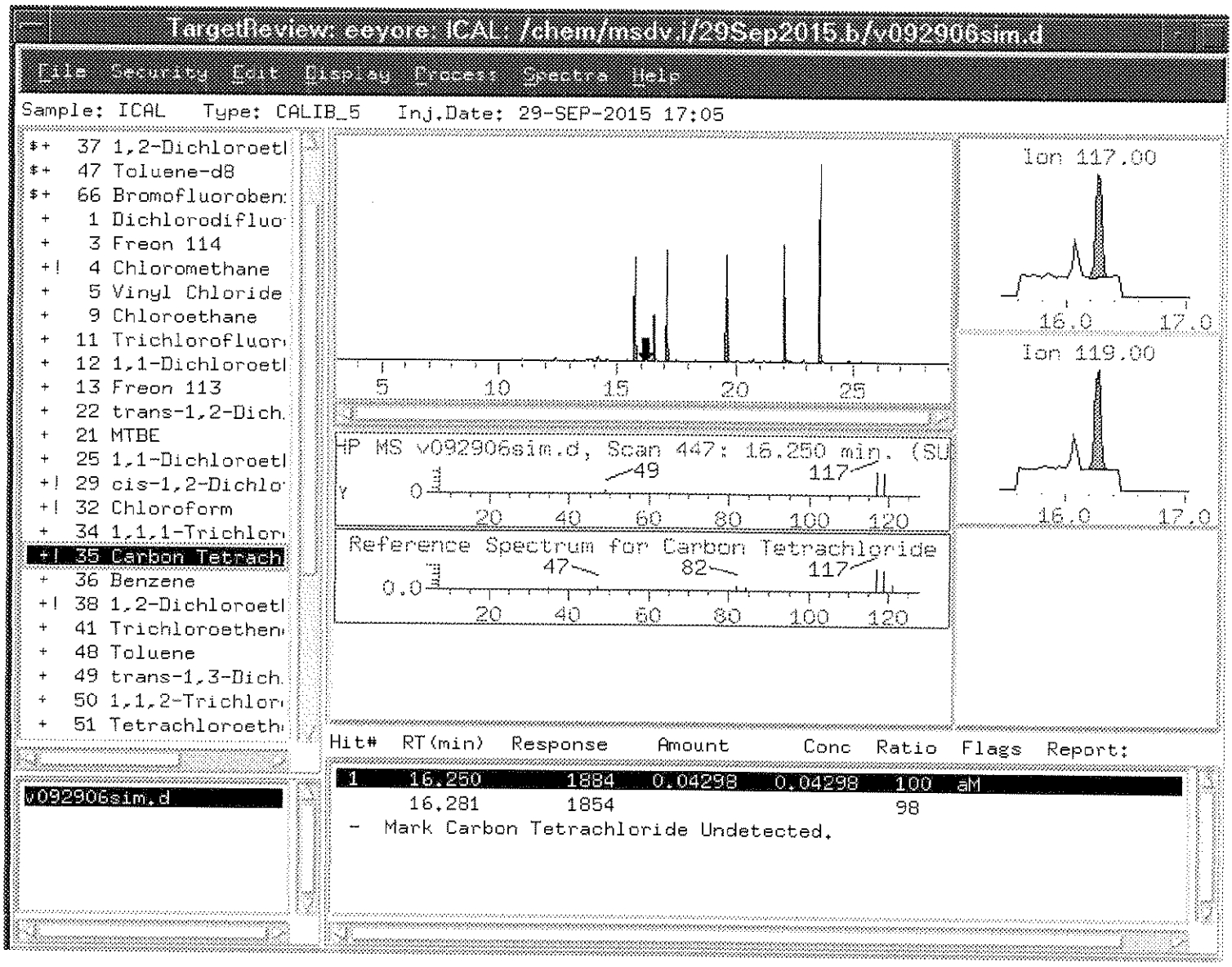
After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓

GLG 9/30/15


TargetReview: eeyore: ICAL: /chem/msdv.i/20Sep2015.b/v092906sim.d
File Spectra Edit Display Process Search Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 17:05
** 31 Bromochloromethane
** 40 1,4-Difluorobenzene
** 56 Chlorobenzene-d5
$+ 37 1,2-Dichloroethane-d4
$+ 47 Toluene-d8
$+ 66 Bromofluorobenzene
+ 1 Dichlorodifluoromethane
+ 3 Freon 114
+! 4 Chloromethane
+ 5 Vinyl Chloride
+ 9 Chloroethane
+ 11 Trichlorofluoromethane
+ 12 1,1-Dichloroethene
+ 13 Freon 113
+ 22 trans-1,2-Dichloroethene
+ 21 MTBE
+ 25 1,1-Dichloroethane
+| 29 cis-1,2-Dichloroethene
+! 32 Chloroform
+ 34 1,1,1-Trichloroethane
* 35 Carbon Tetrachloride
+ 36 Benzene
+ 38 1,2-Dichloroethane
+ 41 Trichloroethene
+ 48 Toluene
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Ion 117.00
Ion 119.00
HP MS v092906sim.d, Scan 447: 16.250 min. (SUB)
Reference Spectrum for Carbon Tetrachloride
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 16.065 1146 0.01550 0.01550 100 a
16.065 1253 109
2 16.250 2650 0.03584 0.03584 100 a
16.281 2792 105
3 16.404 699 0.009453 0.009453 100 a
16.435 776 111

before

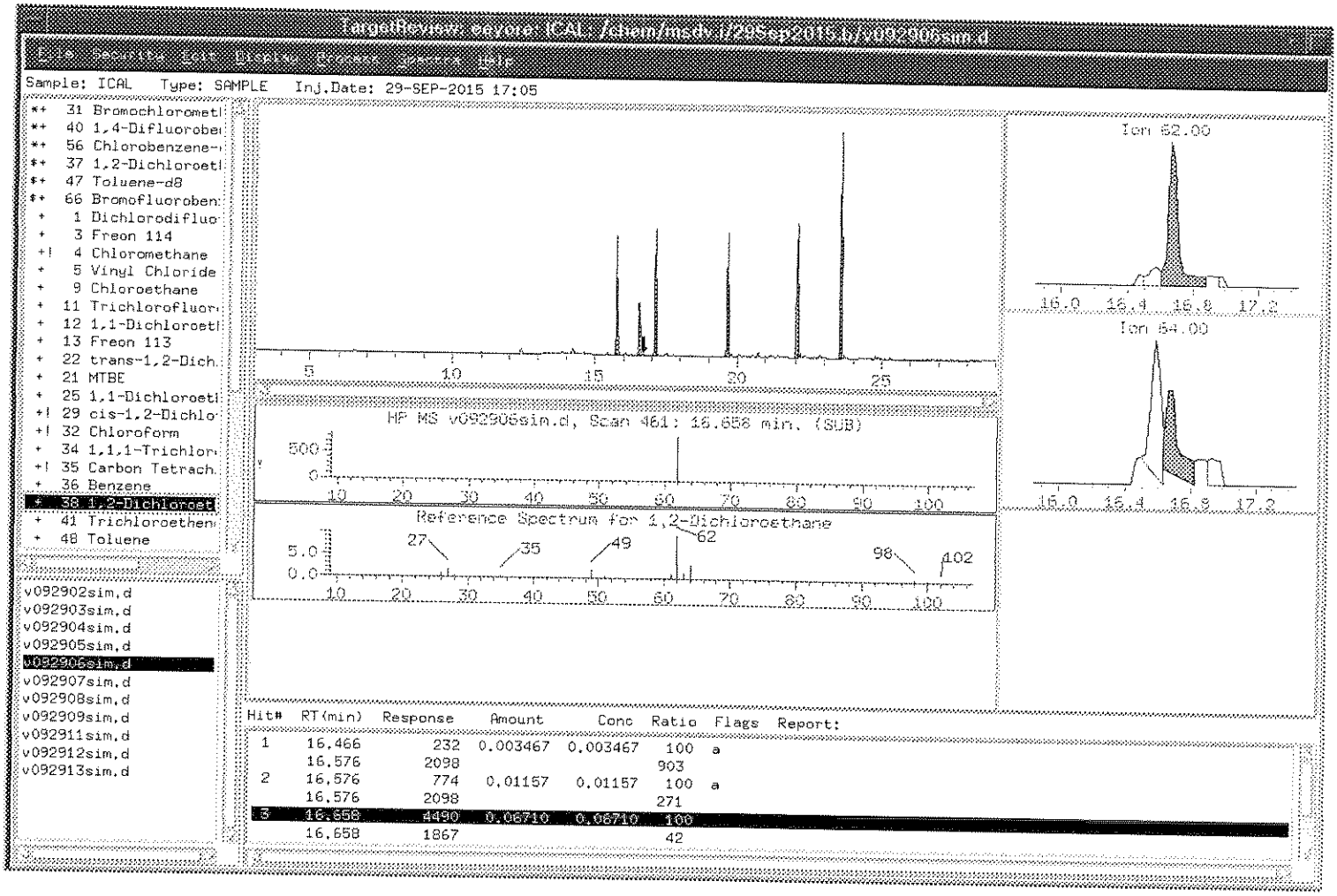


9/30/15
AC

After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	

Peak Integration ✓ GH 9/30/15

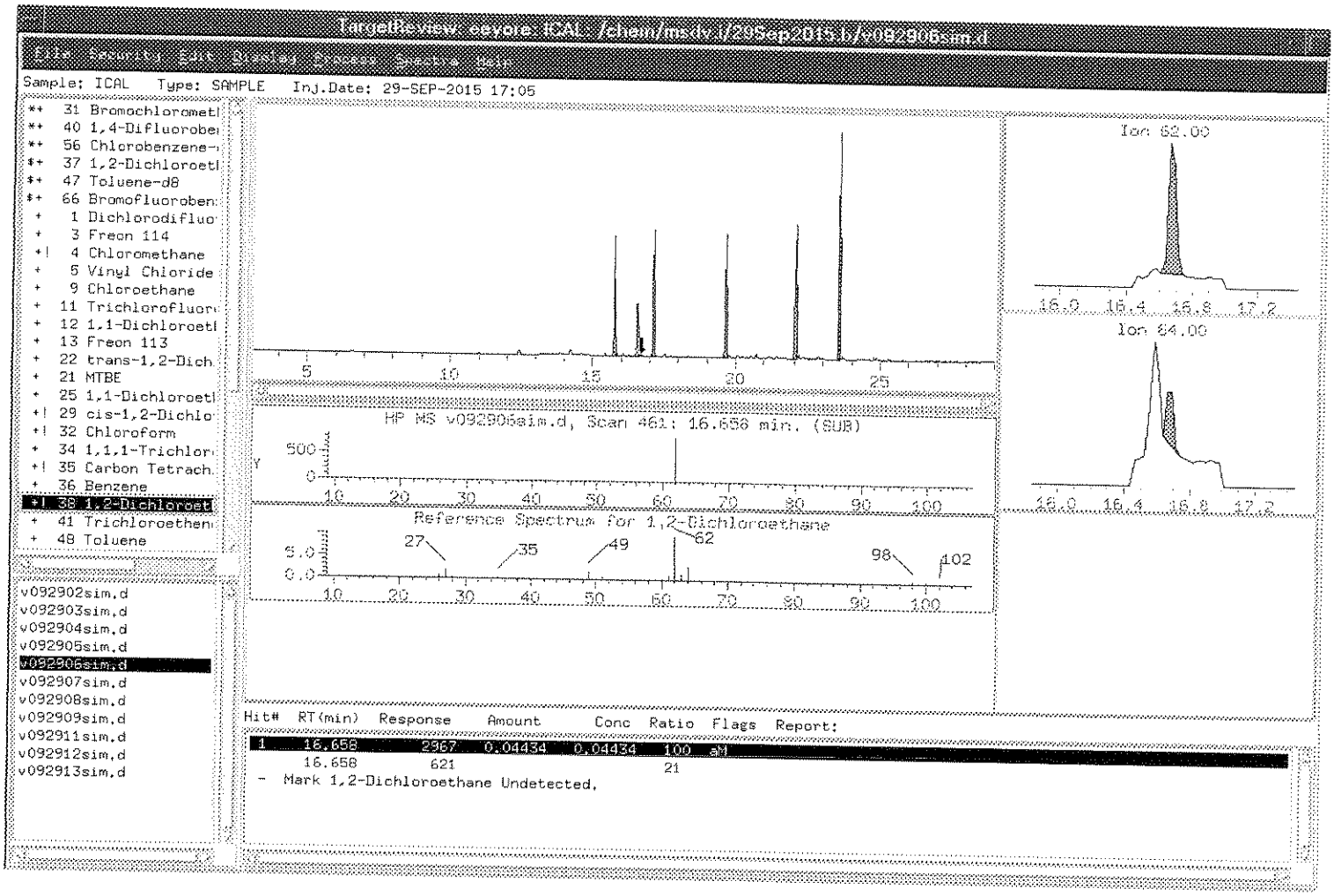


After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	

before

4/9/30/15

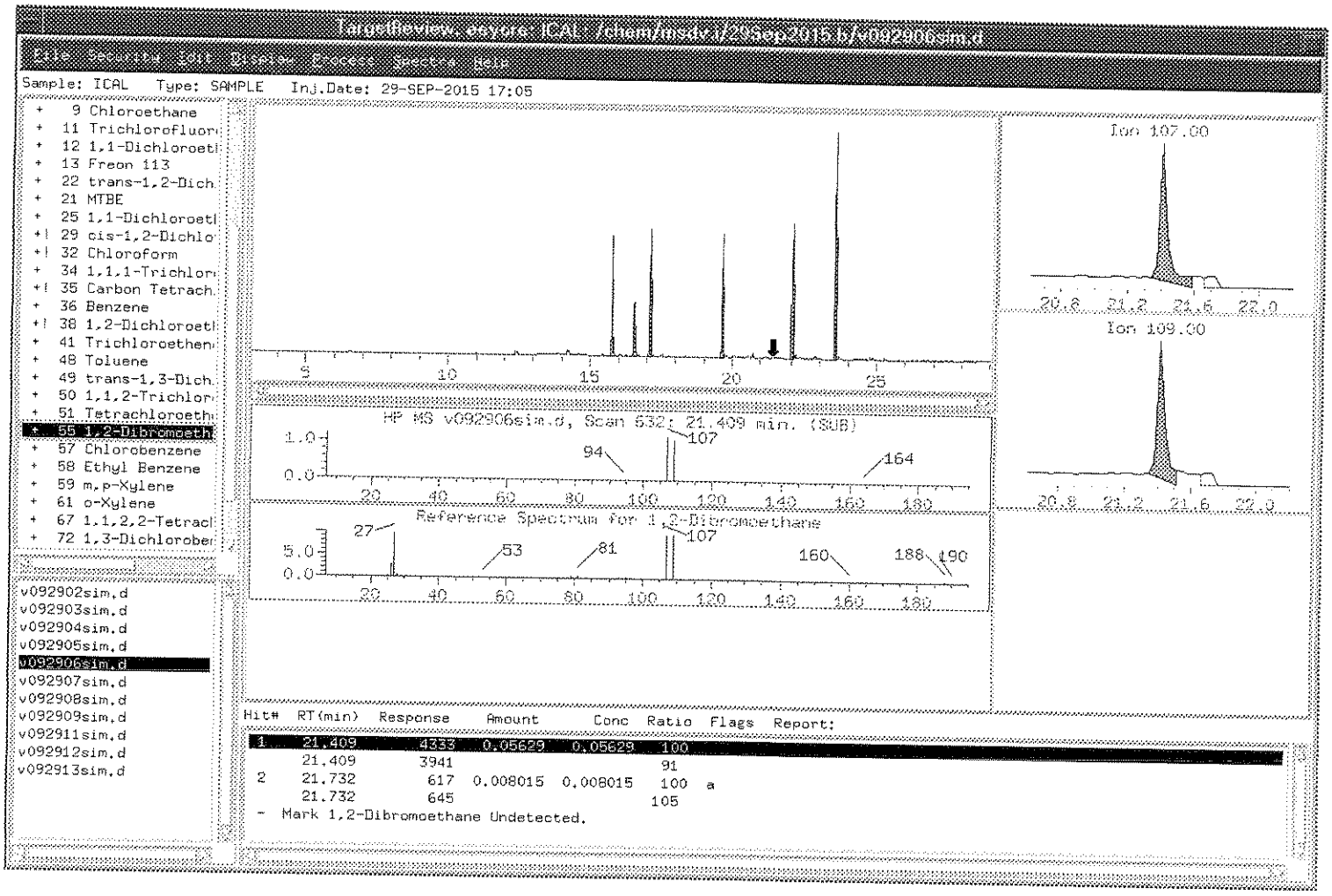


9/30/15
Acf

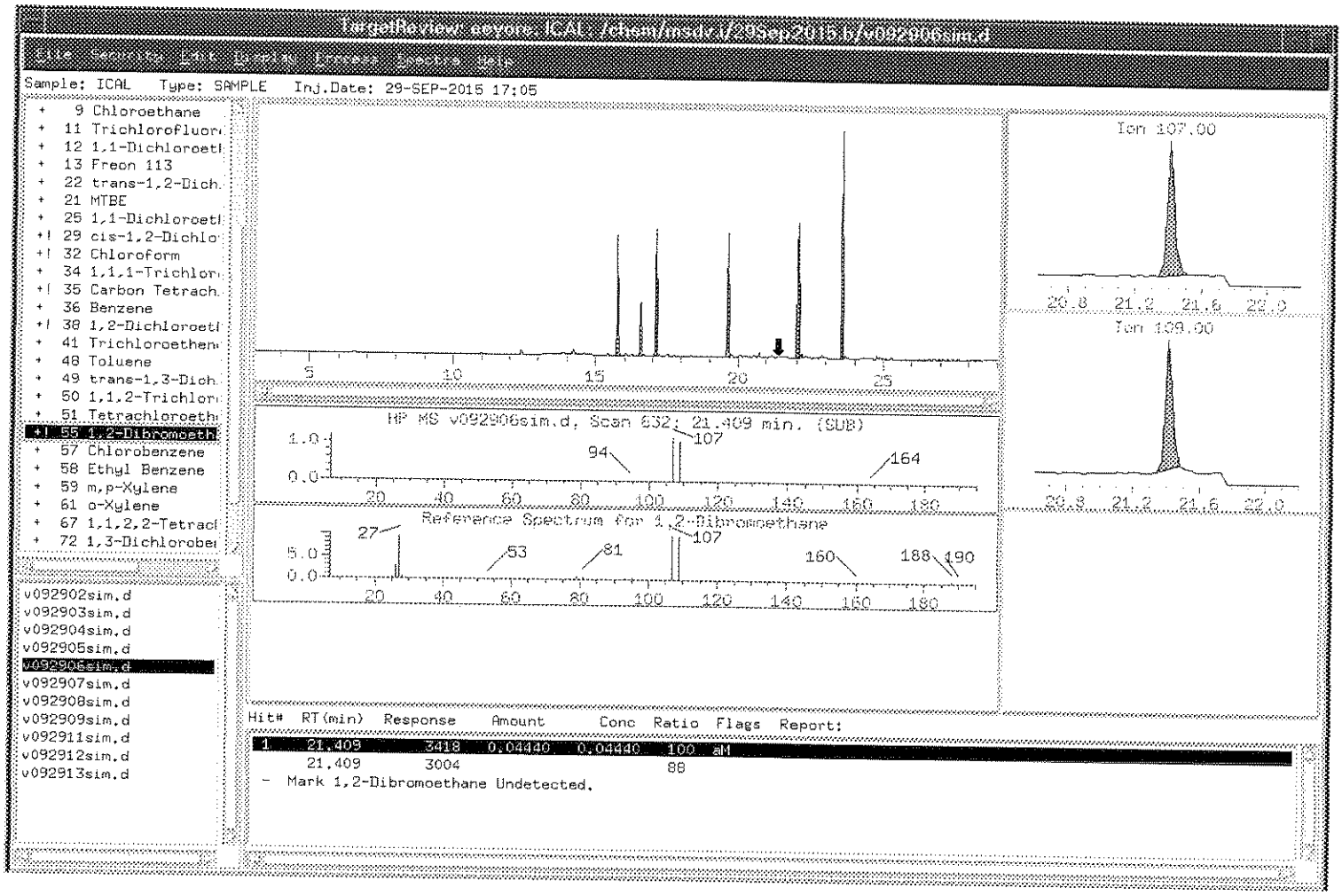
After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓

GH 9/30/15


TargetReview, eeyore: ICAL /chem/ms4v.i/29sep2015.b/v092906sim.d
File Search Edit Display Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 17:05
9 Chloroethane
11 Trichlorofluor
12 1,1-Dichloroeth
13 Freon 113
22 trans-1,2-Dich
21 MTBE
25 1,1-Dichloroeth
29 cis-1,2-Dichlo
32 Chloroform
34 1,1,1-Trichlor
35 Carbon Tetrach
36 Benzene
38 1,2-Dichloroeth
41 Trichloroethen
48 Toluene
49 trans-1,3-Dich
50 1,1,2-Trichlor
51 Tetrachloroeth
55 1,2-Dibromoeth
57 Chlorobenzene
58 Ethyl Benzene
59 m,p-Xylene
61 o-Xylene
67 1,1,2,2-Tetrach
72 1,3-Dichlorober
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Ion 107.00
Ion 109.00
HP MS v092906sim.d, Scan 632; 21.409 Min. (SUB)
Reference Spectrum for 1,2-Dibromoethane
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 21.409 4333 0.05629 0.05629 100
21.409 3941 91
2 21.732 617 0.008015 0.008015 100 a
21.732 645 105
- Mark 1,2-Dibromoethane Undetected.

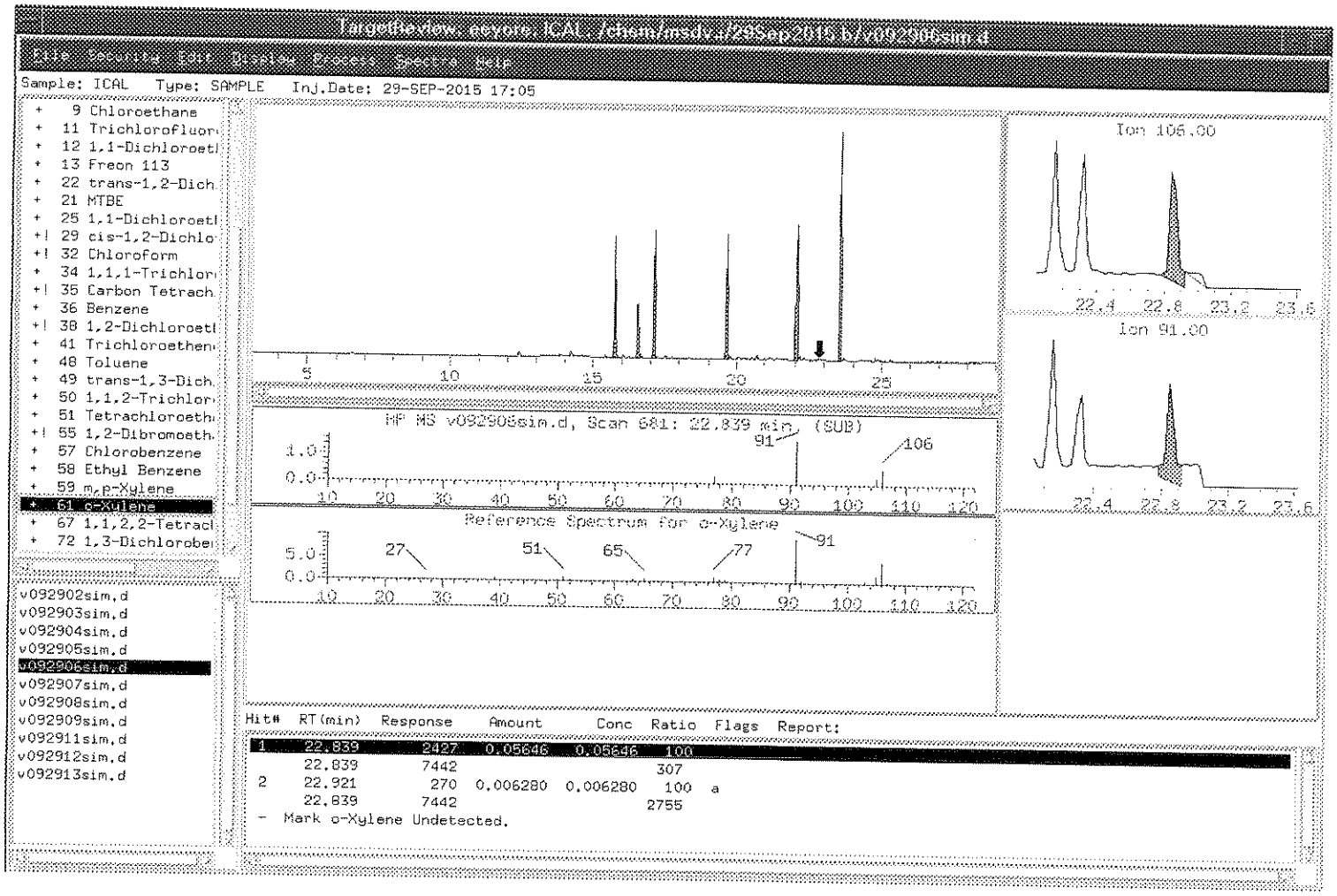
before



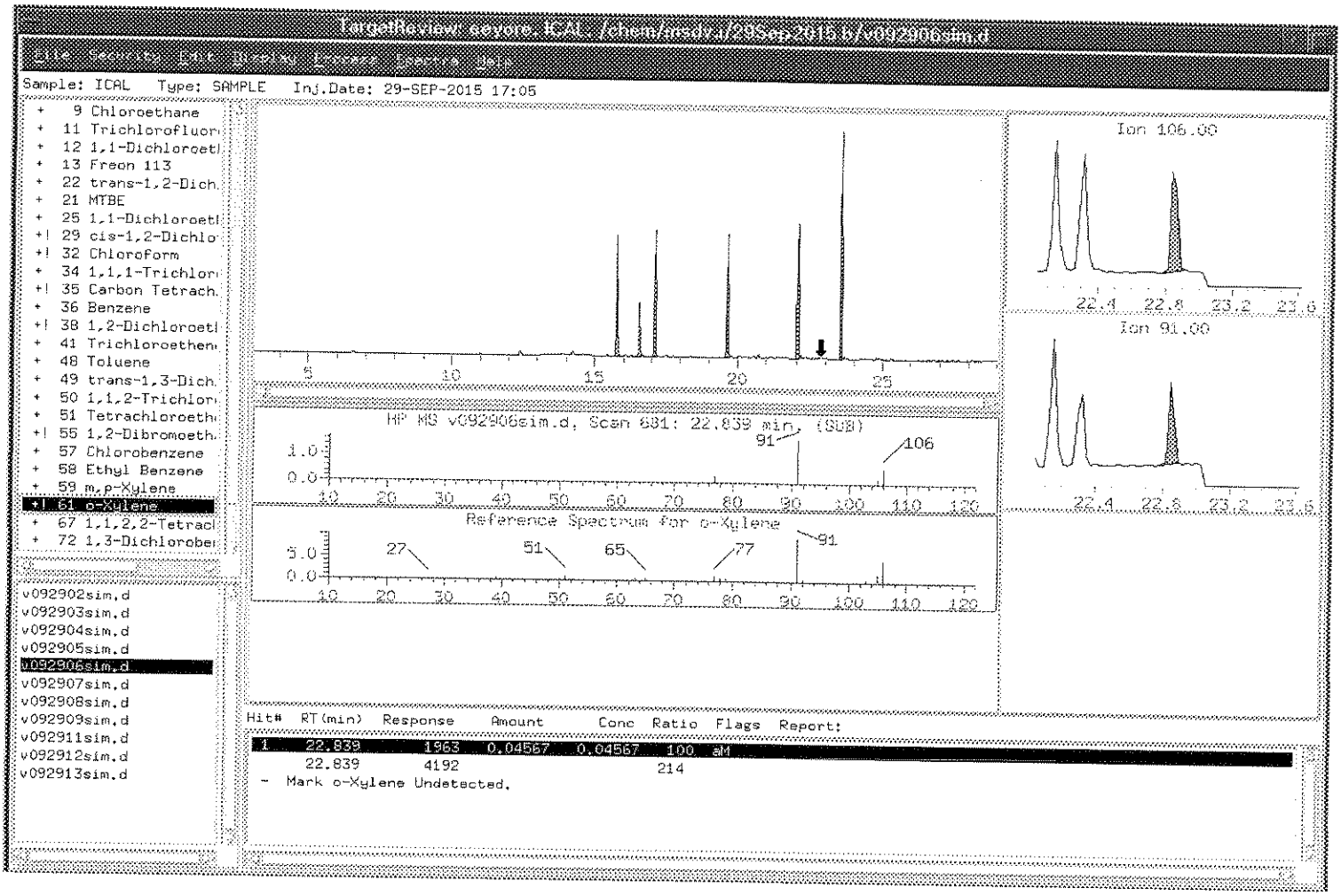
9/30/15
Ker

After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓ GH 9/30/15


TargetReview: eeyore: ICAL: /chem/msdv.i/29Sep2015.b/v092906sim.d
File Security Edit Display Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 17:05
+ 9 Chloroethane
+ 11 Trichlorofluor
+ 12 1,1-Dichloroetl
+ 13 Freon 113
+ 22 trans-1,2-Dich
+ 21 MTBE
+ 25 1,1-Dichloroetl
+! 29 cis-1,2-Dichlo
+! 32 Chloroform
+ 34 1,1,1-Trichlor
+! 35 Carbon Tetrach
+ 36 Benzene
+! 38 1,2-Dichloroetl
+ 41 Trichloroethen
+ 48 Toluene
+ 49 trans-1,3-Dich
+ 50 1,1,2-Trichlor
+ 51 Tetrachloroeth
+! 55 1,2-Dibromoeth
+ 57 Chlorobenzene
+ 58 Ethyl Benzene
+ 59 m,p-Xylene
+ 61 o-Xylene
+ 67 1,1,2,2-Tetrac
+ 72 1,3-Dichlorobe
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Ion 106.00
Ion 91.00
HP MS v092906sim.d, Scan 681: 22.839 min (SUB)
Reference Spectrum for o-Xylene
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 22.839 2427 0.05646 0.05646 100
22.839 7442 307
2 22.921 270 0.006280 0.006280 100 a
22.839 7442 2755
- Mark o-Xylene Undetected.

before

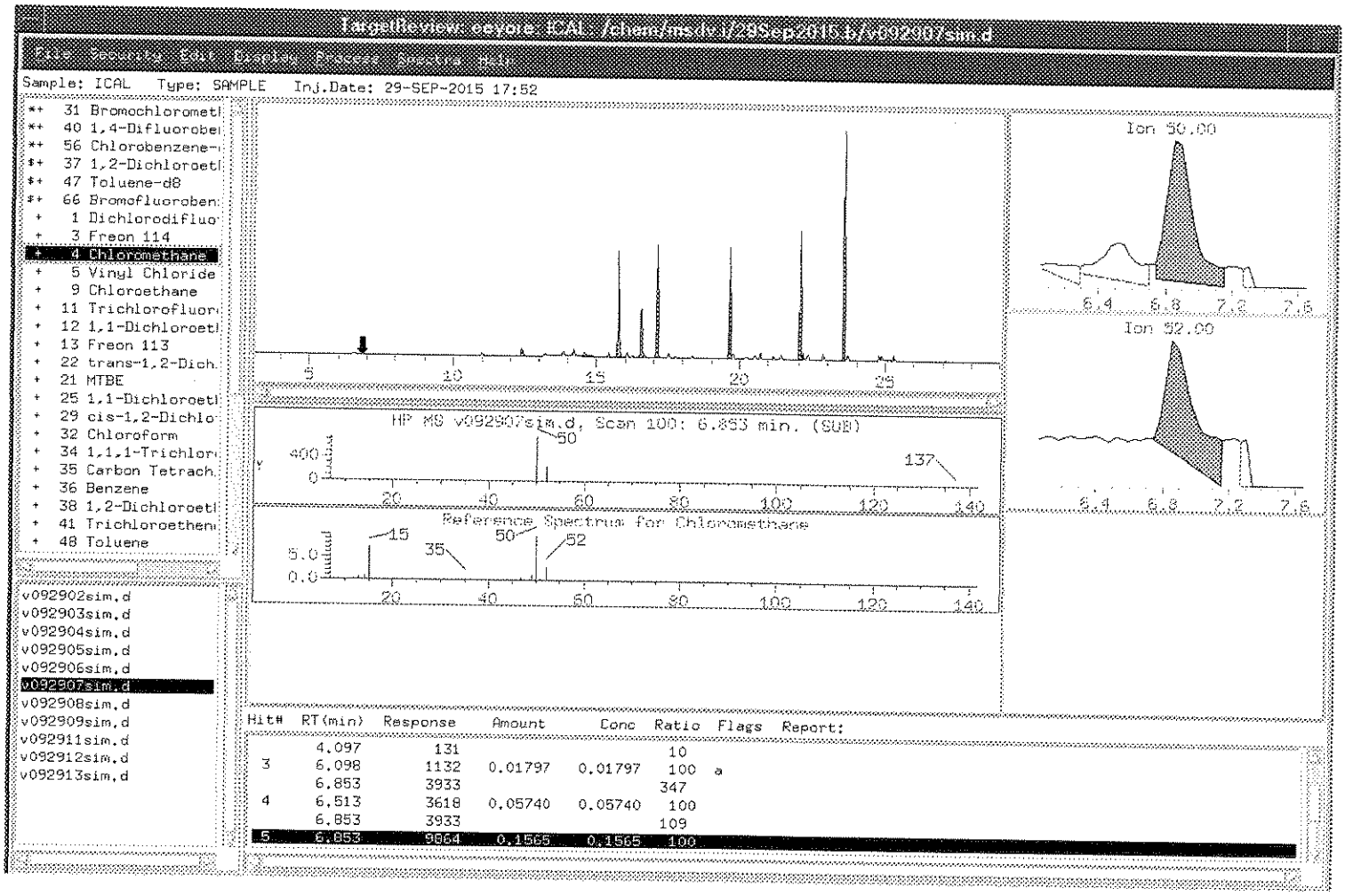


9/30/15
ACS

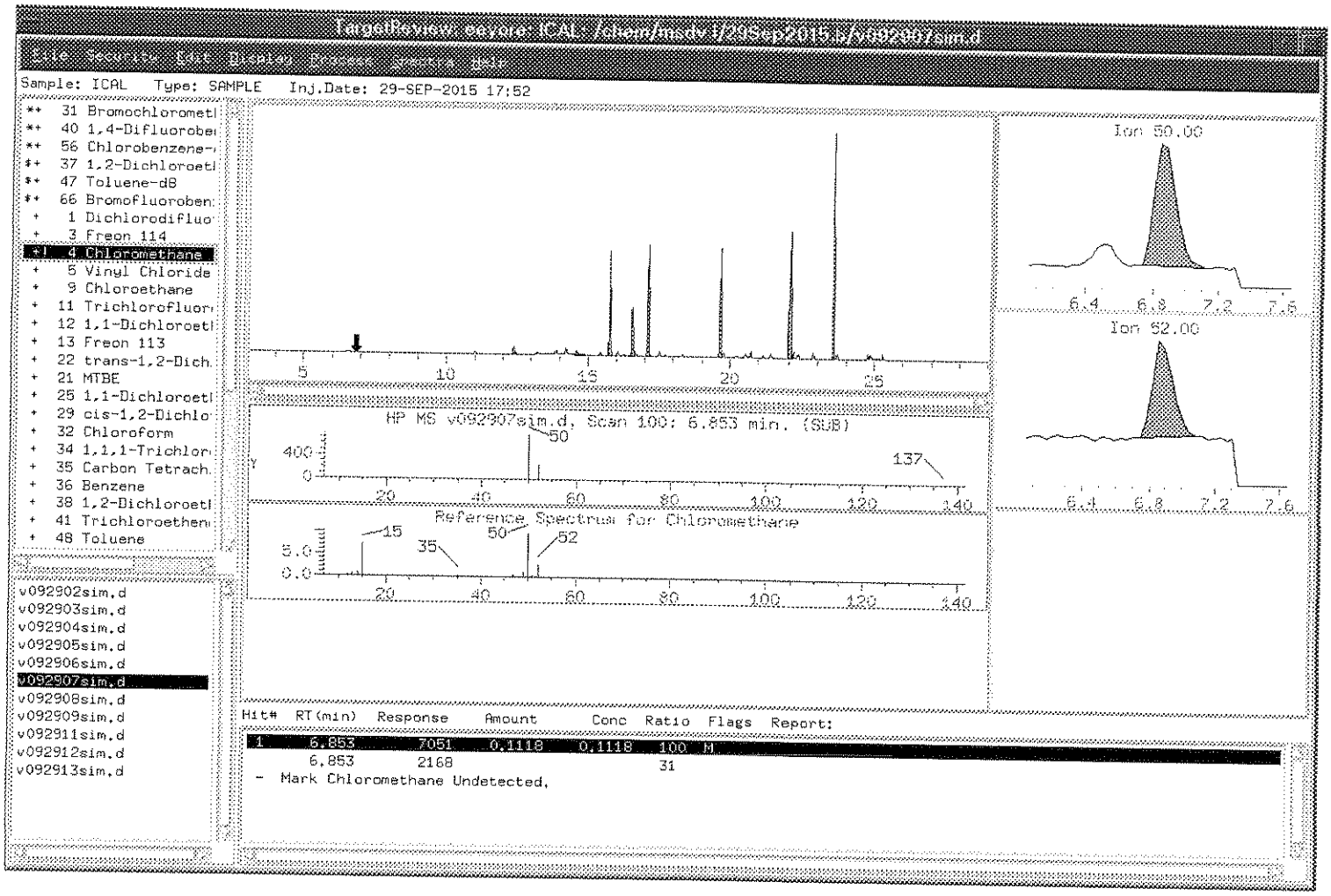
After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	

BHG 9/30/15


TargetReview: eeyore: ICAL: /chem/ms.dv/29Sep2015.b/v092907sim.d
File Results Edit Explain Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 17:52
** 31 Bromochlorometh
** 40 1,4-Difluorober
** 56 Chlorobenzene-
$+ 37 1,2-Dichloroeth
$+ 47 Toluene-d8
$+ 66 Bromofluoroben
+ 1 Dichlorodifluo
+ 3 Freon 114
+ 4 Chloromethane
+ 5 Vinyl Chloride
+ 9 Chloroethane
+ 11 Trichlorofluor
+ 12 1,1-Dichloroeth
+ 13 Freon 113
+ 22 trans-1,2-Dich
+ 21 MTBE
+ 25 1,1-Dichloroeth
+ 29 cis-1,2-Dichlo
+ 32 Chloroform
+ 34 1,1,1-Trichlor
+ 35 Carbon Tetrach
+ 36 Benzene
+ 38 1,2-Dichloroeth
+ 41 Trichloroethen
+ 48 Toluene
Ion 50.00
Ion 52.00
HP MS v092907sim.d, Scan 100: 6.853 min. (SUB)
Reference Spectrum for Chloromethane
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
4.097 131 10
3 6.098 1132 0.01797 0.01797 100 a
6.853 3933 347
4 6.513 3618 0.05740 0.05740 100
6.853 3933 109
5 6.853 9864 0.1565 0.1565 100

before

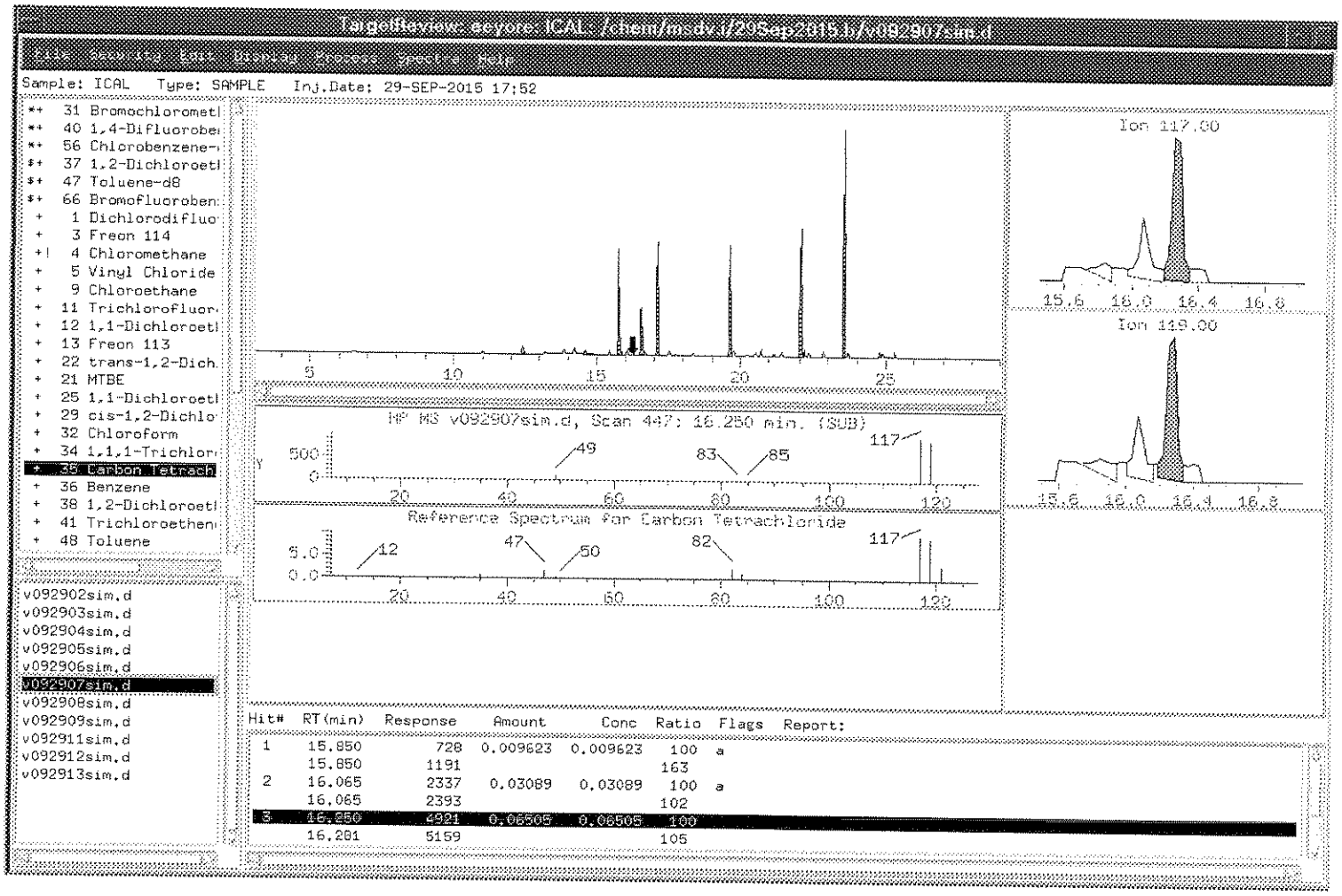


9/30/15
ACT

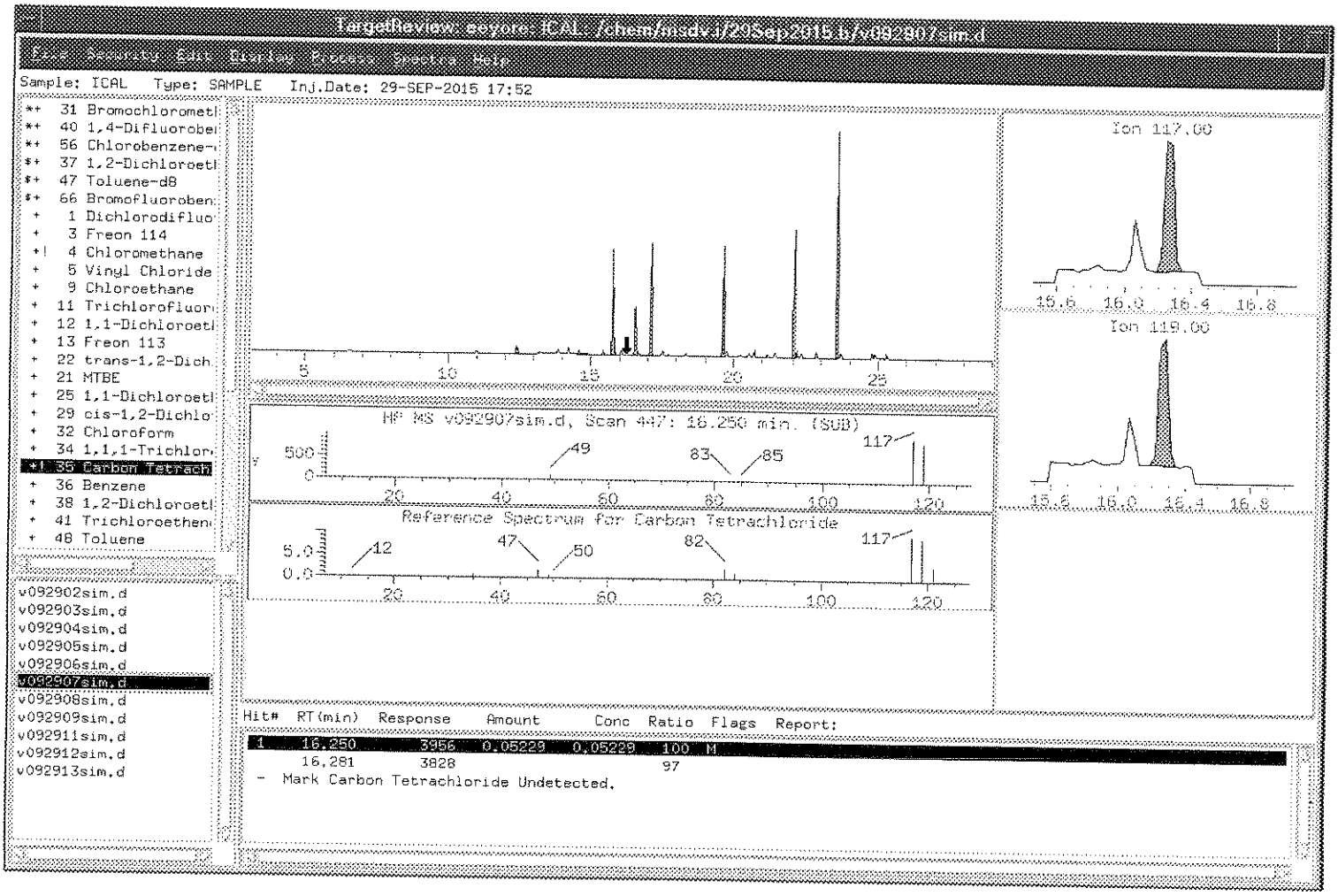
After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓

GKA 9/30/15


TargetReview: eeyore: ICAL /chem/ms.dv/f295qs2015.b/v092907sim.d
File Sequence Edit Display Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 17:52
*+ 31 Bromochlorometl
*+ 40 1,4-Difluorobe
*+ 56 Chlorobenzene-
$+ 37 1,2-Dichloroetl
$+ 47 Toluene-d8
$+ 66 Bromofluoroben
+ 1 Dichlorodifluo
+ 3 Freon 114
+! 4 Chloromethane
+ 5 Vinyl Chloride
+ 9 Chloroethane
+ 11 Trichlorofluor
+ 12 1,1-Dichloroetl
+ 13 Freon 113
+ 22 trans-1,2-Dich
+ 21 MTBE
+ 25 1,1-Dichloroetl
+ 29 cis-1,2-Dichlo
+ 32 Chloroform
+ 34 1,1,1-Trichlor
+ 35 Carbon Tetrach
+ 36 Benzene
+ 38 1,2-Dichloroetl
+ 41 Trichloroethen
+ 48 Toluene
5 10 15 20 25
Ion 117.00
15.6 16.0 16.4 16.8
Ion 119.00
15.6 16.0 16.4 16.8
HP MS v092907sim.d, Scan 447: 16.250 min. (SUB)
500
0
49 83 85 117
20 40 60 80 100 120
Reference Spectrum for Carbon Tetrachloride
5.0
0.0
12 47 50 82 117
20 40 60 80 100 120
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 15.850 728 0.009623 0.009623 100 a
15.850 1191 163
2 16.065 2337 0.03089 0.03089 100 a
16.065 2393 102
3 16.250 4921 0.06505 0.06505 100
16.281 5159 105

before

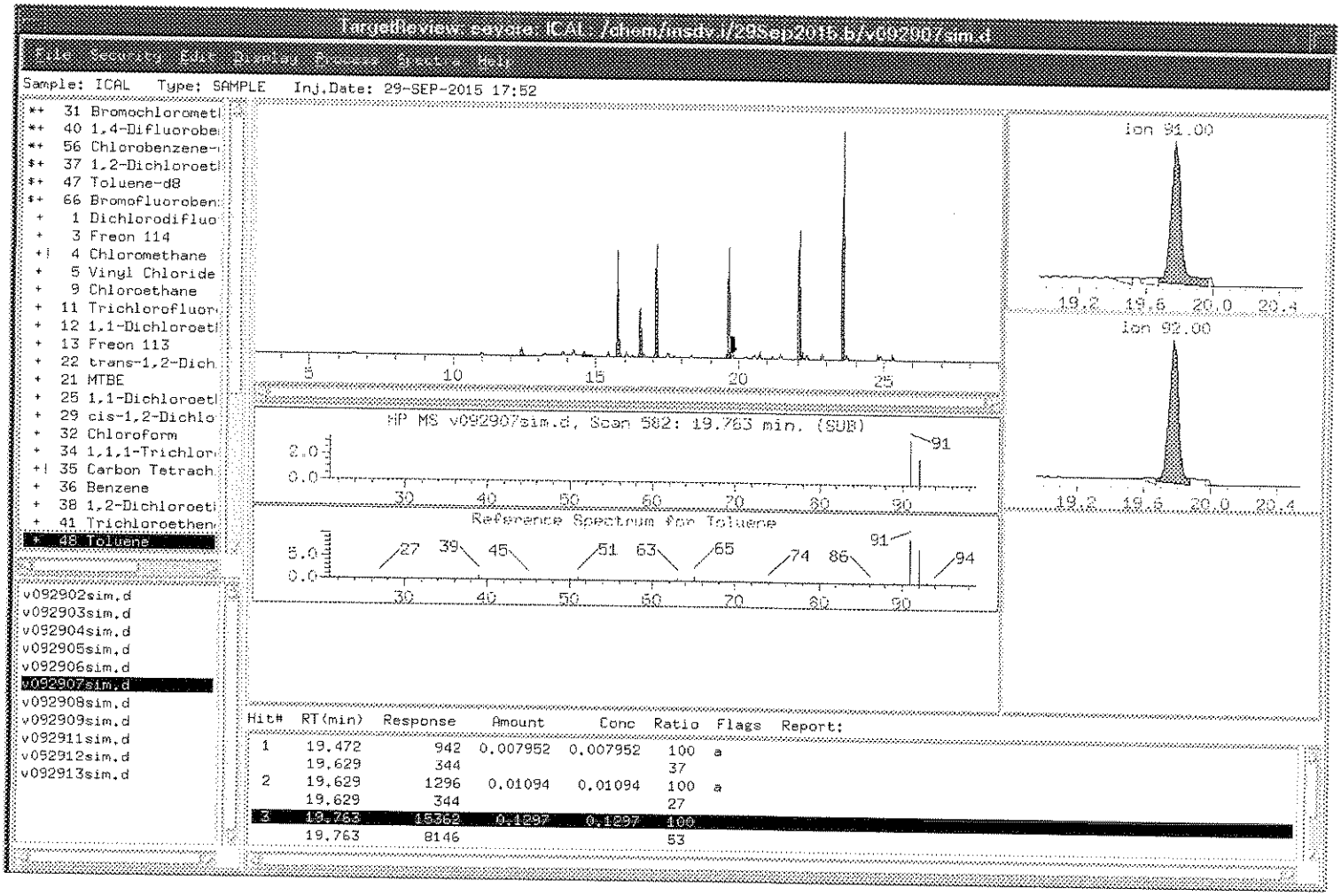


9/30/15
AKS

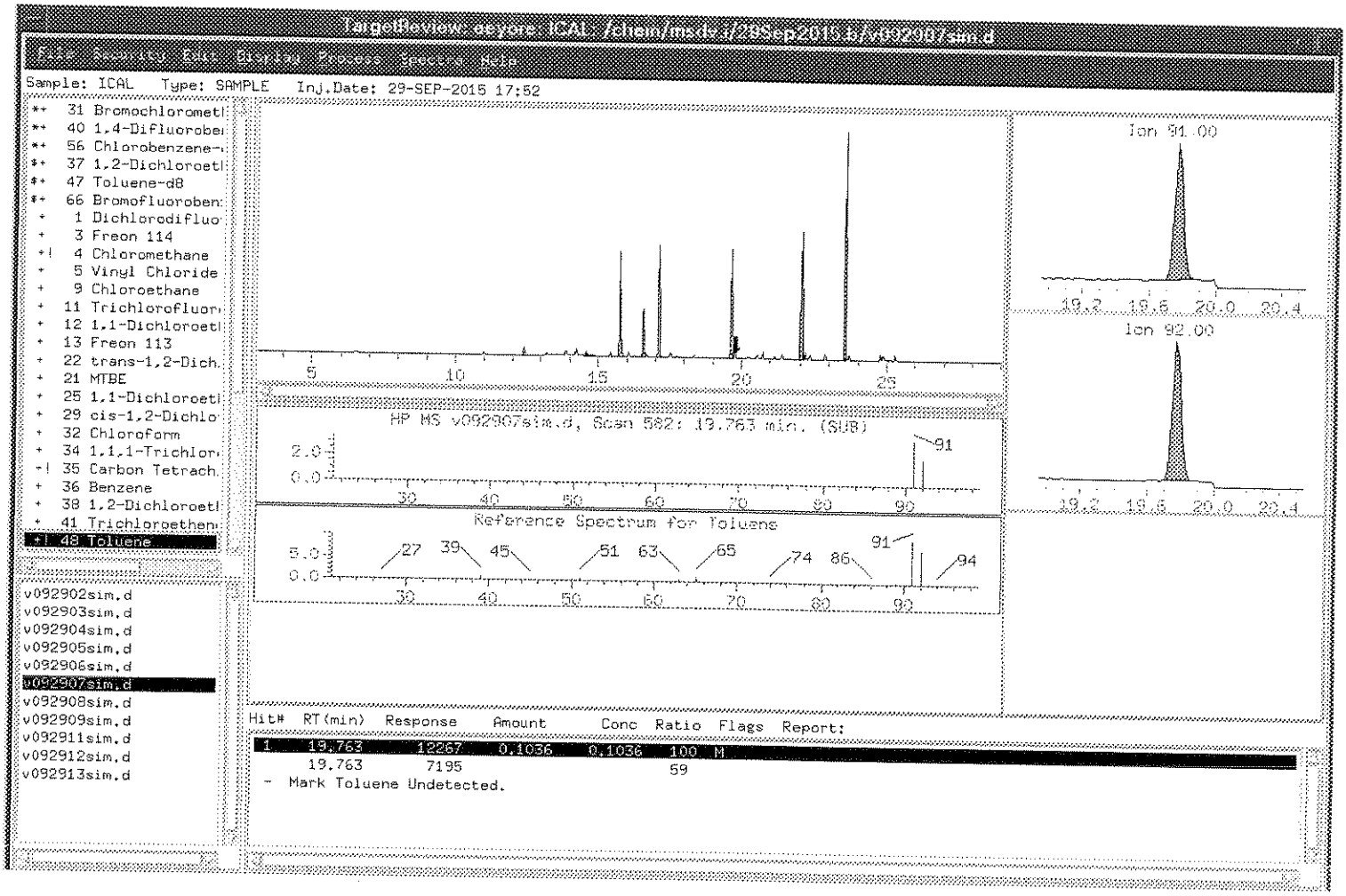
After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓

GH 9/30/15


TargetReview: Sayora: ICAL: /chem/insdv.i/29Sep2015.b/v092907sim.d
File Security Edit Display Process Spectra Help
Sample: ICAL Type: SAMPLE Inj.Date: 29-SEP-2015 17:52
*+ 31 Bromochlorometh
*+ 40 1,4-Difluorobe
*+ 56 Chlorobenzene-
$+ 37 1,2-Dichloroeth
$+ 47 Toluene-d8
$+ 66 Bromofluoroben
+ 1 Dichlorodifluo
+ 3 Freon 114
+! 4 Chloromethane
+ 5 Vinyl Chloride
+ 9 Chloroethane
+ 11 Trichlorofluor
+ 12 1,1-Dichloroeth
+ 13 Freon 113
+ 22 trans-1,2-Dich
+ 21 MTBE
+ 25 1,1-Dichloroeth
+ 29 cis-1,2-Dichlo
+ 32 Chloroform
+ 34 1,1,1-Trichlor
+! 35 Carbon Tetrach
+ 36 Benzene
+ 38 1,2-Dichloroeth
+ 41 Trichloroethen
* 48 Toluene
v092902sim.d
v092903sim.d
v092904sim.d
v092905sim.d
v092906sim.d
v092907sim.d
v092908sim.d
v092909sim.d
v092911sim.d
v092912sim.d
v092913sim.d
Ion 91.00
Ion 92.00
MP MS v092907sim.d, Scan 582: 19.763 min. (SUB)
Reference Spectrum for Toluene
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 19.472 942 0.007952 0.007952 100 a
19.629 344 37
2 19.629 1296 0.01094 0.01094 100 a
19.629 344 27
3 19.763 15362 0.1297 0.1297 100
19.763 8146 53

before



9/30/15

Ack

After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓ 9/30/15

Modified EPA Methods TO-14A/TO-15 SIM
Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane
Target Compounds:
Dichlorodifluoromethane (Fr12)
Freon 114
Chloromethane
Vinyl Chloride
Chloroethane
1,1-Dichloroethene
trans-1,2-Dichloroethene
Methyl tert-butyl ether
1,1-Dichloroethane
cis-1,2-Dichloroethene
Chloroform
1,1,1-Trichloroethane
Carbon Tetrachloride
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Trichloroethene
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
1,1,2-Trichloroethane
Tetrachloroethene
1,2-Dibromoethane
Ethyl Benzene
m,p-Xylene
o-Xylene
1,1,2,2-Tetrachloroethane
1,4-Dichlorobenzene
Naphthalene
Surrogates:
Bromofluorobenzene

Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/29Sep2015.b/v092916sim.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 30-SEP-2015 09:52
Operator : gh Inst ID: msdv.i
Smp Info : 25mL #2716-276
Misc Info : 5.0ppbv (25ppbv)
Comment : SIM GC-MS
Method : /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 01-Oct-2015 14:04 sblack Quant Type: ISTD
Cal Date : 29-SEP-2015 21:15 Cal File: v092912sim.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 31 Bromochloromethane					CAS #: 74-97-5		
15.757	15.757 (1.000)	130	91048	5.00000		80.00- 120.00	100.00
15.757	15.757 (1.000)	128	70745			48.13- 108.13	77.70
15.757	15.757 (1.000)	49	243672			238.09- 298.09	267.63
* 40 1,4-Difluorobenzene					CAS #: 540-36-3		
17.125	17.125 (1.000)	114	381818	5.00000		80.00- 120.00	100.00
17.125	17.125 (1.000)	88	55036			0.00- 44.50	14.41
* 56 Chlorobenzene-d5					CAS #: 3114-55-4		
22.042	22.042 (1.000)	117	330138	5.00000		80.00- 120.00	100.00
22.015	22.015 (1.000)	82	155008			16.61- 76.61	46.95
$ 37 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.548	16.548 (1.050)	65	149005	4.95880	4.959	80.00- 120.00	100.00
16.548	16.548 (1.050)	67	72645			19.91- 79.91	48.75
$ 47 Toluene-d8					CAS #: 2037-26-5		
19.629	19.629 (1.146)	98	309383	5.01497	5.015	80.00- 120.00	100.00
19.629	19.629 (1.146)	70	34218			0.00- 41.04	11.06

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.629	19.629 (1.146)	100	194576			32.99- 92.99	62.89
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	183279	4.98331	4.983	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	208238			84.02- 144.02	113.62
23.548	23.548 (1.068)	176	178753			67.56- 127.56	97.53
1 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.003	5.003 (0.318)	85	422576	5.53655	5.536	80.00- 120.00	100.00
5.003	5.003 (0.318)	87	135929			2.25- 62.25	32.17
3 Freon 114					CAS #: 76-14-2		
6.514	6.551 (0.413)	135	359820	5.64308	5.643	80.00- 120.00	100.00
6.514	6.551 (0.413)	137	113170			1.20- 61.20	31.45
4 Chloromethane					CAS #: 74-87-3		
6.853	6.891 (0.435)	50	330901	5.35495	5.355	80.00- 120.00	100.00
6.853	6.891 (0.435)	52	106989			0.99- 60.99	32.33
5 Vinyl Chloride					CAS #: 75-01-4		
7.809	7.840 (0.496)	62	233026	5.36345	5.363	80.00- 120.00	100.00
7.809	7.840 (0.496)	64	64613			0.00- 57.67	27.73
9 Chloroethane					CAS #: 75-00-3		
10.151	10.175 (0.644)	64	94553	5.89365	5.894	80.00- 120.00	100.00
10.151	10.175 (0.644)	66	25668			0.00- 57.14	27.15
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.994	10.994 (0.698)	101	468066	5.73047	5.730	80.00- 120.00	100.00
10.994	10.994 (0.698)	103	302790			34.66- 94.66	64.69
12 1,1-Dichloroethene					CAS #: 75-35-4		
12.400	12.399 (0.787)	98	112490	5.07109	5.071	80.00- 120.00	100.00
12.400	12.399 (0.787)	61	411220			331.89- 391.89	365.56
12.400	12.399 (0.787)	96	176705			127.52- 187.52	157.09
13 Freon 113					CAS #: 76-13-1		
12.400	12.427 (0.787)	151	324844	5.36812	5.368	80.00- 120.00	100.00
12.427	12.427 (0.789)	153	206299			34.11- 94.11	63.51
12.400	12.399 (0.787)	101	366078			83.01- 143.01	112.69
22 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.882	13.882 (0.881)	98	98207	4.08839	4.088	80.00- 120.00	100.00
13.882	13.882 (0.881)	61	325491			298.00- 358.00	331.43
13.882	13.882 (0.881)	96	155454			126.99- 186.99	158.29

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
21 MTBE					CAS #: 1634-04-4		
13.855	13.855 (0.879)	73	425340	5.54696	5.547	80.00- 120.00	100.00
13.828	13.827 (0.878)	57	194855			16.91- 76.91	45.81
13.828	13.827 (0.878)	41	173674			11.83- 71.83	40.83
25 1,1-Dichloroethane					CAS #: 75-34-3		
14.596	14.596 (0.926)	63	429100	5.52664	5.527	80.00- 120.00	100.00
14.596	14.596 (0.926)	65	118800			0.00- 57.70	27.69
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.437	15.437 (0.980)	98	138065	5.97009	5.970	80.00- 120.00	100.00
15.437	15.437 (0.980)	61	409470			264.63- 324.63	296.58
15.437	15.437 (0.980)	96	216760			126.49- 186.49	157.00
32 Chloroform					CAS #: 67-66-3		
15.819	15.819 (1.004)	83	361824	5.45637	5.456	80.00- 120.00	100.00
15.819	15.819 (1.004)	85	233875			34.82- 94.82	64.64
34 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.065	16.065 (1.020)	97	410953	5.44573	5.446	80.00- 120.00	100.00
16.065	16.065 (1.020)	99	263683			34.47- 94.47	64.16
35 Carbon Tetrachloride					CAS #: 56-23-5		
16.250	16.250 (1.031)	117	433810	9.27103	9.271	80.00- 120.00	100.00(R)
16.250	16.281 (1.031)	119	416643			65.73- 125.73	96.04
36 Benzene					CAS #: 71-43-2		
16.576	16.576 (0.968)	78	491289	4.85724	4.857	80.00- 120.00	100.00
16.576	16.576 (0.968)	77	111761			0.00- 52.79	22.75
38 1,2-Dichloroethane					CAS #: 107-06-2		
16.658	16.658 (0.973)	62	338409	5.66638	5.666	80.00- 120.00	100.00
16.658	16.658 (0.973)	64	99242			0.00- 59.27	29.33
41 Trichloroethene					CAS #: 79-01-6		
17.509	17.509 (1.022)	130	280811	4.70242	4.702	80.00- 120.00	100.00
17.509	17.509 (1.022)	95	265649			64.71- 124.71	94.60
17.509	17.509 (1.022)	97	171728			31.19- 91.19	61.15
48 Toluene					CAS #: 108-88-3		
19.764	19.764 (1.154)	91	605386	5.23087	5.231	80.00- 120.00	100.00
19.764	19.764 (1.154)	92	357082			28.99- 88.99	58.98
49 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.189	20.189 (0.916)	75	301966	5.74966	5.750	80.00- 120.00	100.00
20.189	20.189 (0.916)	77	96896			1.70- 61.70	32.09

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
50 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.548	20.548 (0.932)	97	249415	4.96139	4.961	80.00- 120.00	100.00
20.548	20.548 (0.932)	99	155207			32.61- 92.61	62.23
20.548	20.548 (0.932)	83	199652			49.96- 109.96	80.05
51 Tetrachloroethene					CAS #: 127-18-4		
20.728	20.727 (0.940)	166	375161	4.74364	4.744	80.00- 120.00	100.00
20.728	20.727 (0.940)	129	268468			41.60- 101.60	71.56
20.728	20.727 (0.940)	131	281602			45.07- 105.07	75.06
55 1,2-Dibromoethane					CAS #: 106-93-4		
21.409	21.409 (0.971)	107	396620	5.59883	5.599	80.00- 120.00	100.00
21.409	21.409 (0.971)	109	376398			64.60- 124.60	94.90
57 Chlorobenzene					CAS #: 108-90-7		
22.070	22.070 (1.001)	112	550800	5.48716	5.487	80.00- 120.00	100.00
22.070	22.070 (1.001)	114	176345			1.94- 61.94	32.02
22.070	22.070 (1.001)	77	273868			24.15- 84.15	49.72
58 Ethyl Benzene					CAS #: 100-41-4		
22.152	22.152 (1.005)	106	220896	5.45675	5.457	80.00- 120.00	100.00
22.152	22.152 (1.005)	91	731702			301.49- 361.49	331.24
59 m,p-Xylene					CAS #: 108-38-3		
22.317	22.317 (1.012)	106	230668	5.42568	5.426	80.00- 120.00	100.00
22.290	22.317 (1.011)	91	496811			185.00- 245.00	215.38
61 o-Xylene					CAS #: 95-47-6		
22.839	22.839 (1.036)	106	223100	5.55567	5.556	80.00- 120.00	100.00
22.839	22.839 (1.036)	91	510119			198.20- 258.20	228.65
67 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.677	23.677 (1.074)	83	441979	5.18793	5.188	80.00- 120.00	100.00
23.677	23.677 (1.074)	85	285019			34.54- 94.54	64.49
72 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.769	24.769 (1.124)	146	348636	4.91057	4.910	80.00- 120.00	100.00
24.769	24.769 (1.124)	148	224141			34.01- 94.01	64.29
24.769	24.769 (1.124)	111	135125			8.85- 68.85	38.76
73 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.859	24.859 (1.128)	146	307812	4.35610	4.356	80.00- 120.00	100.00
24.859	24.859 (1.128)	148	197112			34.02- 94.02	64.04
24.859	24.859 (1.128)	111	115064			7.95- 67.95	37.38
75 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.285	25.285 (1.147)	146	303411	4.91278	4.913	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
75 1,2-Dichlorobenzene (continued)							
25.285	25.285 (1.147)	148	193829			33.70- 93.70	63.88
25.285	25.285 (1.147)	111	120959			9.89- 69.89	39.87
78 Naphthalene					CAS #: 91-20-3		
27.415	27.415 (1.244)	128	35101	0.68868	0.6887	80.00- 120.00	100.00
27.415	27.415 (1.244)	127	4607			0.00- 42.90	13.12

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v092916sim.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 5.0ppbv (25ppbv)

Calibration Date: 29-SEP-2015
Calibration Time: 19:51
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	100126	60076	140176	91048	-9.07
40 1,4-Difluorobenze	412832	247699	577965	381818	-7.51
56 Chlorobenzene-d5	352453	211472	493434	330138	-6.33

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 29Sep2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: ICV Client Smp ID: ICV
Level: LOW Operator: gh
Data Type: MS DATA SampleType: LCS
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 5.0ppbv (25ppbv)

SPIKE	COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
1	Dichlorodifluorome	5.000	5.536	110.73	70-130
13	Freon 113	5.000	5.368	107.36	60-140
11	Trichlorofluoromet	5.000	5.730	114.61	60-140
3	Freon 114	5.000	5.643	112.86	70-130
4	Chloromethane	5.000	5.355	107.10	70-130
5	Vinyl Chloride	5.000	5.363	107.27	70-130
9	Chloroethane	5.000	5.894	117.87	70-130
12	1,1-Dichloroethene	5.000	5.071	101.42	70-130
21	MTBE	5.000	5.547	110.94	70-130
22	trans-1,2-Dichloro	5.000	4.088	81.77	70-130
25	1,1-Dichloroethane	5.000	5.527	110.53	70-130
29	cis-1,2-Dichloroet	5.000	5.970	119.40	70-130
32	Chloroform	5.000	5.456	109.13	70-130
34	1,1,1-Trichloroeth	5.000	5.446	108.91	70-130
35	Carbon Tetrachlori	5.000	9.271	185.42*	60-140
36	Benzene	5.000	4.857	97.14	70-130
38	1,2-Dichloroethane	5.000	5.666	113.33	70-130
41	Trichloroethene	5.000	4.702	94.05	70-130
48	Toluene	5.000	5.231	104.62	70-130
50	1,1,2-Trichloroeth	5.000	4.961	99.23	70-130
51	Tetrachloroethene	5.000	4.744	94.87	70-130
55	1,2-Dibromoethane	5.000	5.599	111.98	70-130
58	Ethyl Benzene	5.000	5.457	109.14	70-130
59	m,p-Xylene	5.000	5.426	108.51	70-130
61	o-Xylene	5.000	5.556	111.11	70-130
67	1,1,2,2-Tetrachlor	5.000	5.188	103.76	70-130
57	Chlorobenzene	5.000	5.487	109.74	60-140
49	trans-1,3-Dichloro	5.000	5.750	114.99	60-140
75	1,2-Dichlorobenzen	5.000	4.913	98.26	60-140
72	1,3-Dichlorobenzen	5.000	4.910	98.21	60-140
73	1,4-Dichlorobenzen	5.000	4.356	87.12	70-130
78	Naphthalene	0.5000	0.6887	137.74	60-140

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 29Sep2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: ICV Client Smp ID: ICV
Level: LOW Operator: gh
Data Type: MS DATA SampleType: LCS
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 5.0ppbv (25ppbv)

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 37 1,2-Dichloroethane	5.000	4.959	99.18	70-130
$ 47 Toluene-d8	5.000	5.015	100.30	70-130
$ 66 Bromofluorobenzene	5.000	4.983	99.67	70-130

Data File: /chem/msdv.i/29Sep2015.b/v092916sim.d

Date : 30-SEP-2015 09:52

Client ID: ICV

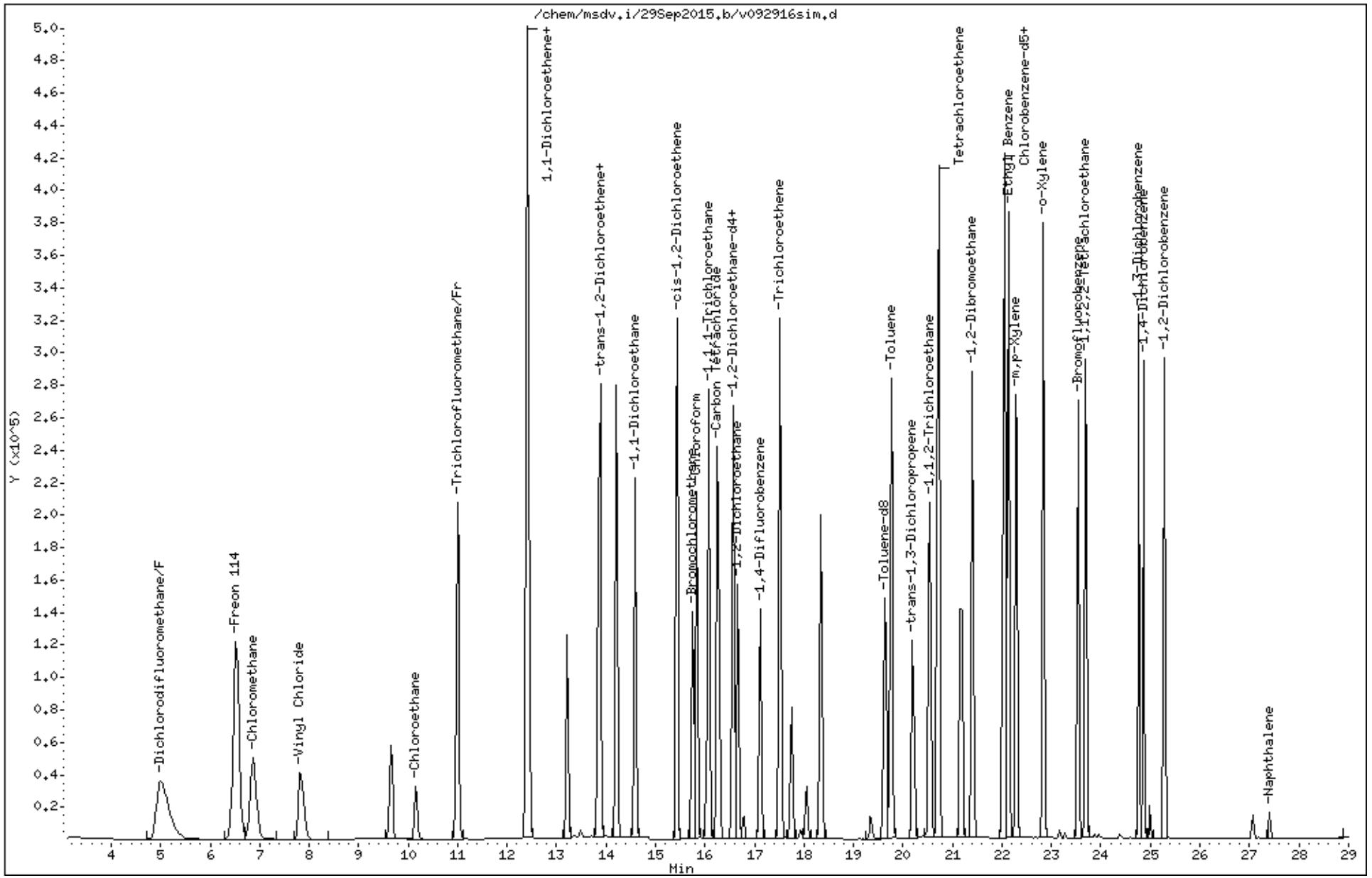
Sample Info: 25mL #2716-276

Column phase: RTx-624

Instrument: msdv.i

Operator: gh

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/29Sep2015.b/v092902sim.d
Lab Smp Id: ICAL Client Smp ID: Level # 1
Inj Date : 29-SEP-2015 13:55
Operator : db Inst ID: msdv.i
Smp Info : 15mL# 2736-248
Misc Info : 0.003ppbv (0.05ppbv)
Comment : SIM GC-MS
Method : /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 01-Oct-2015 14:04 sblack Quant Type: ISTD
Cal Date : 29-SEP-2015 13:55 Cal File: v092902sim.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 3pptv.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 31 Bromochloromethane					CAS #: 74-97-5			
15.757	15.757 (1.000)	130	96220	5.00000		80.00-	120.00	100.00
15.757	15.757 (1.000)	128	75422			48.13-	108.13	78.38
15.757	15.757 (1.000)	49	251439			238.09-	298.09	261.32
* 40 1,4-Difluorobenzene					CAS #: 540-36-3			
17.125	17.125 (1.000)	114	409212	5.00000		80.00-	120.00	100.00
17.125	17.125 (1.000)	88	59275			0.00-	44.50	14.49
* 56 Chlorobenzene-d5					CAS #: 3114-55-4			
22.042	22.042 (1.000)	117	345037	5.00000		80.00-	120.00	100.00
22.015	22.015 (1.000)	82	160709			16.61-	76.61	46.58
$ 37 1,2-Dichloroethane-d4					CAS #: 17060-07-0			
16.576	16.576 (1.052)	65	156950	5.00000	4.942	80.00-	120.00	100.00
16.576	16.576 (1.052)	67	70796			19.91-	79.91	45.11
$ 47 Toluene-d8					CAS #: 2037-26-5			
19.629	19.629 (1.146)	98	328358	5.00000	4.966	80.00-	120.00	100.00
19.629	19.629 (1.146)	70	36339			0.00-	41.04	11.07

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.651	19.651 (1.148)	100	206566			32.99- 92.99	62.91
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	188739	5.00000	4.910	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	215487			84.02- 144.02	114.17
23.548	23.548 (1.068)	176	184152			67.56- 127.56	97.57
51 Tetrachloroethene					CAS #: 127-18-4		
20.727	20.727 (0.940)	166	417	0.00300	0.005045	80.00- 120.00	100.00(a)
20.727	20.727 (0.940)	129	402			41.60- 101.60	96.40
20.727	20.727 (0.940)	131	314			45.07- 105.07	75.30

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Report Date: 01-Oct-2015 14:04

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v092902sim.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: db
Calibration Date: 29-SEP-2015
Calibration Time: 19:51
Client Smp ID: Level # 1
Level: LOW
Sample Type: AIR
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 0.003ppbv (0.05ppbv)

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	100126	60076	140176	96220	-3.90
40 1,4-Difluorobenze	412832	247699	577965	409212	-0.88
56 Chlorobenzene-d5	352453	211472	493434	345037	-2.10

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/29Sep2015.b/v092902sim.d

Date : 29-SEP-2015 13:55

Client ID: Level # 1

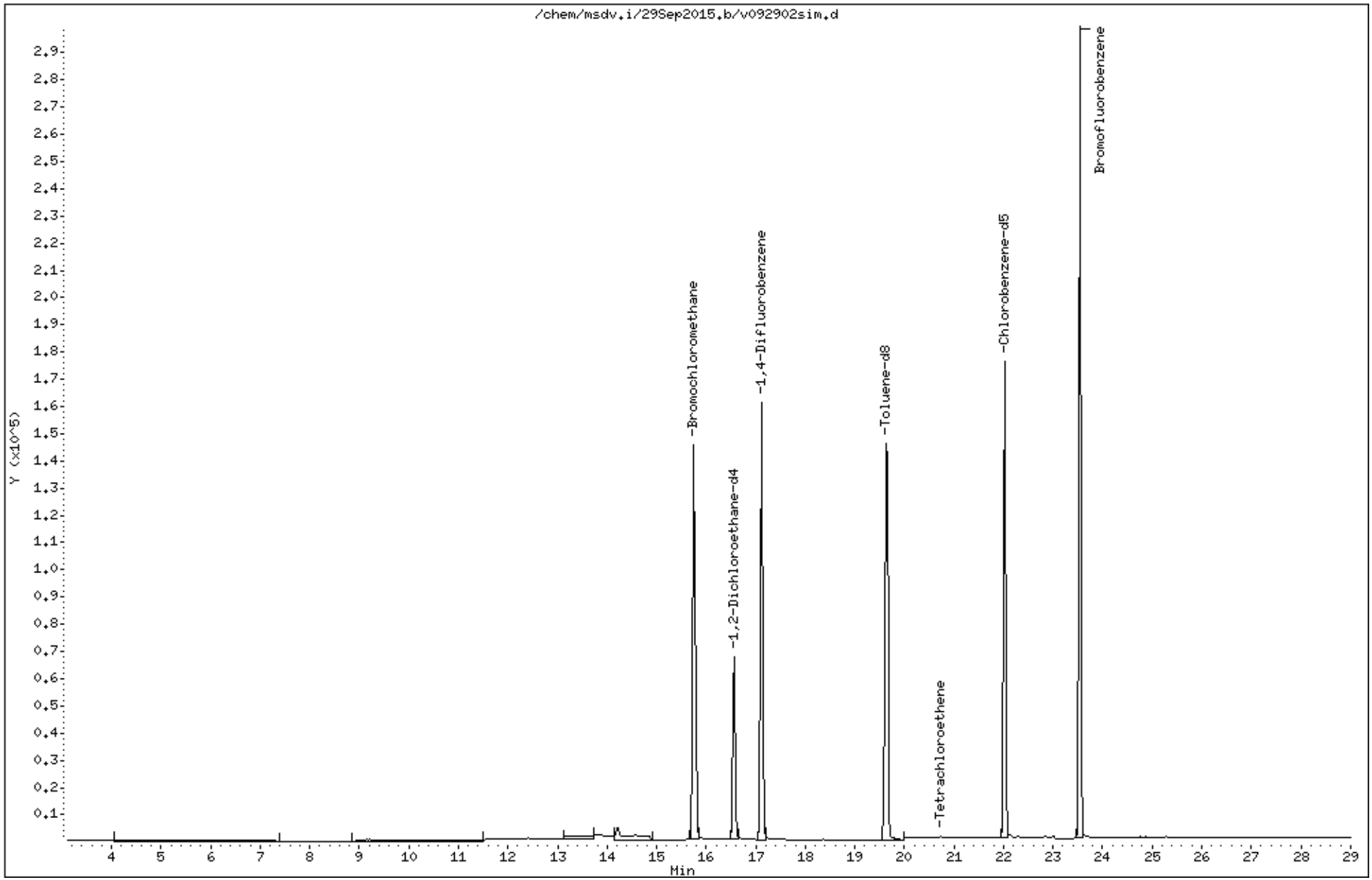
Instrument: msdv.i

Sample Info: 15mL# 2736-248

Operator: db

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/29Sep2015.b/v092903sim.d
Lab Smp Id: ICAL Client Smp ID: Level # 2
Inj Date : 29-SEP-2015 14:34
Operator : db Inst ID: msdv.i
Smp Info : 25mL# 2736-248
Misc Info : 0.005ppbv (0.05ppbv)
Comment : SIM GC-MS
Method : /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 01-Oct-2015 14:04 sblack Quant Type: ISTD
Cal Date : 29-SEP-2015 14:34 Cal File: v092903sim.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 5pptv.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 31 Bromochloromethane						CAS #: 74-97-5		
15.757	15.757 (1.000)	130	96430	5.00000		80.00- 120.00		100.00
15.757	15.757 (1.000)	128	74505			48.13- 108.13		77.26
15.757	15.757 (1.000)	49	248774			238.09- 298.09		257.98
* 40 1,4-Difluorobenzene						CAS #: 540-36-3		
17.125	17.125 (1.000)	114	406566	5.00000		80.00- 120.00		100.00
17.125	17.125 (1.000)	88	58646			0.00- 44.50		14.42
* 56 Chlorobenzene-d5						CAS #: 3114-55-4		
22.042	22.042 (1.000)	117	344505	5.00000		80.00- 120.00		100.00
22.015	22.015 (1.000)	82	160461			16.61- 76.61		46.58
$ 37 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
16.576	16.576 (1.052)	65	155006	5.00000	4.871	80.00- 120.00		100.00
16.576	16.576 (1.052)	67	69750			19.91- 79.91		45.00
$ 47 Toluene-d8						CAS #: 2037-26-5		
19.629	19.629 (1.146)	98	329371	5.00000	5.014	80.00- 120.00		100.00
19.629	19.629 (1.146)	70	37843			0.00- 41.04		11.49

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.629	19.629 (1.146)	100	208354			32.99- 92.99	63.26
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	190738	5.00000	4.970	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	217013			84.02- 144.02	113.78
23.548	23.548 (1.068)	176	185880			67.56- 127.56	97.45
22 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.910	13.910 (0.883)	98	143	0.00500	0.005621	80.00- 120.00	100.00(a)
13.910	13.910 (0.883)	61	408			298.00- 358.00	285.31
13.910	13.910 (0.883)	96	336			126.99- 186.99	234.97
32 Chloroform					CAS #: 67-66-3		
15.819	15.819 (1.004)	83	379	0.00500	0.005396	80.00- 120.00	100.00(aM)
15.850	15.850 (1.006)	85	272			34.82- 94.82	71.77
36 Benzene					CAS #: 71-43-2		
16.576	16.576 (0.968)	78	833	0.00500	0.007734	80.00- 120.00	100.00(a)
16.576	16.576 (0.968)	77	258			0.00- 52.79	30.97
38 1,2-Dichloroethane					CAS #: 107-06-2		
16.686	16.686 (0.974)	62	297	0.00500	0.004670	80.00- 120.00	100.00(aM)
16.576	16.576 (0.968)	64	1615			0.00- 59.27	543.77
41 Trichloroethene					CAS #: 79-01-6		
17.509	17.509 (1.022)	130	568	0.00500	0.008933	80.00- 120.00	100.00(a)
17.509	17.509 (1.022)	95	499			64.71- 124.71	87.85
17.509	17.509 (1.022)	97	624			31.19- 91.19	109.86
51 Tetrachloroethene					CAS #: 127-18-4		
20.727	20.727 (0.940)	166	544	0.00500	0.006592	80.00- 120.00	100.00(a)
20.727	20.727 (0.940)	129	385			41.60- 101.60	70.77
20.727	20.727 (0.940)	131	572			45.07- 105.07	105.15
55 1,2-Dibromoethane					CAS #: 106-93-4		
21.409	21.409 (0.971)	107	436	0.00500	0.005898	80.00- 120.00	100.00(aM)
21.409	21.409 (0.971)	109	525			64.60- 124.60	120.41
73 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.881	24.881 (1.129)	146	451	0.00500	0.006116	80.00- 120.00	100.00(aM)
24.881	24.881 (1.129)	148	355			34.02- 94.02	78.71
24.859	24.859 (1.128)	111	162			7.95- 67.95	35.92
67 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.677	23.677 (1.074)	83	541	0.00500	0.006085	80.00- 120.00	100.00(a)

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
67 1,1,2,2-Tetrachloroethane (continued)							
23.703	23.703 (1.075)	85	377			34.54- 94.54	69.69

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Report Date: 01-Oct-2015 14:04

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v092903sim.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: db
Calibration Date: 29-SEP-2015
Calibration Time: 19:51
Client Smp ID: Level # 2
Level: LOW
Sample Type: AIR
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 0.005ppbv (0.05ppbv)

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	100126	60076	140176	96430	-3.69
40 1,4-Difluorobenze	412832	247699	577965	406566	-1.52
56 Chlorobenzene-d5	352453	211472	493434	344505	-2.26

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/29Sep2015.b/v092903sim.d

Date : 29-SEP-2015 14:34

Client ID: Level # 2

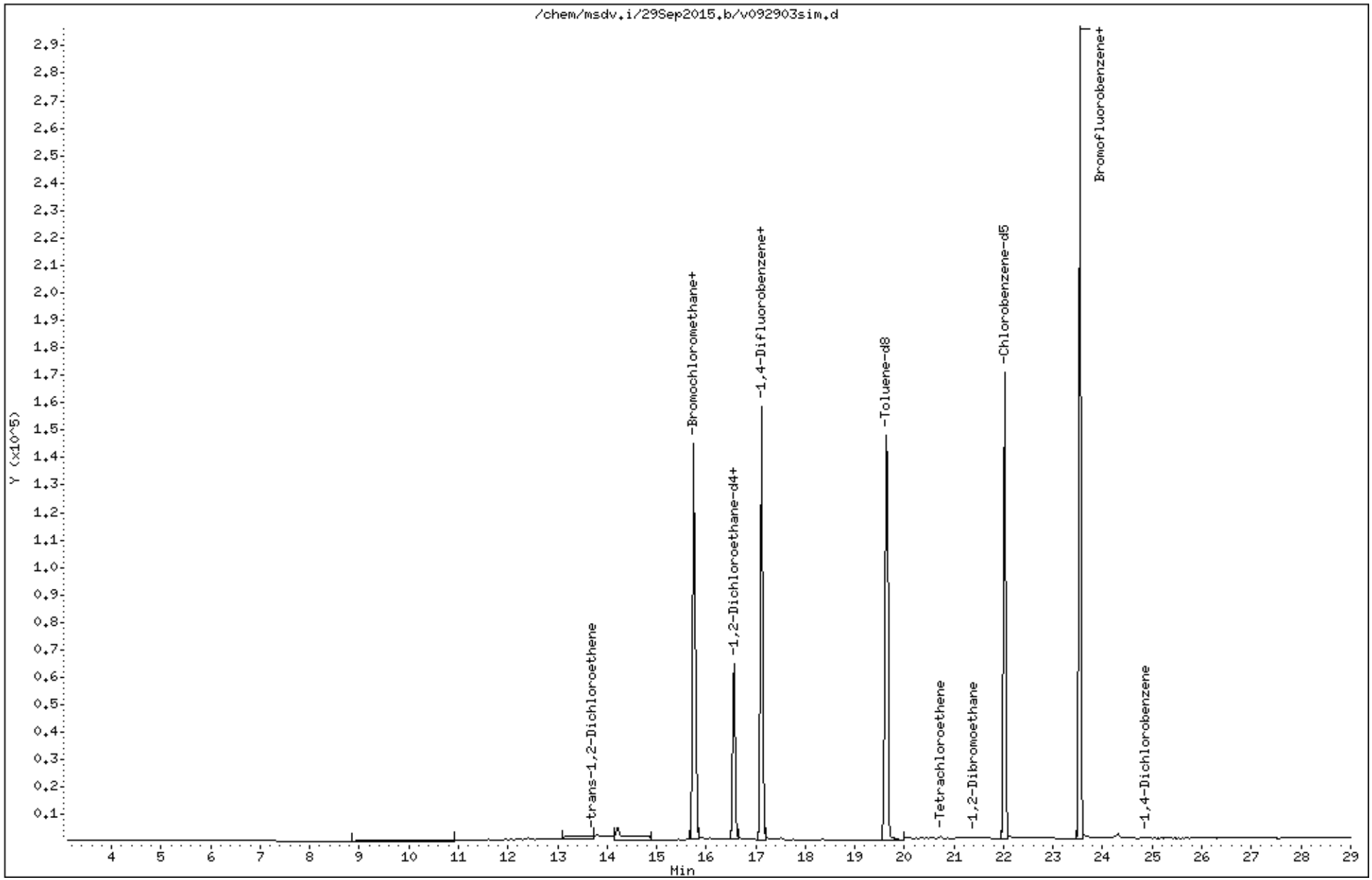
Instrument: msdv.i

Sample Info: 25mL# 2736-248

Operator: db

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/29Sep2015.b/v092904sim.d
Lab Smp Id: ICAL Client Smp ID: Level # 3
Inj Date : 29-SEP-2015 15:09
Operator : db Inst ID: msdv.i
Smp Info : 50mL# 2736-248
Misc Info : 0.01ppbv (0.05ppbv)
Comment : SIM GC-MS
Method : /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 01-Oct-2015 14:04 sblack Quant Type: ISTD
Cal Date : 29-SEP-2015 15:09 Cal File: v092904sim.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 10pptv.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 31 Bromochloromethane						CAS #: 74-97-5	
15.757	15.757 (1.000)	130	96150	5.00000		80.00- 120.00	100.00
15.757	15.757 (1.000)	128	74797			48.13- 108.13	77.79
15.757	15.757 (1.000)	49	251827			238.09- 298.09	261.91
* 40 1,4-Difluorobenzene						CAS #: 540-36-3	
17.125	17.125 (1.000)	114	409626	5.00000		80.00- 120.00	100.00
17.125	17.125 (1.000)	88	59446			0.00- 44.50	14.51
* 56 Chlorobenzene-d5						CAS #: 3114-55-4	
22.042	22.042 (1.000)	117	356632	5.00000		80.00- 120.00	100.00
22.015	22.015 (1.000)	82	166436			16.61- 76.61	46.67
$ 37 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.548	16.548 (1.050)	65	155830	5.00000	4.911	80.00- 120.00	100.00
16.576	16.576 (1.052)	67	70673			19.91- 79.91	45.35
$ 47 Toluene-d8						CAS #: 2037-26-5	
19.629	19.629 (1.146)	98	332286	5.00000	5.020	80.00- 120.00	100.00
19.629	19.629 (1.146)	70	38237			0.00- 41.04	11.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.629	19.629 (1.146)	100	210404			32.99- 92.99	63.32
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	197625	5.00000	4.974	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	224244			84.02- 144.02	113.47
23.548	23.548 (1.068)	176	193536			67.56- 127.56	97.93
5 Vinyl Chloride					CAS #: 75-01-4		
7.809	7.809 (0.496)	62	567	0.01000	0.01236	80.00- 120.00	100.00
7.840	7.840 (0.498)	64	247			0.00- 57.67	43.56
12 1,1-Dichloroethene					CAS #: 75-35-4		
12.399	12.399 (0.787)	98	281	0.01000	0.01200	80.00- 120.00	100.00
12.399	12.399 (0.787)	61	1013			331.89- 391.89	360.50
12.399	12.399 (0.787)	96	493			127.52- 187.52	175.44
22 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.910	13.910 (0.883)	98	385	0.01000	0.01518	80.00- 120.00	100.00
13.882	13.882 (0.881)	61	838			298.00- 358.00	217.66
13.910	13.910 (0.883)	96	632			126.99- 186.99	164.16
25 1,1-Dichloroethane					CAS #: 75-34-3		
14.596	14.596 (0.926)	63	853	0.01000	0.01040	80.00- 120.00	100.00
14.596	14.596 (0.926)	65	862			0.00- 57.70	101.06
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.437	15.437 (0.980)	98	266	0.01000	0.01089	80.00- 120.00	100.00(M)
15.437	15.437 (0.980)	61	703			264.63- 324.63	264.29
15.437	15.437 (0.980)	96	507			126.49- 186.49	190.60
32 Chloroform					CAS #: 67-66-3		
15.819	15.819 (1.004)	83	732	0.01000	0.01045	80.00- 120.00	100.00(M)
15.819	15.819 (1.004)	85	490			34.82- 94.82	66.94
34 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.065	16.065 (1.020)	97	808	0.01000	0.01014	80.00- 120.00	100.00
16.065	16.065 (1.020)	99	589			34.47- 94.47	72.90
35 Carbon Tetrachloride					CAS #: 56-23-5		
16.250	16.250 (1.031)	117	337	0.01000	0.006820	80.00- 120.00	100.00(aM)
16.281	16.281 (1.033)	119	325			65.73- 125.73	96.44
36 Benzene					CAS #: 71-43-2		
16.576	16.576 (0.968)	78	1362	0.01000	0.01255	80.00- 120.00	100.00
16.576	16.576 (0.968)	77	1662			0.00- 52.79	122.03

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
38 1,2-Dichloroethane					CAS #: 107-06-2		
16.686	16.686 (0.974)	62	570	0.01000	0.008896	80.00- 120.00	100.00(aM)
16.686	16.686 (0.974)	64	324			0.00- 59.27	56.84
41 Trichloroethene					CAS #: 79-01-6		
17.509	17.509 (1.022)	130	764	0.01000	0.01192	80.00- 120.00	100.00
17.509	17.509 (1.022)	95	700			64.71- 124.71	91.62
17.509	17.509 (1.022)	97	533			31.19- 91.19	69.76
48 Toluene					CAS #: 108-88-3		
19.764	19.764 (1.154)	91	1466	0.01000	0.01181	80.00- 120.00	100.00
19.764	19.764 (1.154)	92	840			28.99- 88.99	57.30
50 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.548	20.548 (0.932)	97	845	0.01000	0.01556	80.00- 120.00	100.00
20.548	20.548 (0.932)	99	368			32.61- 92.61	43.55
20.548	20.548 (0.932)	83	573			49.96- 109.96	67.81
51 Tetrachloroethene					CAS #: 127-18-4		
20.727	20.727 (0.940)	166	899	0.01000	0.01052	80.00- 120.00	100.00
20.727	20.727 (0.940)	129	716			41.60- 101.60	79.64
20.727	20.727 (0.940)	131	718			45.07- 105.07	79.87
55 1,2-Dibromoethane					CAS #: 106-93-4		
21.409	21.409 (0.971)	107	693	0.01000	0.009056	80.00- 120.00	100.00(aM)
21.409	21.409 (0.971)	109	725			64.60- 124.60	104.62
58 Ethyl Benzene					CAS #: 100-41-4		
22.152	22.152 (1.005)	106	459	0.01000	0.01050	80.00- 120.00	100.00
22.152	22.152 (1.005)	91	2181			301.49- 361.49	475.16
59 m,p-Xylene					CAS #: 108-38-3		
22.317	22.317 (1.012)	106	510	0.01000	0.01110	80.00- 120.00	100.00
22.317	22.317 (1.012)	91	1162			185.00- 245.00	227.84
61 o-Xylene					CAS #: 95-47-6		
22.866	22.866 (1.037)	106	410	0.01000	0.009451	80.00- 120.00	100.00(aM)
22.839	22.839 (1.036)	91	886			198.20- 258.20	216.10
67 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.677	23.677 (1.074)	83	962	0.01000	0.01045	80.00- 120.00	100.00
23.703	23.703 (1.075)	85	628			34.54- 94.54	65.28
73 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.881	24.881 (1.129)	146	1135	0.01000	0.01487	80.00- 120.00	100.00
24.881	24.881 (1.129)	148	988			34.02- 94.02	87.05

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
73 1,4-Dichlorobenzene (continued)							
24.859	24.859 (1.128)	111	774			7.95- 67.95	68.19

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Report Date: 01-Oct-2015 14:04

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v092904sim.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: db
Calibration Date: 29-SEP-2015
Calibration Time: 19:51
Client Smp ID: Level # 3
Level: LOW
Sample Type: AIR
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 0.01ppbv (0.05ppbv)

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	100126	60076	140176	96150	-3.97
40 1,4-Difluorobenze	412832	247699	577965	409626	-0.78
56 Chlorobenzene-d5	352453	211472	493434	356632	1.19

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/29Sep2015.b/v092904sim.d

Date : 29-SEP-2015 15:09

Client ID: Level # 3

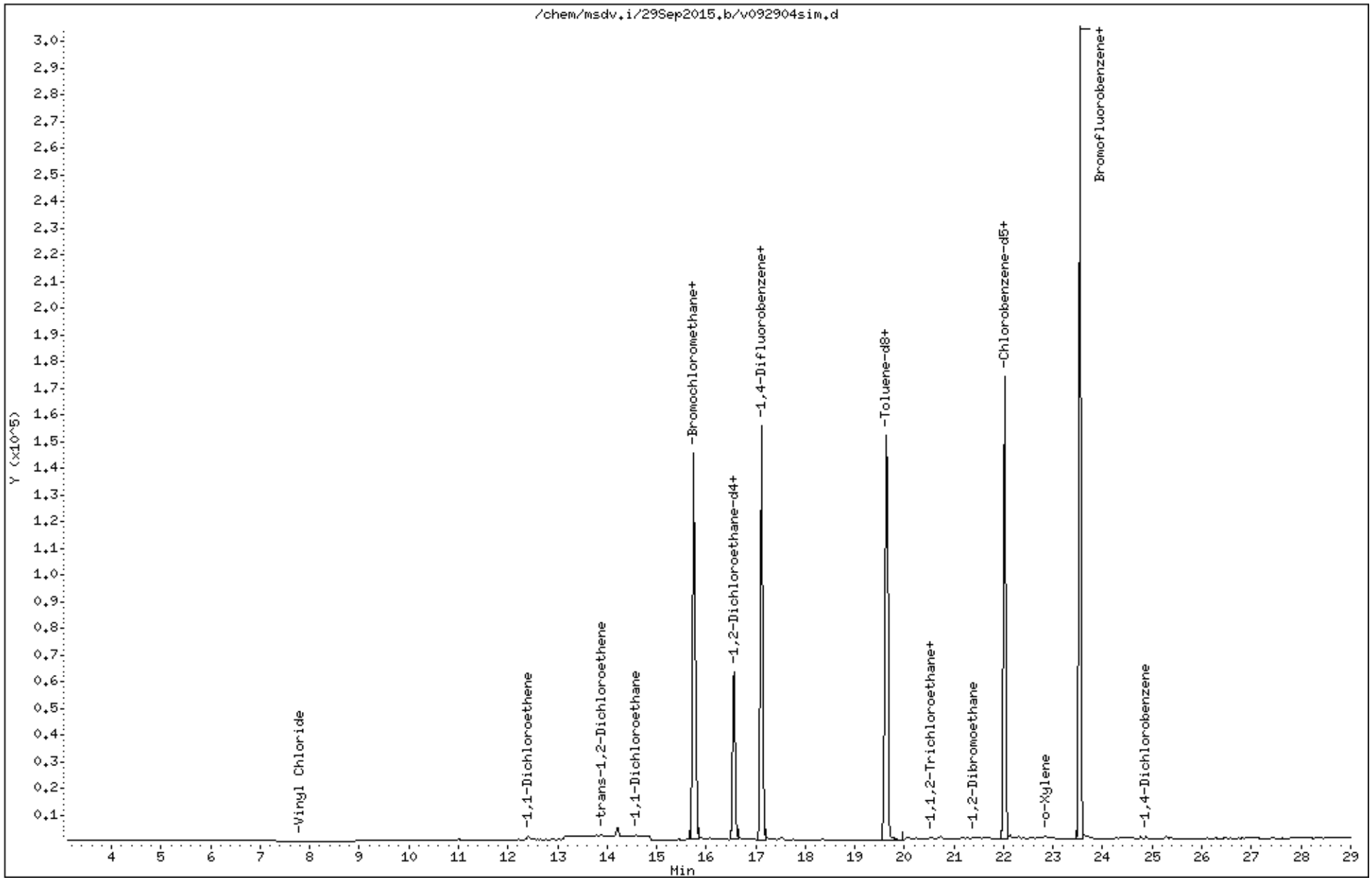
Instrument: msdv.i

Sample Info: 50mL# 2736-248

Operator: db

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/29Sep2015.b/v092905sim.d
Lab Smp Id: ICAL Client Smp ID: Level # 4
Inj Date : 29-SEP-2015 15:44
Operator : db Inst ID: msdv.i
Smp Info : 100mL# 2736-248
Misc Info : 0.02ppbv (0.05ppbv)
Comment : SIM GC-MS
Method : /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 01-Oct-2015 14:04 sblack Quant Type: ISTD
Cal Date : 29-SEP-2015 15:44 Cal File: v092905sim.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 20.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 31 Bromochloromethane						CAS #: 74-97-5	
15.757	15.757 (1.000)	130	95484	5.00000		80.00- 120.00	100.00
15.757	15.757 (1.000)	128	74258			48.13- 108.13	77.77
15.757	15.757 (1.000)	49	250975			238.09- 298.09	262.85
* 40 1,4-Difluorobenzene						CAS #: 540-36-3	
17.125	17.125 (1.000)	114	406466	5.00000		80.00- 120.00	100.00
17.125	17.125 (1.000)	88	59143			0.00- 44.50	14.55
* 56 Chlorobenzene-d5						CAS #: 3114-55-4	
22.042	22.042 (1.000)	117	343542	5.00000		80.00- 120.00	100.00
22.015	22.015 (1.000)	82	159667			16.61- 76.61	46.48
$ 37 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.576	16.576 (1.052)	65	156502	5.00000	4.966	80.00- 120.00	100.00
16.576	16.576 (1.052)	67	71228			19.91- 79.91	45.51
$ 47 Toluene-d8						CAS #: 2037-26-5	
19.629	19.629 (1.146)	98	329542	5.00000	5.018	80.00- 120.00	100.00
19.629	19.629 (1.146)	70	36133			0.00- 41.04	10.96

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.629	19.629 (1.146)	100	206700			32.99- 92.99	62.72
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	184839	5.00000	4.830	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	209229			84.02- 144.02	113.20
23.548	23.548 (1.068)	176	179736			67.56- 127.56	97.24
1 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.003	5.003 (0.318)	85	1828	0.02000	0.02284	80.00- 120.00	100.00
5.041	5.041 (0.320)	87	804			2.25- 62.25	43.98
3 Freon 114					CAS #: 76-14-2		
6.513	6.513 (0.413)	135	1481	0.02000	0.02215	80.00- 120.00	100.00
6.513	6.513 (0.413)	137	491			1.20- 61.20	33.15
4 Chloromethane					CAS #: 74-87-3		
6.891	6.891 (0.437)	50	1363	0.02000	0.02103	80.00- 120.00	100.00(M)
6.891	6.891 (0.437)	52	668			0.99- 60.99	49.01
5 Vinyl Chloride					CAS #: 75-01-4		
7.840	7.840 (0.498)	62	997	0.02000	0.02188	80.00- 120.00	100.00
7.840	7.840 (0.498)	64	251			0.00- 57.67	25.18
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.994	10.994 (0.698)	101	1764	0.02000	0.02059	80.00- 120.00	100.00
11.018	11.018 (0.699)	103	1076			34.66- 94.66	61.00
12 1,1-Dichloroethene					CAS #: 75-35-4		
12.399	12.399 (0.787)	98	629	0.02000	0.02704	80.00- 120.00	100.00
12.399	12.399 (0.787)	61	1781			331.89- 391.89	283.15
12.399	12.399 (0.787)	96	919			127.52- 187.52	146.10
13 Freon 113					CAS #: 76-13-1		
12.427	12.427 (0.789)	151	1333	0.02000	0.02100	80.00- 120.00	100.00
12.427	12.427 (0.789)	153	886			34.11- 94.11	66.47
12.427	12.427 (0.789)	101	1470			83.01- 143.01	110.28
22 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.910	13.910 (0.883)	98	550	0.02000	0.02183	80.00- 120.00	100.00
13.882	13.882 (0.881)	61	1510			298.00- 358.00	274.55
13.910	13.910 (0.883)	96	810			126.99- 186.99	147.27
21 MTBE					CAS #: 1634-04-4		
13.855	13.855 (0.879)	73	1690	0.02000	0.02102	80.00- 120.00	100.00
13.855	13.855 (0.879)	57	841			16.91- 76.91	49.76

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
21 MTBE (continued)							
13.827	13.827 (0.878)	41	1036			11.83- 71.83	61.30
25 1,1-Dichloroethane					CAS #: 75-34-3		
14.596	14.596 (0.926)	63	1683	0.02000	0.02067	80.00- 120.00	100.00
14.596	14.596 (0.926)	65	1006			0.00- 57.70	59.77
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.437	15.437 (0.980)	98	536	0.02000	0.02210	80.00- 120.00	100.00(M)
15.437	15.437 (0.980)	61	1437			264.63- 324.63	268.10
15.437	15.437 (0.980)	96	741			126.49- 186.49	138.25
32 Chloroform					CAS #: 67-66-3		
15.819	15.819 (1.004)	83	1215	0.02000	0.01747	80.00- 120.00	100.00(M)
15.819	15.819 (1.004)	85	765			34.82- 94.82	62.96
34 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.065	16.065 (1.020)	97	1575	0.02000	0.01990	80.00- 120.00	100.00
16.065	16.065 (1.020)	99	1043			34.47- 94.47	66.22
35 Carbon Tetrachloride					CAS #: 56-23-5		
16.250	16.250 (1.031)	117	671	0.02000	0.01367	80.00- 120.00	100.00(M)
16.281	16.281 (1.033)	119	642			65.73- 125.73	95.68
36 Benzene					CAS #: 71-43-2		
16.576	16.576 (0.968)	78	2268	0.02000	0.02106	80.00- 120.00	100.00
16.576	16.576 (0.968)	77	889			0.00- 52.79	39.20
38 1,2-Dichloroethane					CAS #: 107-06-2		
16.658	16.658 (0.973)	62	1512	0.02000	0.02378	80.00- 120.00	100.00
16.658	16.658 (0.973)	64	1275			0.00- 59.27	84.33
41 Trichloroethene					CAS #: 79-01-6		
17.509	17.509 (1.022)	130	1260	0.02000	0.01982	80.00- 120.00	100.00
17.509	17.509 (1.022)	95	1184			64.71- 124.71	93.97
17.509	17.509 (1.022)	97	884			31.19- 91.19	70.16
48 Toluene					CAS #: 108-88-3		
19.763	19.763 (1.154)	91	2608	0.02000	0.02117	80.00- 120.00	100.00
19.763	19.763 (1.154)	92	2238			28.99- 88.99	85.81
49 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.225	20.225 (0.918)	75	921	0.02000	0.01685	80.00- 120.00	100.00(M)
20.225	20.225 (0.918)	77	284			1.70- 61.70	30.84
50 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.548	20.548 (0.932)	97	1218	0.02000	0.02328	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
50 1,1,2-Trichloroethane (continued)							
20.548	20.548 (0.932)	99	690			32.61- 92.61	56.65
20.548	20.548 (0.932)	83	1287			49.96- 109.96	105.67
51 Tetrachloroethene					CAS #: 127-18-4		
20.727	20.727 (0.940)	166	1601	0.02000	0.01945	80.00- 120.00	100.00
20.727	20.727 (0.940)	129	1185			41.60- 101.60	74.02
20.727	20.727 (0.940)	131	1240			45.07- 105.07	77.45
55 1,2-Dibromoethane					CAS #: 106-93-4		
21.409	21.409 (0.971)	107	1356	0.02000	0.01839	80.00- 120.00	100.00(M)
21.409	21.409 (0.971)	109	1086			64.60- 124.60	80.09
57 Chlorobenzene					CAS #: 108-90-7		
22.070	22.070 (1.001)	112	2149	0.02000	0.02057	80.00- 120.00	100.00
22.070	22.070 (1.001)	114	828			1.94- 61.94	38.53
22.015	22.015 (0.999)	77	3882			24.15- 84.15	180.64
58 Ethyl Benzene					CAS #: 100-41-4		
22.152	22.152 (1.005)	106	846	0.02000	0.02008	80.00- 120.00	100.00
22.152	22.152 (1.005)	91	3536			301.49- 361.49	417.97
59 m,p-Xylene					CAS #: 108-38-3		
22.317	22.317 (1.012)	106	920	0.02000	0.02080	80.00- 120.00	100.00
22.317	22.317 (1.012)	91	2138			185.00- 245.00	232.39
61 o-Xylene					CAS #: 95-47-6		
22.838	22.838 (1.036)	106	843	0.02000	0.02017	80.00- 120.00	100.00(M)
22.838	22.838 (1.036)	91	2047			198.20- 258.20	242.82
67 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.677	23.677 (1.074)	83	1815	0.02000	0.02047	80.00- 120.00	100.00
23.703	23.703 (1.075)	85	1137			34.54- 94.54	62.64
72 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.769	24.769 (1.124)	146	1919	0.02000	0.02597	80.00- 120.00	100.00
24.769	24.769 (1.124)	148	2530			34.01- 94.01	131.84
24.769	24.769 (1.124)	111	1085			8.85- 68.85	56.54
73 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.881	24.881 (1.129)	146	1828	0.02000	0.02486	80.00- 120.00	100.00
24.881	24.881 (1.129)	148	1307			34.02- 94.02	71.50
24.859	24.859 (1.128)	111	850			7.95- 67.95	46.50
75 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.285	25.285 (1.147)	146	1545	0.02000	0.02404	80.00- 120.00	100.00

				AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
RT	EXP RT (REL RT)	MASS	RESPONSE				
==	====== ========	====	========	=======	=======	==========	=====
75 1,2-Dichlorobenzene (continued)							
25.285	25.285 (1.147)	148	1057			33.70- 93.70	68.41
25.285	25.285 (1.147)	111	696			9.89- 69.89	45.05

QC Flag Legend

M - Compound response manually integrated.

Report Date: 01-Oct-2015 14:04

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v092905sim.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: db
Calibration Date: 29-SEP-2015
Calibration Time: 19:51
Client Smp ID: Level # 4
Level: LOW
Sample Type: AIR
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 0.02ppbv (0.05ppbv)

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	100126	60076	140176	95484	-4.64
40 1,4-Difluorobenze	412832	247699	577965	406466	-1.54
56 Chlorobenzene-d5	352453	211472	493434	343542	-2.53

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/29Sep2015.b/v092905sim.d

Date : 29-SEP-2015 15:44

Client ID: Level # 4

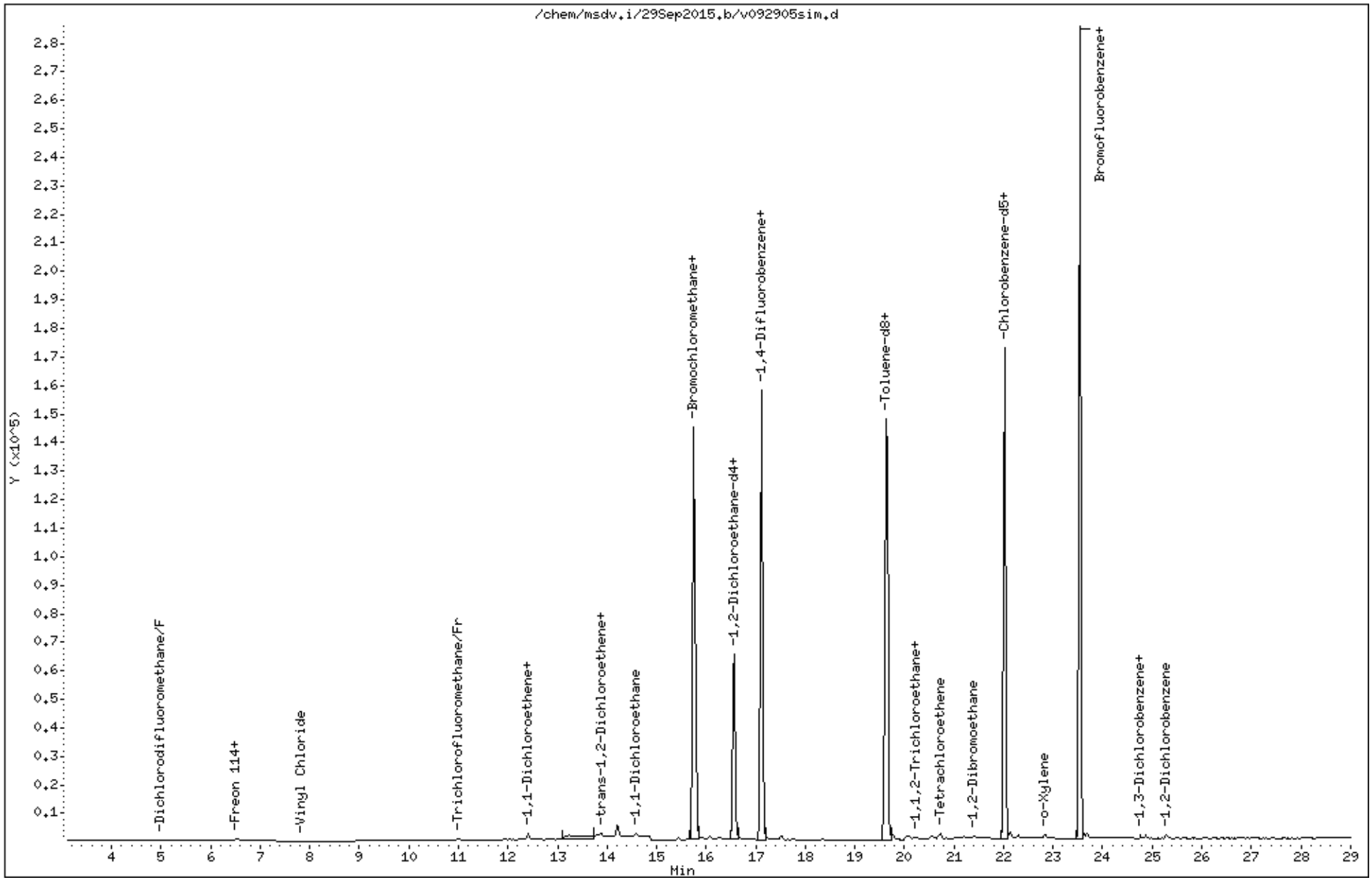
Instrument: msdv.i

Sample Info: 100mL# 2736-248

Operator: db

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/29Sep2015.b/v092906sim.d
Lab Smp Id: ICAL Client Smp ID: Level # 5
Inj Date : 29-SEP-2015 17:05
Operator : gh Inst ID: msdv.i
Smp Info : 250mL# 2736-248
Misc Info : 0.05ppbv (0.05ppbv)
Comment : SIM GC-MS
Method : /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 01-Oct-2015 14:04 sblack Quant Type: ISTD
Cal Date : 29-SEP-2015 17:05 Cal File: v092906sim.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HiLoCRV.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 31 Bromochloromethane						CAS #: 74-97-5	
15.757	15.757 (1.000)	130	94554	5.00000		80.00- 120.00	100.00
15.757	15.757 (1.000)	128	73511			48.13- 108.13	77.74
15.757	15.757 (1.000)	49	250834			238.09- 298.09	265.28
* 40 1,4-Difluorobenzene						CAS #: 540-36-3	
17.125	17.125 (1.000)	114	405408	5.00000		80.00- 120.00	100.00
17.125	17.125 (1.000)	88	58749			0.00- 44.50	14.49
* 56 Chlorobenzene-d5						CAS #: 3114-55-4	
22.042	22.042 (1.000)	117	341133	5.00000		80.00- 120.00	100.00
22.015	22.015 (1.000)	82	160766			16.61- 76.61	47.13
$ 37 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.548	16.548 (1.050)	65	157167	5.00000	5.036	80.00- 120.00	100.00
16.576	16.576 (1.052)	67	71083			19.91- 79.91	45.23
$ 47 Toluene-d8						CAS #: 2037-26-5	
19.629	19.629 (1.146)	98	325575	5.00000	4.970	80.00- 120.00	100.00
19.629	19.629 (1.146)	70	35955			0.00- 41.04	11.04

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.629	19.629 (1.146)	100	204327			32.99- 92.99	62.76
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	182680	5.00000	4.807	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	208237			84.02- 144.02	113.99
23.548	23.548 (1.068)	176	177610			67.56- 127.56	97.22
1 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.041	5.041 (0.320)	85	4100	0.05000	0.05172	80.00- 120.00	100.00
5.003	5.003 (0.318)	87	464			2.25- 62.25	11.32
3 Freon 114					CAS #: 76-14-2		
6.551	6.551 (0.416)	135	3267	0.05000	0.04934	80.00- 120.00	100.00(a)
6.551	6.551 (0.416)	137	937			1.20- 61.20	28.68
4 Chloromethane					CAS #: 74-87-3		
6.929	6.929 (0.440)	50	3325	0.05000	0.05181	80.00- 120.00	100.00(M)
6.929	6.929 (0.440)	52	815			0.99- 60.99	24.51
5 Vinyl Chloride					CAS #: 75-01-4		
7.841	7.841 (0.498)	62	2184	0.05000	0.04840	80.00- 120.00	100.00(a)
7.872	7.872 (0.500)	64	630			0.00- 57.67	28.85
9 Chloroethane					CAS #: 75-00-3		
10.175	10.175 (0.646)	64	870	0.05000	0.05222	80.00- 120.00	100.00
10.175	10.175 (0.646)	66	265			0.00- 57.14	30.46
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.994	10.994 (0.698)	101	4083	0.05000	0.04813	80.00- 120.00	100.00
11.018	11.018 (0.699)	103	2922			34.66- 94.66	71.57
12 1,1-Dichloroethene					CAS #: 75-35-4		
12.400	12.400 (0.787)	98	1061	0.05000	0.04606	80.00- 120.00	100.00(a)
12.400	12.400 (0.787)	61	3942			331.89- 391.89	371.54
12.400	12.400 (0.787)	96	2111			127.52- 187.52	198.96
13 Freon 113					CAS #: 76-13-1		
12.427	12.427 (0.789)	151	3172	0.05000	0.05047	80.00- 120.00	100.00
12.427	12.427 (0.789)	153	2068			34.11- 94.11	65.20
12.400	12.400 (0.787)	101	3655			83.01- 143.01	115.23
22 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.910	13.910 (0.883)	98	1227	0.05000	0.04919	80.00- 120.00	100.00(a)
13.882	13.882 (0.881)	61	3679			298.00- 358.00	299.84
13.910	13.910 (0.883)	96	1736			126.99- 186.99	141.48

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
21 MTBE					CAS #: 1634-04-4		
13.855	13.855 (0.879)	73	3907	0.05000	0.04906	80.00- 120.00	100.00(a)
13.855	13.855 (0.879)	57	3264			16.91- 76.91	83.54
13.855	13.855 (0.879)	41	3057			11.83- 71.83	78.24
25 1,1-Dichloroethane					CAS #: 75-34-3		
14.596	14.596 (0.926)	63	3829	0.05000	0.04749	80.00- 120.00	100.00(a)
14.596	14.596 (0.926)	65	1712			0.00- 57.70	44.71
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.437	15.437 (0.980)	98	1100	0.05000	0.04580	80.00- 120.00	100.00(aM)
15.437	15.437 (0.980)	61	3183			264.63- 324.63	289.36
15.437	15.437 (0.980)	96	1712			126.49- 186.49	155.64
32 Chloroform					CAS #: 67-66-3		
15.819	15.819 (1.004)	83	3258	0.05000	0.04731	80.00- 120.00	100.00(aM)
15.819	15.819 (1.004)	85	2095			34.82- 94.82	64.30
34 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.065	16.065 (1.020)	97	4253	0.05000	0.05427	80.00- 120.00	100.00
16.065	16.065 (1.020)	99	2543			34.47- 94.47	59.79
35 Carbon Tetrachloride					CAS #: 56-23-5		
16.250	16.250 (1.031)	117	1884	0.05000	0.03877	80.00- 120.00	100.00(aM)
16.281	16.281 (1.033)	119	1854			65.73- 125.73	98.41
36 Benzene					CAS #: 71-43-2		
16.576	16.576 (0.968)	78	4938	0.05000	0.04598	80.00- 120.00	100.00(a)
16.576	16.576 (0.968)	77	1241			0.00- 52.79	25.13
38 1,2-Dichloroethane					CAS #: 107-06-2		
16.658	16.658 (0.973)	62	2966	0.05000	0.04677	80.00- 120.00	100.00(aM)
16.658	16.658 (0.973)	64	620			0.00- 59.27	20.90
41 Trichloroethene					CAS #: 79-01-6		
17.509	17.509 (1.022)	130	3000	0.05000	0.04731	80.00- 120.00	100.00(a)
17.509	17.509 (1.022)	95	2679			64.71- 124.71	89.30
17.509	17.509 (1.022)	97	1723			31.19- 91.19	57.43
48 Toluene					CAS #: 108-88-3		
19.764	19.764 (1.154)	91	7045	0.05000	0.05733	80.00- 120.00	100.00
19.764	19.764 (1.154)	92	3849			28.99- 88.99	54.63
49 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.225	20.225 (0.918)	75	2802	0.05000	0.05163	80.00- 120.00	100.00
20.225	20.225 (0.918)	77	2115			1.70- 61.70	75.48

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
50 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.548	20.548 (0.932)	97	2479	0.05000	0.04772	80.00- 120.00	100.00(a)
20.548	20.548 (0.932)	99	1465			32.61- 92.61	59.10
20.548	20.548 (0.932)	83	2288			49.96- 109.96	92.30
51 Tetrachloroethene					CAS #: 127-18-4		
20.728	20.728 (0.940)	166	3652	0.05000	0.04469	80.00- 120.00	100.00(a)
20.728	20.728 (0.940)	129	2578			41.60- 101.60	70.59
20.728	20.728 (0.940)	131	2821			45.07- 105.07	77.25
55 1,2-Dibromoethane					CAS #: 106-93-4		
21.409	21.409 (0.971)	107	3418	0.05000	0.04669	80.00- 120.00	100.00(aM)
21.409	21.409 (0.971)	109	3003			64.60- 124.60	87.86
57 Chlorobenzene					CAS #: 108-90-7		
22.070	22.070 (1.001)	112	5297	0.05000	0.05107	80.00- 120.00	100.00
22.070	22.070 (1.001)	114	1989			1.94- 61.94	37.55
22.070	22.070 (1.001)	77	5586			24.15- 84.15	105.46
58 Ethyl Benzene					CAS #: 100-41-4		
22.152	22.152 (1.005)	106	2034	0.05000	0.04863	80.00- 120.00	100.00(a)
22.152	22.152 (1.005)	91	7079			301.49- 361.49	348.03
59 m,p-Xylene					CAS #: 108-38-3		
22.317	22.317 (1.012)	106	2034	0.05000	0.04630	80.00- 120.00	100.00(a)
22.317	22.317 (1.012)	91	4480			185.00- 245.00	220.26
61 o-Xylene					CAS #: 95-47-6		
22.839	22.839 (1.036)	106	1963	0.05000	0.04731	80.00- 120.00	100.00(aM)
22.839	22.839 (1.036)	91	4192			198.20- 258.20	213.55
67 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.677	23.677 (1.074)	83	4320	0.05000	0.04907	80.00- 120.00	100.00(a)
23.703	23.703 (1.075)	85	2728			34.54- 94.54	63.15
72 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.769	24.769 (1.124)	146	3609	0.05000	0.04919	80.00- 120.00	100.00(a)
24.769	24.769 (1.124)	148	2662			34.01- 94.01	73.76
24.769	24.769 (1.124)	111	1797			8.85- 68.85	49.79
73 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.859	24.859 (1.128)	146	3218	0.05000	0.04407	80.00- 120.00	100.00(a)
24.882	24.882 (1.129)	148	2663			34.02- 94.02	82.75
24.859	24.859 (1.128)	111	1418			7.95- 67.95	44.06
75 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.285	25.285 (1.147)	146	3055	0.05000	0.04787	80.00- 120.00	100.00

			AMOUNTS				
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
75 1,2-Dichlorobenzene (continued)							
25.285	25.285 (1.147)	148	1771			33.70- 93.70	57.97
25.285	25.285 (1.147)	111	1354			9.89- 69.89	44.32

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v092906sim.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Calibration Date: 29-SEP-2015
Calibration Time: 19:51
Client Smp ID: Level # 5
Level: LOW
Sample Type: AIR
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 0.05ppbv (0.05ppbv)

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	100126	60076	140176	94554	-5.56
40 1,4-Difluorobenze	412832	247699	577965	405408	-1.80
56 Chlorobenzene-d5	352453	211472	493434	341133	-3.21

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.13	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/29Sep2015.b/v092906sim.d

Date : 29-SEP-2015 17:05

Client ID: Level # 5

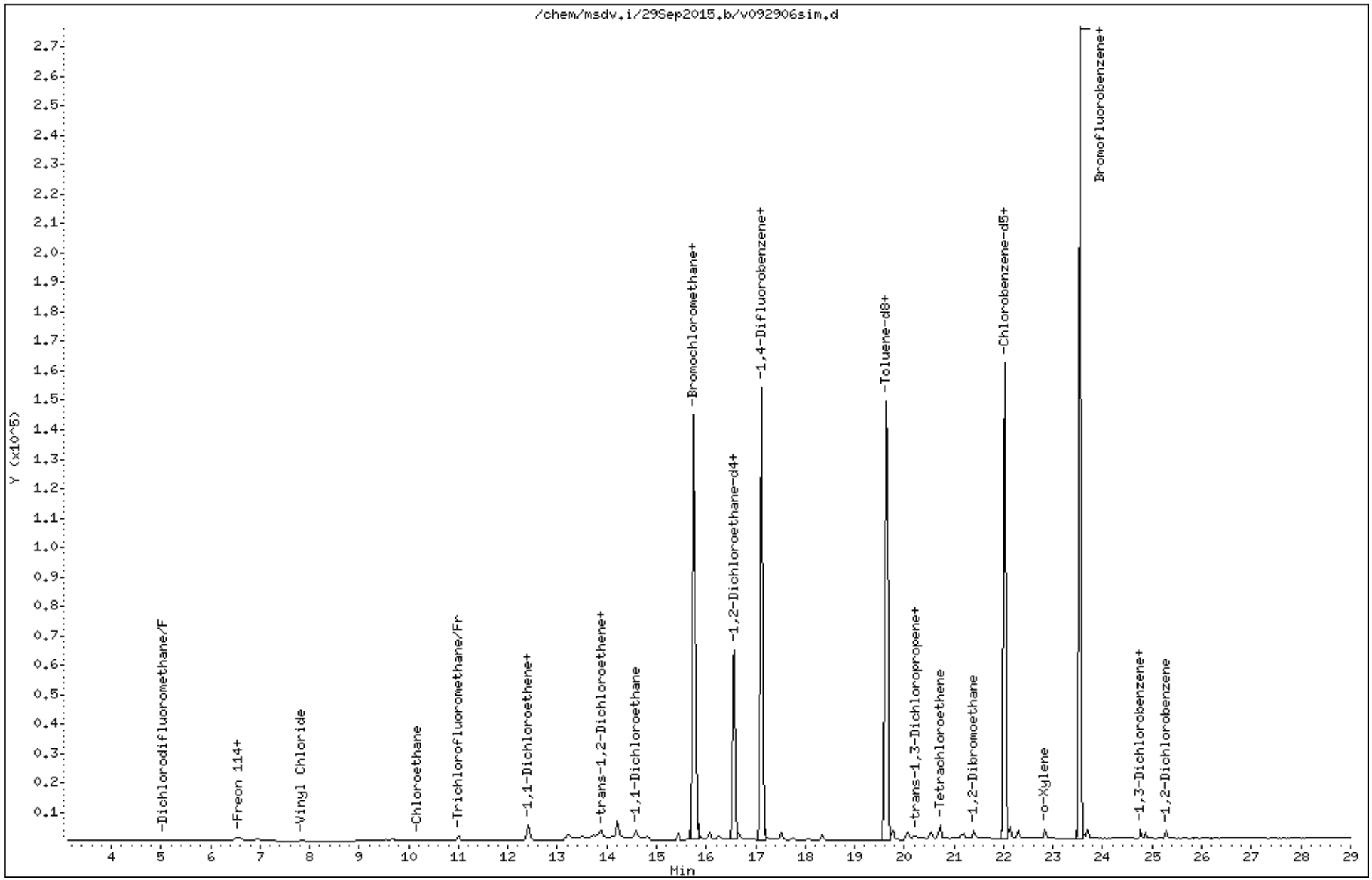
Sample Info: 250mL# 2736-248

Column phase: RTx-624

Instrument: msdv.i

Operator: gh

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/29Sep2015.b/v092907sim.d
Lab Smp Id: ICAL Client Smp ID: Level # 6
Inj Date : 29-SEP-2015 17:52
Operator : gh Inst ID: msdv.i
Smp Info : 25mL# 2736-249
Misc Info : 0.1ppbv (1.0ppbv)
Comment : SIM GC-MS
Method : /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 01-Oct-2015 14:04 sblack Quant Type: ISTD
Cal Date : 29-SEP-2015 17:52 Cal File: v092907sim.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HiLoCRV.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 31 Bromochloromethane					CAS #: 74-97-5			
15.757	15.757 (1.000)	130	96736	5.00000		80.00- 120.00		100.00
15.757	15.757 (1.000)	128	75244			48.13- 108.13		77.78
15.757	15.757 (1.000)	49	256424			238.09- 298.09		265.08
* 40 1,4-Difluorobenzene					CAS #: 540-36-3			
17.125	17.125 (1.000)	114	409440	5.00000		80.00- 120.00		100.00
17.125	17.125 (1.000)	88	59225			0.00- 44.50		14.46
* 56 Chlorobenzene-d5					CAS #: 3114-55-4			
22.042	22.042 (1.000)	117	362963	5.00000		80.00- 120.00		100.00
22.015	22.015 (1.000)	82	169020			16.61- 76.61		46.57
$ 37 1,2-Dichloroethane-d4					CAS #: 17060-07-0			
16.548	16.548 (1.050)	65	157230	5.00000	4.925	80.00- 120.00		100.00
16.576	16.576 (1.052)	67	72924			19.91- 79.91		46.38
$ 47 Toluene-d8					CAS #: 2037-26-5			
19.629	19.629 (1.146)	98	334059	5.00000	5.050	80.00- 120.00		100.00
19.629	19.629 (1.146)	70	38348			0.00- 41.04		11.48

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.629	19.629 (1.146)	100	212467			32.99- 92.99	63.60
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	207107	5.00000	5.122	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	237694			84.02- 144.02	114.77
23.548	23.548 (1.068)	176	202972			67.56- 127.56	98.00
1 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.003	5.003 (0.318)	85	8856	0.10000	0.1092	80.00- 120.00	100.00
5.041	5.041 (0.320)	87	3058			2.25- 62.25	34.53
3 Freon 114					CAS #: 76-14-2		
6.513	6.513 (0.413)	135	7338	0.10000	0.1083	80.00- 120.00	100.00
6.551	6.551 (0.416)	137	2292			1.20- 61.20	31.23
4 Chloromethane					CAS #: 74-87-3		
6.853	6.853 (0.435)	50	7050	0.10000	0.1074	80.00- 120.00	100.00(M)
6.853	6.853 (0.435)	52	2168			0.99- 60.99	30.75
5 Vinyl Chloride					CAS #: 75-01-4		
7.840	7.840 (0.498)	62	4788	0.10000	0.1037	80.00- 120.00	100.00
7.840	7.840 (0.498)	64	1473			0.00- 57.67	30.76
9 Chloroethane					CAS #: 75-00-3		
10.151	10.151 (0.644)	64	1636	0.10000	0.09598	80.00- 120.00	100.00
10.175	10.175 (0.646)	66	423			0.00- 57.14	25.86
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.994	10.994 (0.698)	101	9284	0.10000	0.1070	80.00- 120.00	100.00
10.994	10.994 (0.698)	103	5883			34.66- 94.66	63.37
12 1,1-Dichloroethene					CAS #: 75-35-4		
12.399	12.399 (0.787)	98	2373	0.10000	0.1007	80.00- 120.00	100.00
12.399	12.399 (0.787)	61	8299			331.89- 391.89	349.73
12.399	12.399 (0.787)	96	3663			127.52- 187.52	154.36
13 Freon 113					CAS #: 76-13-1		
12.427	12.427 (0.789)	151	6934	0.10000	0.1078	80.00- 120.00	100.00
12.427	12.427 (0.789)	153	4319			34.11- 94.11	62.29
12.399	12.399 (0.787)	101	7622			83.01- 143.01	109.92
22 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.910	13.910 (0.883)	98	2526	0.10000	0.09898	80.00- 120.00	100.00
13.882	13.882 (0.881)	61	7758			298.00- 358.00	307.13
13.910	13.910 (0.883)	96	3976			126.99- 186.99	157.40

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
21 MTBE					CAS #: 1634-04-4		
13.855	13.855 (0.879)	73	8694	0.10000	0.1067	80.00- 120.00	100.00
13.855	13.855 (0.879)	57	5149			16.91- 76.91	59.22
13.827	13.827 (0.878)	41	4880			11.83- 71.83	56.13
25 1,1-Dichloroethane					CAS #: 75-34-3		
14.596	14.596 (0.926)	63	8762	0.10000	0.1062	80.00- 120.00	100.00
14.596	14.596 (0.926)	65	3185			0.00- 57.70	36.35
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.437	15.437 (0.980)	98	2541	0.10000	0.1034	80.00- 120.00	100.00
15.437	15.437 (0.980)	61	8278			264.63- 324.63	325.78
15.437	15.437 (0.980)	96	6516			126.49- 186.49	256.43
32 Chloroform					CAS #: 67-66-3		
15.819	15.819 (1.004)	83	7839	0.10000	0.1113	80.00- 120.00	100.00
15.819	15.819 (1.004)	85	5163			34.82- 94.82	65.86
34 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.065	16.065 (1.020)	97	8473	0.10000	0.1057	80.00- 120.00	100.00
16.065	16.065 (1.020)	99	5326			34.47- 94.47	62.86
35 Carbon Tetrachloride					CAS #: 56-23-5		
16.250	16.250 (1.031)	117	3955	0.10000	0.07955	80.00- 120.00	100.00(M)
16.281	16.281 (1.033)	119	3828			65.73- 125.73	96.79
36 Benzene					CAS #: 71-43-2		
16.576	16.576 (0.968)	78	10391	0.10000	0.09580	80.00- 120.00	100.00
16.576	16.576 (0.968)	77	2925			0.00- 52.79	28.15
38 1,2-Dichloroethane					CAS #: 107-06-2		
16.658	16.658 (0.973)	62	6740	0.10000	0.1052	80.00- 120.00	100.00
16.686	16.686 (0.974)	64	2866			0.00- 59.27	42.52
41 Trichloroethene					CAS #: 79-01-6		
17.509	17.509 (1.022)	130	5937	0.10000	0.09271	80.00- 120.00	100.00
17.509	17.509 (1.022)	95	5547			64.71- 124.71	93.43
17.509	17.509 (1.022)	97	3642			31.19- 91.19	61.34
48 Toluene					CAS #: 108-88-3		
19.763	19.763 (1.154)	91	12267	0.10000	0.09884	80.00- 120.00	100.00(M)
19.763	19.763 (1.154)	92	7195			28.99- 88.99	58.65
49 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.225	20.225 (0.918)	75	6407	0.10000	0.1110	80.00- 120.00	100.00
20.225	20.225 (0.918)	77	3084			1.70- 61.70	48.13

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
50 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.548	20.548 (0.932)	97	4972	0.10000	0.08996	80.00- 120.00	100.00
20.548	20.548 (0.932)	99	3146			32.61- 92.61	63.27
20.548	20.548 (0.932)	83	4309			49.96- 109.96	86.67
51 Tetrachloroethene					CAS #: 127-18-4		
20.727	20.727 (0.940)	166	7713	0.10000	0.08870	80.00- 120.00	100.00
20.727	20.727 (0.940)	129	5680			41.60- 101.60	73.64
20.727	20.727 (0.940)	131	5891			45.07- 105.07	76.38
55 1,2-Dibromoethane					CAS #: 106-93-4		
21.409	21.409 (0.971)	107	8372	0.10000	0.1075	80.00- 120.00	100.00
21.409	21.409 (0.971)	109	7847			64.60- 124.60	93.73
57 Chlorobenzene					CAS #: 108-90-7		
22.070	22.070 (1.001)	112	11424	0.10000	0.1035	80.00- 120.00	100.00
22.070	22.070 (1.001)	114	3790			1.94- 61.94	33.18
22.070	22.070 (1.001)	77	8866			24.15- 84.15	77.61
58 Ethyl Benzene					CAS #: 100-41-4		
22.152	22.152 (1.005)	106	4582	0.10000	0.1030	80.00- 120.00	100.00
22.152	22.152 (1.005)	91	15304			301.49- 361.49	334.00
59 m,p-Xylene					CAS #: 108-38-3		
22.317	22.317 (1.012)	106	4672	0.10000	0.09995	80.00- 120.00	100.00
22.317	22.317 (1.012)	91	10139			185.00- 245.00	217.02
61 o-Xylene					CAS #: 95-47-6		
22.838	22.838 (1.036)	106	4940	0.10000	0.1119	80.00- 120.00	100.00
22.838	22.838 (1.036)	91	13874			198.20- 258.20	280.85
67 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.677	23.677 (1.074)	83	9090	0.10000	0.09705	80.00- 120.00	100.00
23.703	23.703 (1.075)	85	5935			34.54- 94.54	65.29
72 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.769	24.769 (1.124)	146	8560	0.10000	0.1097	80.00- 120.00	100.00
24.769	24.769 (1.124)	148	5943			34.01- 94.01	69.43
24.769	24.769 (1.124)	111	3437			8.85- 68.85	40.15
73 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.859	24.859 (1.128)	146	8043	0.10000	0.1035	80.00- 120.00	100.00
24.859	24.859 (1.128)	148	6468			34.02- 94.02	80.42
24.859	24.859 (1.128)	111	3899			7.95- 67.95	48.48
75 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.285	25.285 (1.147)	146	7667	0.10000	0.1129	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
75 1,2-Dichlorobenzene (continued)							
25.285	25.285 (1.147)	148	4907			33.70- 93.70	64.00
25.285	25.285 (1.147)	111	4313			9.89- 69.89	56.25
78 Naphthalene					CAS #: 91-20-3		
27.415	27.415 (1.244)	128	871	0.01000	0.01554	80.00- 120.00	100.00(aH)
27.437	27.437 (1.245)	127	177			0.00- 42.90	20.32

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Report Date: 01-Oct-2015 14:04

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v092907sim.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 0.1ppbv (1.0ppbv)

Calibration Date: 29-SEP-2015
Calibration Time: 19:51
Client Smp ID: Level # 6
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	100126	60076	140176	96736	-3.39
40 1,4-Difluorobenze	412832	247699	577965	409440	-0.82
56 Chlorobenzene-d5	352453	211472	493434	362963	2.98

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/29Sep2015.b/v092907sim.d

Page 1

Date : 29-SEP-2015 17:52

Client ID: Level # 6

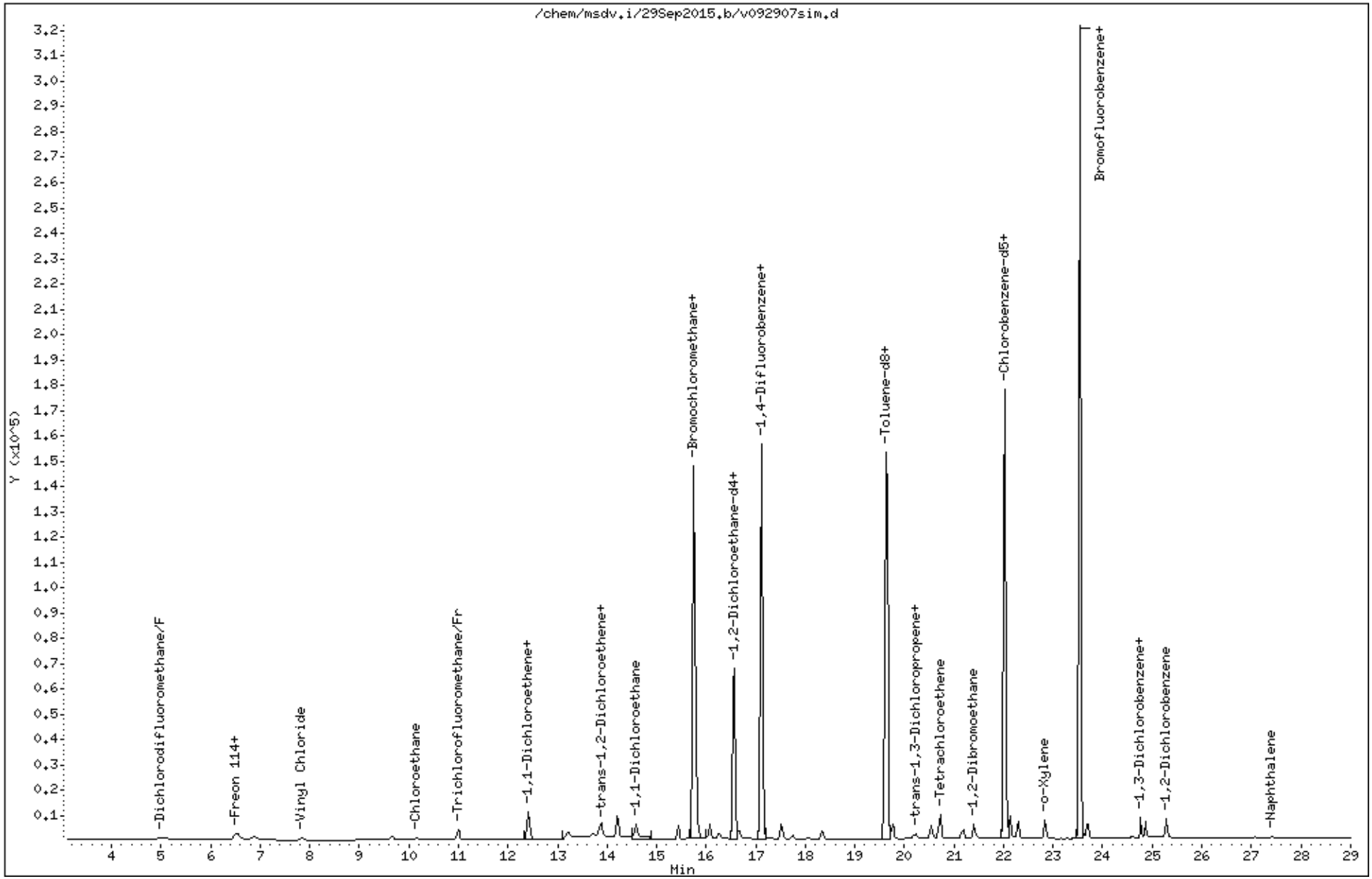
Instrument: msdv.i

Sample Info: 25mL# 2736-249

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/29Sep2015.b/v092908sim.d
Lab Smp Id: ICAL Client Smp ID: Level # 7
Inj Date : 29-SEP-2015 18:33
Operator : gh Inst ID: msdv.i
Smp Info : 125mL# 2736-249
Misc Info : 0.5ppbv (1.0ppbv)
Comment : SIM GC-MS
Method : /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 01-Oct-2015 14:04 sblack Quant Type: ISTD
Cal Date : 29-SEP-2015 18:33 Cal File: v092908sim.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HiLoCRV.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 31 Bromochloromethane					CAS #: 74-97-5		
15.757	15.757 (1.000)	130	94888	5.00000		80.00- 120.00	100.00
15.757	15.757 (1.000)	128	73643			48.13- 108.13	77.61
15.757	15.757 (1.000)	49	253197			238.09- 298.09	266.84
* 40 1,4-Difluorobenzene					CAS #: 540-36-3		
17.125	17.125 (1.000)	114	405952	5.00000		80.00- 120.00	100.00
17.125	17.125 (1.000)	88	59239			0.00- 44.50	14.59
* 56 Chlorobenzene-d5					CAS #: 3114-55-4		
22.042	22.042 (1.000)	117	348433	5.00000		80.00- 120.00	100.00
22.015	22.015 (1.000)	82	162941			16.61- 76.61	46.76
$ 37 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
16.576	16.576 (1.052)	65	155565	5.00000	4.968	80.00- 120.00	100.00
16.576	16.576 (1.052)	67	72099			19.91- 79.91	46.35
$ 47 Toluene-d8					CAS #: 2037-26-5		
19.629	19.629 (1.146)	98	329518	5.00000	5.024	80.00- 120.00	100.00
19.629	19.629 (1.146)	70	37384			0.00- 41.04	11.35

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.629	19.629 (1.146)	100	205513			32.99- 92.99	62.37
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	192437	5.00000	4.958	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	219480			84.02- 144.02	114.05
23.548	23.548 (1.068)	176	186700			67.56- 127.56	97.02
1 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.003	5.003 (0.318)	85	38555	0.50000	0.4847	80.00- 120.00	100.00
5.003	5.003 (0.318)	87	12347			2.25- 62.25	32.02
3 Freon 114					CAS #: 76-14-2		
6.513	6.513 (0.413)	135	32380	0.50000	0.4873	80.00- 120.00	100.00
6.551	6.551 (0.416)	137	10261			1.20- 61.20	31.69
4 Chloromethane					CAS #: 74-87-3		
6.891	6.891 (0.437)	50	33776	0.50000	0.5245	80.00- 120.00	100.00
6.891	6.891 (0.437)	52	12858			0.99- 60.99	38.07
5 Vinyl Chloride					CAS #: 75-01-4		
7.840	7.840 (0.498)	62	21487	0.50000	0.4745	80.00- 120.00	100.00
7.840	7.840 (0.498)	64	6049			0.00- 57.67	28.15
9 Chloroethane					CAS #: 75-00-3		
10.175	10.175 (0.646)	64	7973	0.50000	0.4768	80.00- 120.00	100.00
10.175	10.175 (0.646)	66	2237			0.00- 57.14	28.06
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.994	10.994 (0.698)	101	42363	0.50000	0.4976	80.00- 120.00	100.00
10.994	10.994 (0.698)	103	27204			34.66- 94.66	64.22
12 1,1-Dichloroethene					CAS #: 75-35-4		
12.399	12.399 (0.787)	98	10683	0.50000	0.4621	80.00- 120.00	100.00
12.399	12.399 (0.787)	61	38703			331.89- 391.89	362.29
12.399	12.399 (0.787)	96	16692			127.52- 187.52	156.25
13 Freon 113					CAS #: 76-13-1		
12.427	12.427 (0.789)	151	31245	0.50000	0.4954	80.00- 120.00	100.00
12.427	12.427 (0.789)	153	20074			34.11- 94.11	64.25
12.399	12.399 (0.787)	101	35062			83.01- 143.01	112.22
22 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.910	13.910 (0.883)	98	10903	0.50000	0.4355	80.00- 120.00	100.00
13.882	13.882 (0.881)	61	35177			298.00- 358.00	322.64
13.910	13.910 (0.883)	96	17334			126.99- 186.99	158.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
21 MTBE					CAS #: 1634-04-4		
13.855	13.855 (0.879)	73	39079	0.50000	0.4890	80.00- 120.00	100.00
13.855	13.855 (0.879)	57	19785			16.91- 76.91	50.63
13.827	13.827 (0.878)	41	17426			11.83- 71.83	44.59
25 1,1-Dichloroethane					CAS #: 75-34-3		
14.596	14.596 (0.926)	63	40183	0.50000	0.4966	80.00- 120.00	100.00
14.596	14.596 (0.926)	65	11190			0.00- 57.70	27.85
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.437	15.437 (0.980)	98	11554	0.50000	0.4794	80.00- 120.00	100.00
15.437	15.437 (0.980)	61	34946			264.63- 324.63	302.46
15.437	15.437 (0.980)	96	23144			126.49- 186.49	200.31
32 Chloroform					CAS #: 67-66-3		
15.819	15.819 (1.004)	83	34720	0.50000	0.5024	80.00- 120.00	100.00
15.819	15.819 (1.004)	85	22470			34.82- 94.82	64.72
34 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.065	16.065 (1.020)	97	38473	0.50000	0.4892	80.00- 120.00	100.00
16.065	16.065 (1.020)	99	24783			34.47- 94.47	64.42
35 Carbon Tetrachloride					CAS #: 56-23-5		
16.250	16.250 (1.031)	117	20323	0.50000	0.4167	80.00- 120.00	100.00
16.281	16.281 (1.033)	119	19980			65.73- 125.73	98.31
36 Benzene					CAS #: 71-43-2		
16.576	16.576 (0.968)	78	46482	0.50000	0.4322	80.00- 120.00	100.00
16.576	16.576 (0.968)	77	11209			0.00- 52.79	24.11
38 1,2-Dichloroethane					CAS #: 107-06-2		
16.658	16.658 (0.973)	62	30993	0.50000	0.4881	80.00- 120.00	100.00
16.658	16.658 (0.973)	64	9704			0.00- 59.27	31.31
41 Trichloroethene					CAS #: 79-01-6		
17.509	17.509 (1.022)	130	26403	0.50000	0.4158	80.00- 120.00	100.00
17.509	17.509 (1.022)	95	24699			64.71- 124.71	93.55
17.509	17.509 (1.022)	97	16269			31.19- 91.19	61.62
48 Toluene					CAS #: 108-88-3		
19.763	19.763 (1.154)	91	57169	0.50000	0.4646	80.00- 120.00	100.00
19.763	19.763 (1.154)	92	33502			28.99- 88.99	58.60
49 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.189	20.189 (0.916)	75	26334	0.50000	0.4751	80.00- 120.00	100.00
20.225	20.225 (0.918)	77	8930			1.70- 61.70	33.91

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
50 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.548	20.548 (0.932)	97	23420	0.50000	0.4414	80.00- 120.00	100.00
20.548	20.548 (0.932)	99	14466			32.61- 92.61	61.77
20.548	20.548 (0.932)	83	19014			49.96- 109.96	81.19
51 Tetrachloroethene					CAS #: 127-18-4		
20.727	20.727 (0.940)	166	35241	0.50000	0.4222	80.00- 120.00	100.00
20.727	20.727 (0.940)	129	25400			41.60- 101.60	72.08
20.727	20.727 (0.940)	131	26362			45.07- 105.07	74.80
55 1,2-Dibromoethane					CAS #: 106-93-4		
21.409	21.409 (0.971)	107	36999	0.50000	0.4949	80.00- 120.00	100.00
21.409	21.409 (0.971)	109	35014			64.60- 124.60	94.63
57 Chlorobenzene					CAS #: 108-90-7		
22.070	22.070 (1.001)	112	52205	0.50000	0.4928	80.00- 120.00	100.00
22.070	22.070 (1.001)	114	16287			1.94- 61.94	31.20
22.070	22.070 (1.001)	77	30594			24.15- 84.15	58.60
58 Ethyl Benzene					CAS #: 100-41-4		
22.152	22.152 (1.005)	106	20906	0.50000	0.4893	80.00- 120.00	100.00
22.152	22.152 (1.005)	91	69958			301.49- 361.49	334.63
59 m,p-Xylene					CAS #: 108-38-3		
22.317	22.317 (1.012)	106	21607	0.50000	0.4815	80.00- 120.00	100.00
22.317	22.317 (1.012)	91	46518			185.00- 245.00	215.29
61 o-Xylene					CAS #: 95-47-6		
22.839	22.839 (1.036)	106	20855	0.50000	0.4921	80.00- 120.00	100.00
22.839	22.839 (1.036)	91	49361			198.20- 258.20	236.69
67 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.677	23.677 (1.074)	83	42682	0.50000	0.4747	80.00- 120.00	100.00
23.703	23.703 (1.075)	85	27200			34.54- 94.54	63.73
72 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.769	24.769 (1.124)	146	34494	0.50000	0.4603	80.00- 120.00	100.00
24.769	24.769 (1.124)	148	21992			34.01- 94.01	63.76
24.769	24.769 (1.124)	111	13142			8.85- 68.85	38.10
73 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.859	24.859 (1.128)	146	31144	0.50000	0.4176	80.00- 120.00	100.00
24.859	24.859 (1.128)	148	19872			34.02- 94.02	63.81
24.859	24.859 (1.128)	111	11743			7.95- 67.95	37.71
75 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.285	25.285 (1.147)	146	30675	0.50000	0.4706	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
75 1,2-Dichlorobenzene (continued)							
25.285	25.285 (1.147)	148	19775			33.70- 93.70	64.47
25.285	25.285 (1.147)	111	12118			9.89- 69.89	39.50
78 Naphthalene					CAS #: 91-20-3		
27.415	27.415 (1.244)	128	2953	0.05000	0.05490	80.00- 120.00	100.00(H)
27.415	27.415 (1.244)	127	376			0.00- 42.90	12.73

QC Flag Legend

H - Operator selected an alternate compound hit.

Report Date: 01-Oct-2015 14:04

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v092908sim.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Calibration Date: 29-SEP-2015
Calibration Time: 19:51
Client Smp ID: Level # 7
Level: LOW
Sample Type: AIR
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 0.5ppbv (1.0ppbv)

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	100126	60076	140176	94888	-5.23
40 1,4-Difluorobenze	412832	247699	577965	405952	-1.67
56 Chlorobenzene-d5	352453	211472	493434	348433	-1.14

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/29Sep2015.b/v092908sim.d

Page 1

Date : 29-SEP-2015 18:33

Client ID: Level # 7

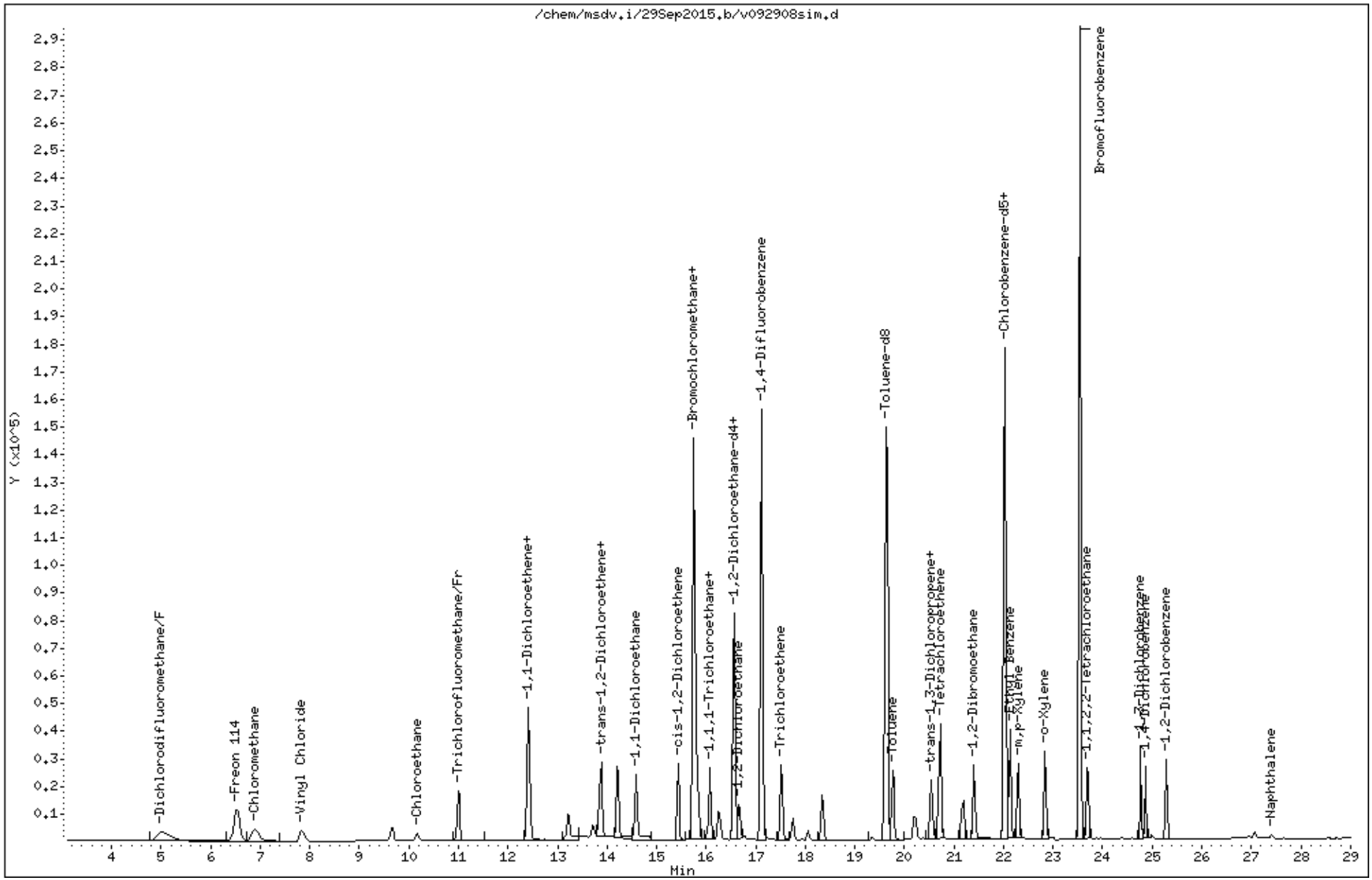
Instrument: msdv.i

Sample Info: 125mL# 2736-249

Operator: gh

Column phase: RTx-624

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/29Sep2015.b/v092909sim.d
Lab Smp Id: ICAL Client Smp ID: Level # 8
Inj Date : 29-SEP-2015 19:17
Operator : gh Inst ID: msdv.i
Smp Info : 250mL# 2736-249
Misc Info : 1.0ppbv (1.0ppbv)
Comment : SIM GC-MS
Method : /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 01-Oct-2015 14:04 sblack Quant Type: ISTD
Cal Date : 29-SEP-2015 19:17 Cal File: v092909sim.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HiLoCRV.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 31 Bromochloromethane					CAS #: 74-97-5			
15.757	15.757 (1.000)	130	94781	5.00000		80.00- 120.00		100.00
15.757	15.757 (1.000)	128	73217			48.13- 108.13		77.25
15.757	15.757 (1.000)	49	257656			238.09- 298.09		271.84
* 40 1,4-Difluorobenzene					CAS #: 540-36-3			
17.125	17.125 (1.000)	114	403326	5.00000		80.00- 120.00		100.00
17.125	17.125 (1.000)	88	58613			0.00- 44.50		14.53
* 56 Chlorobenzene-d5					CAS #: 3114-55-4			
22.042	22.042 (1.000)	117	345538	5.00000		80.00- 120.00		100.00
22.015	22.015 (1.000)	82	162700			16.61- 76.61		47.09
$ 37 1,2-Dichloroethane-d4					CAS #: 17060-07-0			
16.576	16.576 (1.052)	65	158604	5.00000	5.070	80.00- 120.00		100.00
16.576	16.576 (1.052)	67	73876			19.91- 79.91		46.58
$ 47 Toluene-d8					CAS #: 2037-26-5			
19.629	19.629 (1.146)	98	324293	5.00000	4.976	80.00- 120.00		100.00
19.629	19.629 (1.146)	70	37397			0.00- 41.04		11.53

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.629	19.629 (1.146)	100	204325			32.99- 92.99	63.01
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	191595	5.00000	4.977	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	219311			84.02- 144.02	114.47
23.548	23.548 (1.068)	176	186775			67.56- 127.56	97.48
1 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.041	5.041 (0.320)	85	74712	1.00000	0.9403	80.00- 120.00	100.00
5.041	5.041 (0.320)	87	24125			2.25- 62.25	32.29
3 Freon 114					CAS #: 76-14-2		
6.551	6.551 (0.416)	135	65152	1.00000	0.9815	80.00- 120.00	100.00
6.551	6.551 (0.416)	137	20219			1.20- 61.20	31.03
4 Chloromethane					CAS #: 74-87-3		
6.929	6.929 (0.440)	50	64314	1.00000	0.9998	80.00- 120.00	100.00
6.929	6.929 (0.440)	52	20971			0.99- 60.99	32.61
5 Vinyl Chloride					CAS #: 75-01-4		
7.840	7.840 (0.498)	62	41688	1.00000	0.9217	80.00- 120.00	100.00
7.840	7.840 (0.498)	64	11908			0.00- 57.67	28.56
9 Chloroethane					CAS #: 75-00-3		
10.175	10.175 (0.646)	64	16341	1.00000	0.9784	80.00- 120.00	100.00
10.175	10.175 (0.646)	66	4463			0.00- 57.14	27.31
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
11.018	11.018 (0.699)	101	84782	1.00000	0.9971	80.00- 120.00	100.00
11.018	11.018 (0.699)	103	54598			34.66- 94.66	64.40
12 1,1-Dichloroethene					CAS #: 75-35-4		
12.399	12.399 (0.787)	98	21000	1.00000	0.9094	80.00- 120.00	100.00
12.399	12.399 (0.787)	61	76734			331.89- 391.89	365.40
12.399	12.399 (0.787)	96	33597			127.52- 187.52	159.99
13 Freon 113					CAS #: 76-13-1		
12.427	12.427 (0.789)	151	62376	1.00000	0.9902	80.00- 120.00	100.00
12.427	12.427 (0.789)	153	40021			34.11- 94.11	64.16
12.427	12.427 (0.789)	101	70341			83.01- 143.01	112.77
22 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.910	13.910 (0.883)	98	21793	1.00000	0.8715	80.00- 120.00	100.00
13.882	13.882 (0.881)	61	70422			298.00- 358.00	323.14
13.910	13.910 (0.883)	96	33445			126.99- 186.99	153.47

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
21 MTBE					CAS #: 1634-04-4		
13.855	13.855 (0.879)	73	78716	1.00000	0.9861	80.00- 120.00	100.00
13.855	13.855 (0.879)	57	37312			16.91- 76.91	47.40
13.827	13.827 (0.878)	41	34231			11.83- 71.83	43.49
25 1,1-Dichloroethane					CAS #: 75-34-3		
14.596	14.596 (0.926)	63	80376	1.00000	0.9944	80.00- 120.00	100.00
14.596	14.596 (0.926)	65	22070			0.00- 57.70	27.46
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.437	15.437 (0.980)	98	24143	1.00000	1.003	80.00- 120.00	100.00
15.437	15.437 (0.980)	61	70210			264.63- 324.63	290.81
15.437	15.437 (0.980)	96	39667			126.49- 186.49	164.30
32 Chloroform					CAS #: 67-66-3		
15.819	15.819 (1.004)	83	68520	1.00000	0.9926	80.00- 120.00	100.00
15.819	15.819 (1.004)	85	44762			34.82- 94.82	65.33
34 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.065	16.065 (1.020)	97	77155	1.00000	0.9821	80.00- 120.00	100.00
16.065	16.065 (1.020)	99	49194			34.47- 94.47	63.76
35 Carbon Tetrachloride					CAS #: 56-23-5		
16.281	16.281 (1.033)	117	39307	1.00000	0.8070	80.00- 120.00	100.00
16.281	16.281 (1.033)	119	38761			65.73- 125.73	98.61
36 Benzene					CAS #: 71-43-2		
16.576	16.576 (0.968)	78	90451	1.00000	0.8466	80.00- 120.00	100.00
16.576	16.576 (0.968)	77	21276			0.00- 52.79	23.52
38 1,2-Dichloroethane					CAS #: 107-06-2		
16.658	16.658 (0.973)	62	63015	1.00000	0.9989	80.00- 120.00	100.00
16.658	16.658 (0.973)	64	18972			0.00- 59.27	30.11
41 Trichloroethene					CAS #: 79-01-6		
17.509	17.509 (1.022)	130	52318	1.00000	0.8294	80.00- 120.00	100.00
17.509	17.509 (1.022)	95	49227			64.71- 124.71	94.09
17.509	17.509 (1.022)	97	31796			31.19- 91.19	60.77
48 Toluene					CAS #: 108-88-3		
19.763	19.763 (1.154)	91	114374	1.00000	0.9356	80.00- 120.00	100.00
19.763	19.763 (1.154)	92	65617			28.99- 88.99	57.37
49 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.189	20.189 (0.916)	75	52961	1.00000	0.9635	80.00- 120.00	100.00
20.189	20.189 (0.916)	77	17778			1.70- 61.70	33.57

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
50 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.548	20.548 (0.932)	97	46414	1.00000	0.8821	80.00- 120.00	100.00
20.548	20.548 (0.932)	99	28975			32.61- 92.61	62.43
20.548	20.548 (0.932)	83	37380			49.96- 109.96	80.54
51 Tetrachloroethene					CAS #: 127-18-4		
20.727	20.727 (0.940)	166	69242	1.00000	0.8365	80.00- 120.00	100.00
20.727	20.727 (0.940)	129	49636			41.60- 101.60	71.68
20.727	20.727 (0.940)	131	51859			45.07- 105.07	74.90
55 1,2-Dibromoethane					CAS #: 106-93-4		
21.409	21.409 (0.971)	107	73331	1.00000	0.9890	80.00- 120.00	100.00
21.409	21.409 (0.971)	109	69259			64.60- 124.60	94.45
57 Chlorobenzene					CAS #: 108-90-7		
22.070	22.070 (1.001)	112	102477	1.00000	0.9754	80.00- 120.00	100.00
22.070	22.070 (1.001)	114	32571			1.94- 61.94	31.78
22.070	22.070 (1.001)	77	57743			24.15- 84.15	56.35
58 Ethyl Benzene					CAS #: 100-41-4		
22.152	22.152 (1.005)	106	41397	1.00000	0.9770	80.00- 120.00	100.00
22.152	22.152 (1.005)	91	136187			301.49- 361.49	328.98
59 m,p-Xylene					CAS #: 108-38-3		
22.317	22.317 (1.012)	106	42794	1.00000	0.9617	80.00- 120.00	100.00
22.317	22.317 (1.012)	91	92775			185.00- 245.00	216.79
61 o-Xylene					CAS #: 95-47-6		
22.838	22.838 (1.036)	106	41125	1.00000	0.9784	80.00- 120.00	100.00
22.838	22.838 (1.036)	91	96087			198.20- 258.20	233.65
67 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.677	23.677 (1.074)	83	85057	1.00000	0.9539	80.00- 120.00	100.00
23.703	23.703 (1.075)	85	54175			34.54- 94.54	63.69
72 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.769	24.769 (1.124)	146	67227	1.00000	0.9047	80.00- 120.00	100.00
24.769	24.769 (1.124)	148	42902			34.01- 94.01	63.82
24.769	24.769 (1.124)	111	26235			8.85- 68.85	39.02
73 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.859	24.859 (1.128)	146	59716	1.00000	0.8074	80.00- 120.00	100.00
24.859	24.859 (1.128)	148	38438			34.02- 94.02	64.37
24.859	24.859 (1.128)	111	23598			7.95- 67.95	39.52
75 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.285	25.285 (1.147)	146	60270	1.00000	0.9324	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
75 1,2-Dichlorobenzene (continued)							
25.285	25.285 (1.147)	148	38155			33.70- 93.70	63.31
25.285	25.285 (1.147)	111	23826			9.89- 69.89	39.53
78 Naphthalene					CAS #: 91-20-3		
27.415	27.415 (1.244)	128	5852	0.10000	0.1097	80.00- 120.00	100.00(H)
27.415	27.415 (1.244)	127	1081			0.00- 42.90	18.47

QC Flag Legend

H - Operator selected an alternate compound hit.

Report Date: 01-Oct-2015 14:04

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v092909sim.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 1.0ppbv (1.0ppbv)

Calibration Date: 29-SEP-2015
Calibration Time: 19:51
Client Smp ID: Level # 8
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	100126	60076	140176	94781	-5.34
40 1,4-Difluorobenze	412832	247699	577965	403326	-2.30
56 Chlorobenzene-d5	352453	211472	493434	345538	-1.96

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/29Sep2015.b/v092909sim.d

Date : 29-SEP-2015 19:17

Client ID: Level # 8

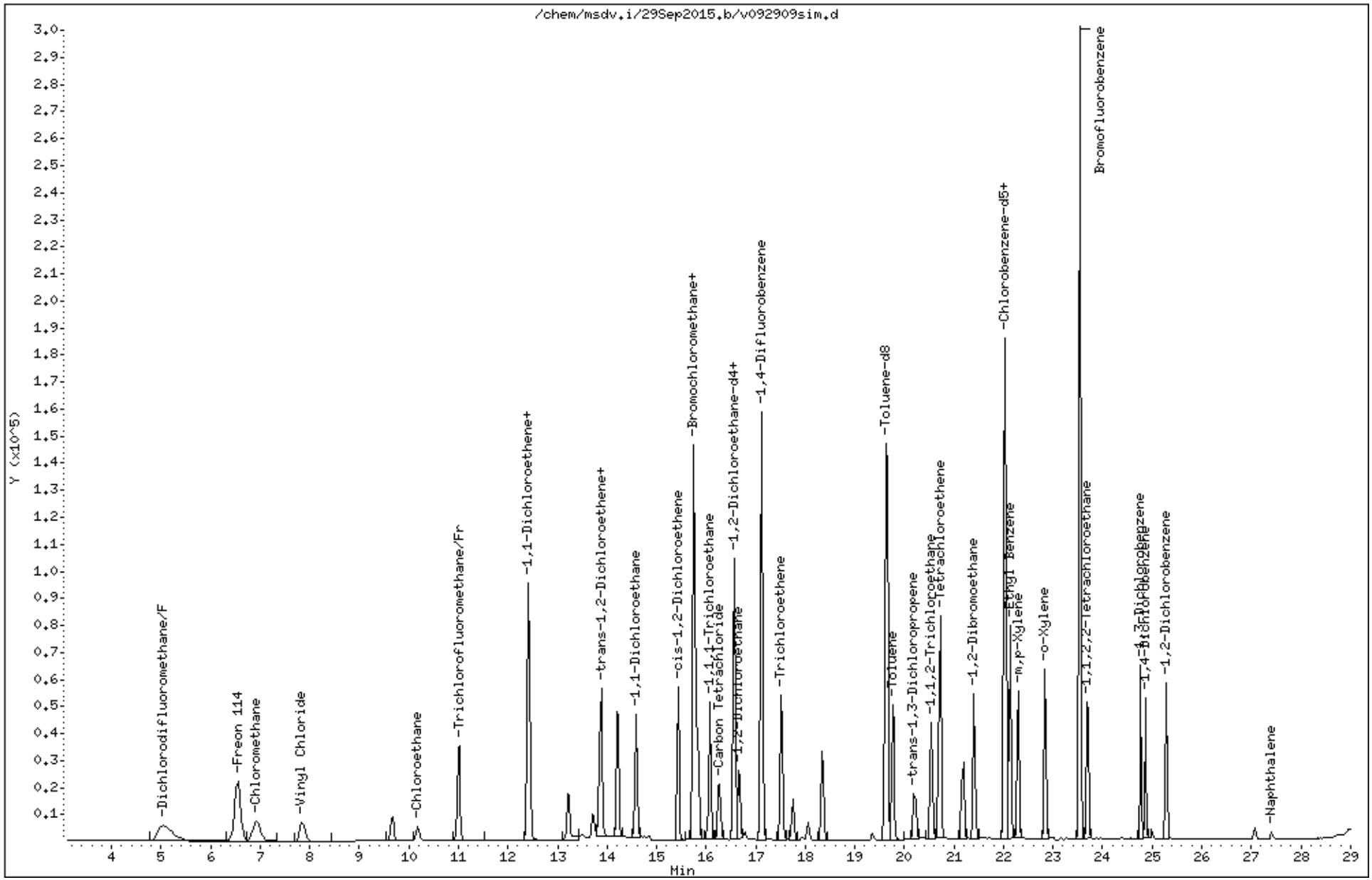
Sample Info: 250mL# 2736-249

Column phase: RTx-624

Instrument: msdv.i

Operator: gh

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/29Sep2015.b/v092910sim.d
Lab Smp Id: ICAL Client Smp ID: Level # 9
Inj Date : 29-SEP-2015 19:51
Operator : gh Inst ID: msdv.i
Smp Info : 25mL# 2736-233
Misc Info : 5.0ppbv (50ppbv)
Comment : SIM GC-MS
Method : /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 01-Oct-2015 14:04 sblack Quant Type: ISTD
Cal Date : 29-SEP-2015 19:51 Cal File: v092910sim.d
Als bottle: 2 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HiLoCRV.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 31 Bromochloromethane						CAS #: 74-97-5	
15.757	15.757 (1.000)	130	100126	5.00000		80.00- 120.00	100.00
15.757	15.757 (1.000)	128	78225			48.13- 108.13	78.13
15.757	15.757 (1.000)	49	268427			238.09- 298.09	268.09
* 40 1,4-Difluorobenzene						CAS #: 540-36-3	
17.125	17.125 (1.000)	114	412832	5.00000		80.00- 120.00	100.00
17.125	17.125 (1.000)	88	59852			0.00- 44.50	14.50
* 56 Chlorobenzene-d5						CAS #: 3114-55-4	
22.042	22.042 (1.000)	117	352453	5.00000		80.00- 120.00	100.00
22.015	22.015 (1.000)	82	164270			16.61- 76.61	46.61
$ 37 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.548	16.548 (1.050)	65	162458	5.00000	4.916	80.00- 120.00	100.00
16.548	16.548 (1.050)	67	81075			19.91- 79.91	49.91
$ 47 Toluene-d8						CAS #: 2037-26-5	
19.629	19.629 (1.146)	98	329679	5.00000	4.942	80.00- 120.00	100.00
19.629	19.629 (1.146)	70	36394			0.00- 41.04	11.04

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.629	19.629 (1.146)	100	207670			32.99- 92.99	62.99
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	199378	5.00000	5.078	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	227336			84.02- 144.02	114.02
23.548	23.548 (1.068)	176	194520			67.56- 127.56	97.56
1 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.003	5.003 (0.318)	85	399813	5.00000	4.763	80.00- 120.00	100.00
5.003	5.003 (0.318)	87	128937			2.25- 62.25	32.25
3 Freon 114					CAS #: 76-14-2		
6.513	6.513 (0.413)	135	349795	5.00000	4.988	80.00- 120.00	100.00
6.513	6.513 (0.413)	137	109132			1.20- 61.20	31.20
4 Chloromethane					CAS #: 74-87-3		
6.853	6.853 (0.435)	50	326216	5.00000	4.800	80.00- 120.00	100.00
6.853	6.853 (0.435)	52	101081			0.99- 60.99	30.99
5 Vinyl Chloride					CAS #: 75-01-4		
7.809	7.809 (0.496)	62	225508	5.00000	4.720	80.00- 120.00	100.00
7.840	7.840 (0.498)	64	62408			0.00- 57.67	27.67
9 Chloroethane					CAS #: 75-00-3		
10.151	10.151 (0.644)	64	91452	5.00000	5.184	80.00- 120.00	100.00
10.151	10.151 (0.644)	66	24824			0.00- 57.14	27.14
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.994	10.994 (0.698)	101	460158	5.00000	5.123	80.00- 120.00	100.00
10.994	10.994 (0.698)	103	297538			34.66- 94.66	64.66
12 1,1-Dichloroethene					CAS #: 75-35-4		
12.399	12.399 (0.787)	98	114338	5.00000	4.687	80.00- 120.00	100.00
12.399	12.399 (0.787)	61	413773			331.89- 391.89	361.89
12.399	12.399 (0.787)	96	180102			127.52- 187.52	157.52
13 Freon 113					CAS #: 76-13-1		
12.427	12.427 (0.789)	151	332716	5.00000	5.000	80.00- 120.00	100.00
12.427	12.427 (0.789)	153	213289			34.11- 94.11	64.11
12.399	12.399 (0.787)	101	376010			83.01- 143.01	113.01
22 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.882	13.882 (0.881)	98	116743	5.00000	4.419	80.00- 120.00	100.00
13.882	13.882 (0.881)	61	382919			298.00- 358.00	328.00
13.882	13.882 (0.881)	96	183274			126.99- 186.99	156.99

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
21 MTBE					CAS #: 1634-04-4		
13.855	13.855 (0.879)	73	427597	5.00000	5.071	80.00- 120.00	100.00
13.827	13.827 (0.878)	57	200601			16.91- 76.91	46.91
13.827	13.827 (0.878)	41	178850			11.83- 71.83	41.83
25 1,1-Dichloroethane					CAS #: 75-34-3		
14.596	14.596 (0.926)	63	433968	5.00000	5.082	80.00- 120.00	100.00
14.596	14.596 (0.926)	65	120209			0.00- 57.70	27.70
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.437	15.437 (0.980)	98	127408	5.00000	5.010	80.00- 120.00	100.00
15.437	15.437 (0.980)	61	375386			264.63- 324.63	294.63
15.437	15.437 (0.980)	96	199379			126.49- 186.49	156.49
32 Chloroform					CAS #: 67-66-3		
15.819	15.819 (1.004)	83	372284	5.00000	5.105	80.00- 120.00	100.00
15.819	15.819 (1.004)	85	241326			34.82- 94.82	64.82
34 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.065	16.065 (1.020)	97	414047	5.00000	4.989	80.00- 120.00	100.00
16.065	16.065 (1.020)	99	266951			34.47- 94.47	64.47
35 Carbon Tetrachloride					CAS #: 56-23-5		
16.250	16.250 (1.031)	117	391521	5.00000	7.609	80.00- 120.00	100.00
16.281	16.281 (1.033)	119	374790			65.73- 125.73	95.73
36 Benzene					CAS #: 71-43-2		
16.576	16.576 (0.968)	78	487681	5.00000	4.459	80.00- 120.00	100.00
16.576	16.576 (0.968)	77	111142			0.00- 52.79	22.79
38 1,2-Dichloroethane					CAS #: 107-06-2		
16.658	16.658 (0.973)	62	340683	5.00000	5.276	80.00- 120.00	100.00
16.658	16.658 (0.973)	64	99718			0.00- 59.27	29.27
41 Trichloroethene					CAS #: 79-01-6		
17.509	17.509 (1.022)	130	281106	5.00000	4.354	80.00- 120.00	100.00
17.509	17.509 (1.022)	95	266231			64.71- 124.71	94.71
17.509	17.509 (1.022)	97	171995			31.19- 91.19	61.19
48 Toluene					CAS #: 108-88-3		
19.763	19.763 (1.154)	91	597189	5.00000	4.772	80.00- 120.00	100.00
19.763	19.763 (1.154)	92	352299			28.99- 88.99	58.99
49 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.189	20.189 (0.916)	75	300074	5.00000	5.352	80.00- 120.00	100.00
20.189	20.189 (0.916)	77	95118			1.70- 61.70	31.70

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
50 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.548	20.548 (0.932)	97	251120	5.00000	4.679	80.00- 120.00	100.00
20.548	20.548 (0.932)	99	157226			32.61- 92.61	62.61
20.548	20.548 (0.932)	83	200797			49.96- 109.96	79.96
51 Tetrachloroethene					CAS #: 127-18-4		
20.727	20.727 (0.940)	166	370350	5.00000	4.386	80.00- 120.00	100.00
20.727	20.727 (0.940)	129	265169			41.60- 101.60	71.60
20.727	20.727 (0.940)	131	278031			45.07- 105.07	75.07
55 1,2-Dibromoethane					CAS #: 106-93-4		
21.409	21.409 (0.971)	107	397675	5.00000	5.258	80.00- 120.00	100.00
21.409	21.409 (0.971)	109	376194			64.60- 124.60	94.60
57 Chlorobenzene					CAS #: 108-90-7		
22.070	22.070 (1.001)	112	548408	5.00000	5.117	80.00- 120.00	100.00
22.070	22.070 (1.001)	114	175174			1.94- 61.94	31.94
22.070	22.070 (1.001)	77	296978			24.15- 84.15	54.15
58 Ethyl Benzene					CAS #: 100-41-4		
22.152	22.152 (1.005)	106	221335	5.00000	5.121	80.00- 120.00	100.00
22.152	22.152 (1.005)	91	733702			301.49- 361.49	331.49
59 m,p-Xylene					CAS #: 108-38-3		
22.317	22.317 (1.012)	106	232456	5.00000	5.122	80.00- 120.00	100.00
22.317	22.317 (1.012)	91	499770			185.00- 245.00	215.00
61 o-Xylene					CAS #: 95-47-6		
22.839	22.839 (1.036)	106	222082	5.00000	5.180	80.00- 120.00	100.00
22.839	22.839 (1.036)	91	506802			198.20- 258.20	228.20
67 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.677	23.677 (1.074)	83	457334	5.00000	5.028	80.00- 120.00	100.00
23.677	23.677 (1.074)	85	295153			34.54- 94.54	64.54
72 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.769	24.769 (1.124)	146	366232	5.00000	4.832	80.00- 120.00	100.00
24.769	24.769 (1.124)	148	234419			34.01- 94.01	64.01
24.769	24.769 (1.124)	111	142273			8.85- 68.85	38.85
73 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.859	24.859 (1.128)	146	323281	5.00000	4.285	80.00- 120.00	100.00
24.859	24.859 (1.128)	148	206965			34.02- 94.02	64.02
24.859	24.859 (1.128)	111	122688			7.95- 67.95	37.95
75 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.285	25.285 (1.147)	146	320884	5.00000	4.867	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
75 1,2-Dichlorobenzene (continued)							
25.285	25.285 (1.147)	148	204404			33.70- 93.70	63.70
25.285	25.285 (1.147)	111	128015			9.89- 69.89	39.89
78 Naphthalene					CAS #: 91-20-3		
27.415	27.415 (1.244)	128	19103	0.50000	0.3511	80.00- 120.00	100.00(H)
27.415	27.415 (1.244)	127	2465			0.00- 42.90	12.90

QC Flag Legend

H - Operator selected an alternate compound hit.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v092910sim.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Calibration Date: 29-SEP-2015
Calibration Time: 19:51
Client Smp ID: Level # 9
Level: LOW
Sample Type: AIR
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 5.0ppbv (50ppbv)

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	100126	60076	140176	100126	0.00
40 1,4-Difluorobenze	412832	247699	577965	412832	0.00
56 Chlorobenzene-d5	352453	211472	493434	352453	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/29Sep2015.b/v092910sim.d

Date : 29-SEP-2015 19:51

Client ID: Level # 9

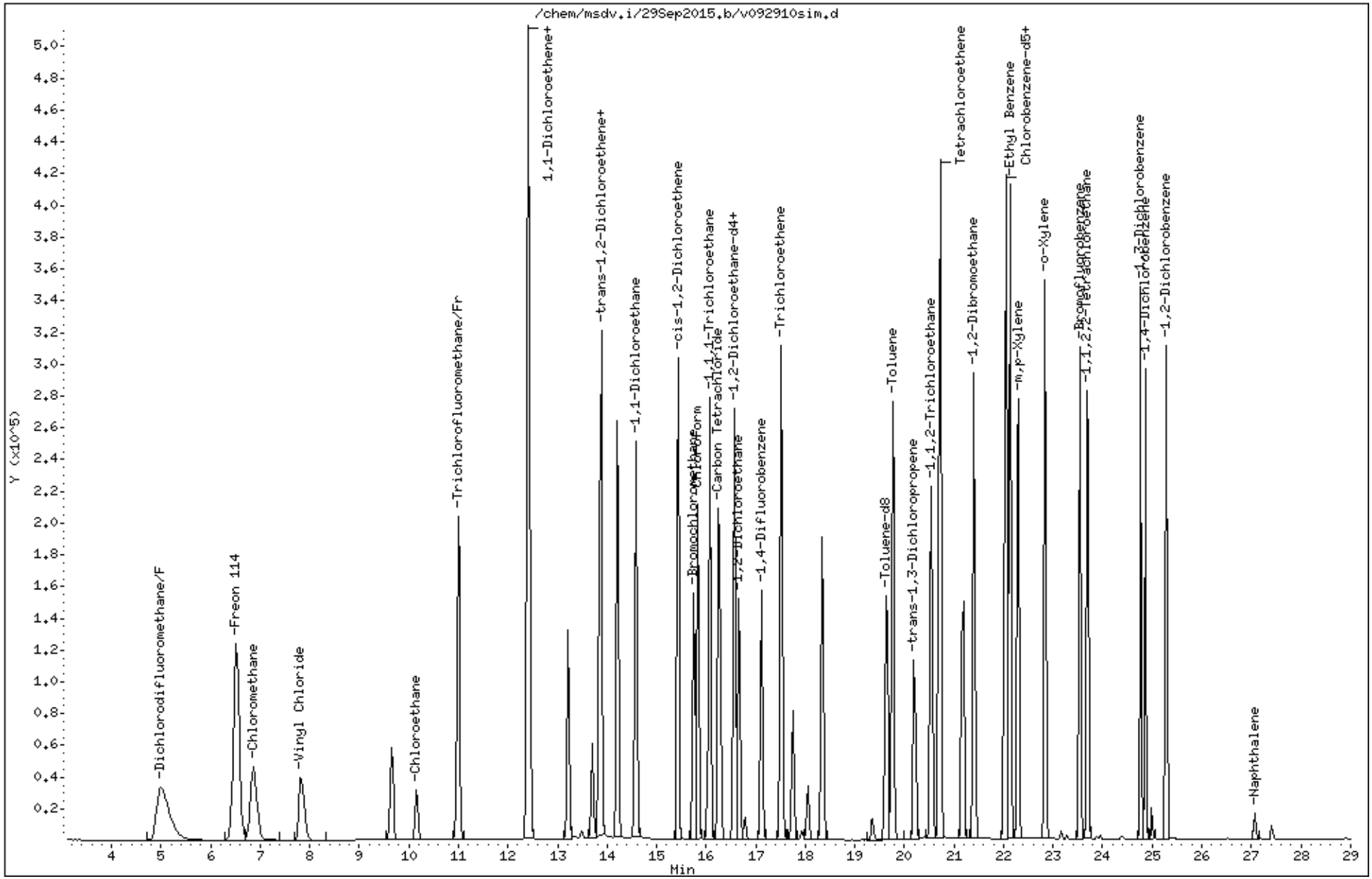
Sample Info: 25mL# 2736-233

Column phase: RTx-624

Instrument: msdv.i

Operator: gh

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/29Sep2015.b/v092911sim.d
Lab Smp Id: ICAL Client Smp ID: Level # 10
Inj Date : 29-SEP-2015 20:36
Operator : gh Inst ID: msdv.i
Smp Info : 50mL# 2736-233
Misc Info : 10ppbv (50ppbv)
Comment : SIM GC-MS
Method : /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 01-Oct-2015 14:04 sblack Quant Type: ISTD
Cal Date : 29-SEP-2015 20:36 Cal File: v092911sim.d
Als bottle: 2 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HiLoCRV.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
* 31 Bromochloromethane						CAS #: 74-97-5	
15.757	15.757 (1.000)	130	96496	5.00000		80.00- 120.00	100.00
15.757	15.757 (1.000)	128	75080			48.13- 108.13	77.81
15.757	15.757 (1.000)	49	264130			238.09- 298.09	273.72
* 40 1,4-Difluorobenzene						CAS #: 540-36-3	
17.125	17.125 (1.000)	114	405553	5.00000		80.00- 120.00	100.00
17.125	17.125 (1.000)	88	59171			0.00- 44.50	14.59
* 56 Chlorobenzene-d5						CAS #: 3114-55-4	
22.042	22.042 (1.000)	117	350630	5.00000		80.00- 120.00	100.00
22.015	22.015 (1.000)	82	165255			16.61- 76.61	47.13
$ 37 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.576	16.576 (1.052)	65	160870	5.00000	5.051	80.00- 120.00	100.00
16.576	16.576 (1.052)	67	85756			19.91- 79.91	53.31
$ 47 Toluene-d8						CAS #: 2037-26-5	
19.629	19.629 (1.146)	98	328642	5.00000	5.015	80.00- 120.00	100.00
19.629	19.629 (1.146)	70	36433			0.00- 41.04	11.09

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.629	19.629 (1.146)	100	206611			32.99- 92.99	62.87
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	201352	5.00000	5.155	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	229321			84.02- 144.02	113.89
23.548	23.548 (1.068)	176	197993			67.56- 127.56	98.33
1 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.003	5.003 (0.318)	85	760972	10.0000	9.407	80.00- 120.00	100.00
5.003	5.003 (0.318)	87	245217			2.25- 62.25	32.22
3 Freon 114					CAS #: 76-14-2		
6.513	6.513 (0.413)	135	635903	10.0000	9.410	80.00- 120.00	100.00
6.513	6.513 (0.413)	137	203829			1.20- 61.20	32.05
4 Chloromethane					CAS #: 74-87-3		
6.853	6.853 (0.435)	50	604536	10.0000	9.231	80.00- 120.00	100.00
6.891	6.891 (0.437)	52	190130			0.99- 60.99	31.45
5 Vinyl Chloride					CAS #: 75-01-4		
7.840	7.840 (0.498)	62	429320	10.0000	9.324	80.00- 120.00	100.00
7.840	7.840 (0.498)	64	118502			0.00- 57.67	27.60
9 Chloroethane					CAS #: 75-00-3		
10.175	10.175 (0.646)	64	172708	10.0000	10.157	80.00- 120.00	100.00
10.175	10.175 (0.646)	66	46790			0.00- 57.14	27.09
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.994	10.994 (0.698)	101	840741	10.0000	9.712	80.00- 120.00	100.00
11.018	11.018 (0.699)	103	545594			34.66- 94.66	64.89
12 1,1-Dichloroethene					CAS #: 75-35-4		
12.399	12.399 (0.787)	98	209305	10.0000	8.903	80.00- 120.00	100.00
12.399	12.399 (0.787)	61	754659			331.89- 391.89	360.55
12.399	12.399 (0.787)	96	328499			127.52- 187.52	156.95
13 Freon 113					CAS #: 76-13-1		
12.427	12.427 (0.789)	151	611751	10.0000	9.538	80.00- 120.00	100.00
12.427	12.427 (0.789)	153	392051			34.11- 94.11	64.09
12.399	12.399 (0.787)	101	689205			83.01- 143.01	112.66
22 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.882	13.882 (0.881)	98	214465	10.0000	8.424	80.00- 120.00	100.00
13.882	13.882 (0.881)	61	703117			298.00- 358.00	327.85
13.882	13.882 (0.881)	96	338120			126.99- 186.99	157.66

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
21 MTBE					CAS #: 1634-04-4		
13.855	13.855 (0.879)	73	789909	10.0000	9.720	80.00- 120.00	100.00
13.827	13.827 (0.878)	57	364372			16.91- 76.91	46.13
13.827	13.827 (0.878)	41	327485			11.83- 71.83	41.46
25 1,1-Dichloroethane					CAS #: 75-34-3		
14.596	14.596 (0.926)	63	794239	10.0000	9.652	80.00- 120.00	100.00
14.596	14.596 (0.926)	65	220964			0.00- 57.70	27.82
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.437	15.437 (0.980)	98	234901	10.0000	9.584	80.00- 120.00	100.00
15.437	15.437 (0.980)	61	687274			264.63- 324.63	292.58
15.437	15.437 (0.980)	96	366923			126.49- 186.49	156.20
32 Chloroform					CAS #: 67-66-3		
15.819	15.819 (1.004)	83	685898	10.0000	9.759	80.00- 120.00	100.00
15.819	15.819 (1.004)	85	443637			34.82- 94.82	64.68
34 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.065	16.065 (1.020)	97	764544	10.0000	9.559	80.00- 120.00	100.00
16.065	16.065 (1.020)	99	493354			34.47- 94.47	64.53
35 Carbon Tetrachloride					CAS #: 56-23-5		
16.281	16.281 (1.033)	117	725607	10.0000	14.632	80.00- 120.00	100.00
16.281	16.281 (1.033)	119	699063			65.73- 125.73	96.34
36 Benzene					CAS #: 71-43-2		
16.576	16.576 (0.968)	78	905256	10.0000	8.426	80.00- 120.00	100.00
16.576	16.576 (0.968)	77	206269			0.00- 52.79	22.79
38 1,2-Dichloroethane					CAS #: 107-06-2		
16.658	16.658 (0.973)	62	628325	10.0000	9.905	80.00- 120.00	100.00
16.658	16.658 (0.973)	64	184561			0.00- 59.27	29.37
41 Trichloroethene					CAS #: 79-01-6		
17.509	17.509 (1.022)	130	521855	10.0000	8.227	80.00- 120.00	100.00
17.509	17.509 (1.022)	95	494279			64.71- 124.71	94.72
17.509	17.509 (1.022)	97	319506			31.19- 91.19	61.23
48 Toluene					CAS #: 108-88-3		
19.763	19.763 (1.154)	91	1126251	10.0000	9.162	80.00- 120.00	100.00
19.763	19.763 (1.154)	92	666418			28.99- 88.99	59.17
49 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.189	20.189 (0.916)	75	570383	10.0000	10.226	80.00- 120.00	100.00
20.189	20.189 (0.916)	77	182037			1.70- 61.70	31.91

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
50 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.548	20.548 (0.932)	97	465874	10.0000	8.726	80.00- 120.00	100.00
20.548	20.548 (0.932)	99	290700			32.61- 92.61	62.40
20.548	20.548 (0.932)	83	373099			49.96- 109.96	80.09
51 Tetrachloroethene					CAS #: 127-18-4		
20.727	20.727 (0.940)	166	696342	10.0000	8.290	80.00- 120.00	100.00
20.727	20.727 (0.940)	129	497786			41.60- 101.60	71.49
20.727	20.727 (0.940)	131	520076			45.07- 105.07	74.69
55 1,2-Dibromoethane					CAS #: 106-93-4		
21.409	21.409 (0.971)	107	741755	10.0000	9.859	80.00- 120.00	100.00
21.409	21.409 (0.971)	109	703359			64.60- 124.60	94.82
57 Chlorobenzene					CAS #: 108-90-7		
22.070	22.070 (1.001)	112	1035291	10.0000	9.711	80.00- 120.00	100.00
22.070	22.070 (1.001)	114	333747			1.94- 61.94	32.24
22.070	22.070 (1.001)	77	561935			24.15- 84.15	54.28
58 Ethyl Benzene					CAS #: 100-41-4		
22.152	22.152 (1.005)	106	423783	10.0000	9.857	80.00- 120.00	100.00
22.152	22.152 (1.005)	91	1389006			301.49- 361.49	327.76
59 m,p-Xylene					CAS #: 108-38-3		
22.317	22.317 (1.012)	106	445132	10.0000	9.858	80.00- 120.00	100.00
22.317	22.317 (1.012)	91	953545			185.00- 245.00	214.22
61 o-Xylene					CAS #: 95-47-6		
22.839	22.839 (1.036)	106	421534	10.0000	9.884	80.00- 120.00	100.00
22.839	22.839 (1.036)	91	953104			198.20- 258.20	226.10
67 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.677	23.677 (1.074)	83	845330	10.0000	9.342	80.00- 120.00	100.00
23.677	23.677 (1.074)	85	546302			34.54- 94.54	64.63
72 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.769	24.769 (1.124)	146	687795	10.0000	9.121	80.00- 120.00	100.00
24.769	24.769 (1.124)	148	440647			34.01- 94.01	64.07
24.769	24.769 (1.124)	111	267953			8.85- 68.85	38.96
73 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.859	24.859 (1.128)	146	608016	10.0000	8.102	80.00- 120.00	100.00
24.859	24.859 (1.128)	148	390076			34.02- 94.02	64.16
24.859	24.859 (1.128)	111	227174			7.95- 67.95	37.36
75 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.285	25.285 (1.147)	146	609740	10.0000	9.296	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
75 1,2-Dichlorobenzene (continued)							
25.285	25.285 (1.147)	148	388760			33.70- 93.70	63.76
25.285	25.285 (1.147)	111	243758			9.89- 69.89	39.98
78 Naphthalene					CAS #: 91-20-3		
27.415	27.415 (1.244)	128	41556	1.00000	0.7677	80.00- 120.00	100.00(H)
27.415	27.415 (1.244)	127	4889			0.00- 42.90	11.76

QC Flag Legend

H - Operator selected an alternate compound hit.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v092911sim.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Calibration Date: 29-SEP-2015
Calibration Time: 19:51
Client Smp ID: Level # 10
Level: LOW
Sample Type: AIR
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 10ppbv (50ppbv)

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	100126	60076	140176	96496	-3.63
40 1,4-Difluorobenze	412832	247699	577965	405553	-1.76
56 Chlorobenzene-d5	352453	211472	493434	350630	-0.52

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/29Sep2015.b/v092911sim.d

Date : 29-SEP-2015 20:36

Client ID: Level # 10

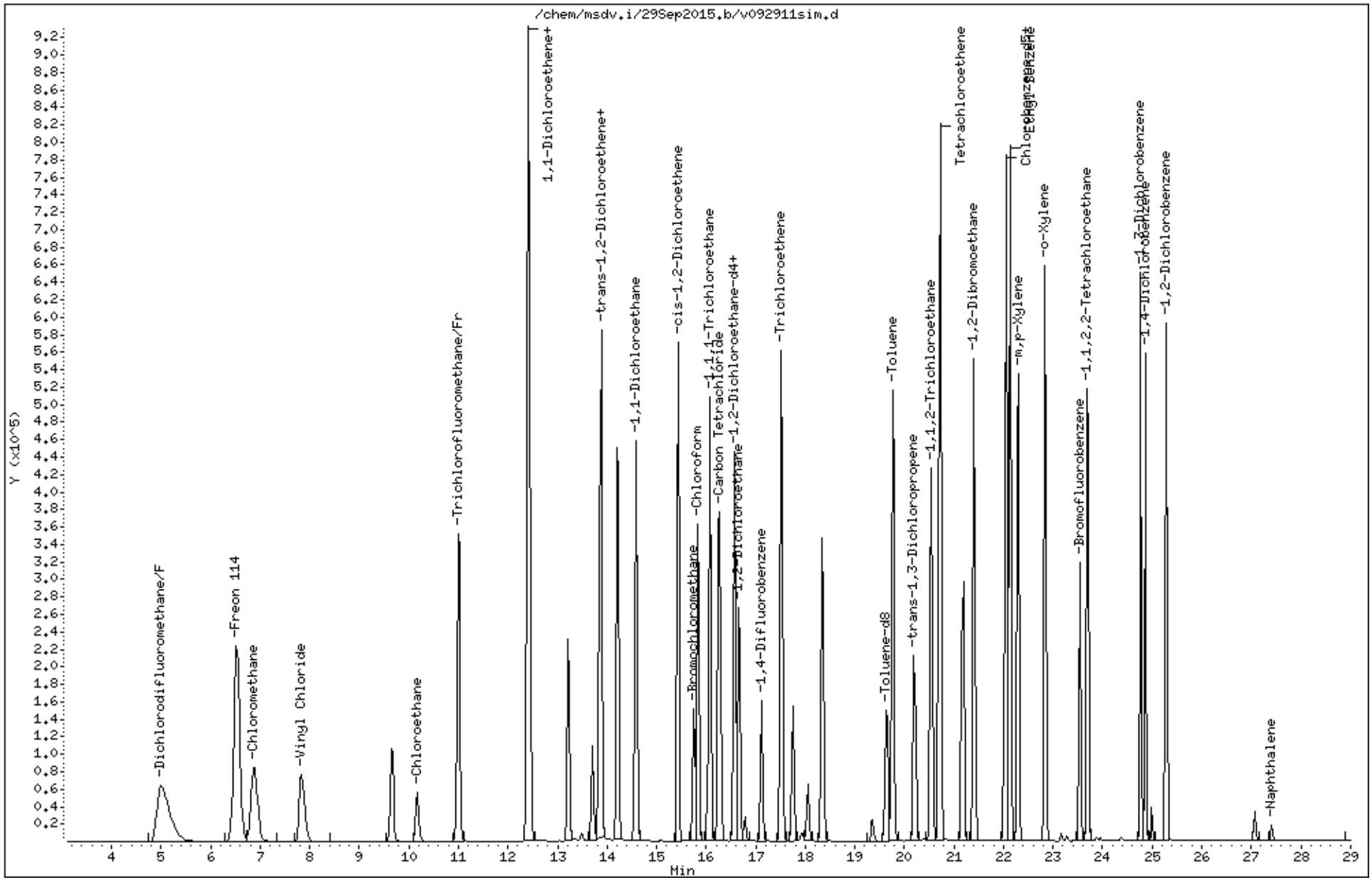
Sample Info: 50mL# 2736-233

Column phase: RTx-624

Instrument: msdv.i

Operator: gh

Column diameter: 0.32



Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/29Sep2015.b/v092912sim.d
Lab Smp Id: ICAL Client Smp ID: Level # 11
Inj Date : 29-SEP-2015 21:15
Operator : gh Inst ID: msdv.i
Smp Info : 100mL# 2736-233
Misc Info : 20ppbv (50ppbv)
Comment : SIM GC-MS
Method : /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 01-Oct-2015 14:04 sblack Quant Type: ISTD
Cal Date : 29-SEP-2015 21:15 Cal File: v092912sim.d
Als bottle: 2 Calibration Sample, Level: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HiLoCRV.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 31 Bromochloromethane						CAS #: 74-97-5		
15.757	15.757 (1.000)	130	96962	5.00000		80.00- 120.00		100.00
15.757	15.757 (1.000)	128	75838			48.13- 108.13		78.21
15.757	15.757 (1.000)	49	270691			238.09- 298.09		279.17
* 40 1,4-Difluorobenzene						CAS #: 540-36-3		
17.125	17.125 (1.000)	114	409466	5.00000		80.00- 120.00		100.00
17.125	17.125 (1.000)	88	59222			0.00- 44.50		14.46
* 56 Chlorobenzene-d5						CAS #: 3114-55-4		
22.042	22.042 (1.000)	117	350782	5.00000		80.00- 120.00		100.00
22.015	22.015 (1.000)	82	166548			16.61- 76.61		47.48
$ 37 1,2-Dichloroethane-d4						CAS #: 17060-07-0		
16.548	16.548 (1.050)	65	170972	5.00000	5.343	80.00- 120.00		100.00
16.548	16.548 (1.050)	67	100282			19.91- 79.91		58.65
$ 47 Toluene-d8						CAS #: 2037-26-5		
19.629	19.629 (1.146)	98	331021	5.00000	5.003	80.00- 120.00		100.00
19.629	19.629 (1.146)	70	36859			0.00- 41.04		11.13

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.629	19.629 (1.146)	100	207772			32.99- 92.99	62.77
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	203986	5.00000	5.220	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	230123			84.02- 144.02	112.81
23.548	23.548 (1.068)	176	198591			67.56- 127.56	97.36
1 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.003	5.003 (0.318)	85	1509248	20.0000	18.568	80.00- 120.00	100.00
5.003	5.003 (0.318)	87	484967			2.25- 62.25	32.13
3 Freon 114					CAS #: 76-14-2		
6.551	6.551 (0.416)	135	1260290	20.0000	18.560	80.00- 120.00	100.00
6.551	6.551 (0.416)	137	401227			1.20- 61.20	31.84
4 Chloromethane					CAS #: 74-87-3		
6.891	6.891 (0.437)	50	1192910	20.0000	18.127	80.00- 120.00	100.00
6.891	6.891 (0.437)	52	374072			0.99- 60.99	31.36
5 Vinyl Chloride					CAS #: 75-01-4		
7.840	7.840 (0.498)	62	849230	20.0000	18.354	80.00- 120.00	100.00
7.840	7.840 (0.498)	64	234366			0.00- 57.67	27.60
9 Chloroethane					CAS #: 75-00-3		
10.175	10.175 (0.646)	64	345548	20.0000	20.225	80.00- 120.00	100.00(A)
10.175	10.175 (0.646)	66	94784			0.00- 57.14	27.43
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.994	10.994 (0.698)	101	1652190	20.0000	18.994	80.00- 120.00	100.00
10.994	10.994 (0.698)	103	1072366			34.66- 94.66	64.91
12 1,1-Dichloroethene					CAS #: 75-35-4		
12.399	12.399 (0.787)	98	405974	20.0000	17.185	80.00- 120.00	100.00
12.399	12.399 (0.787)	61	1482776			331.89- 391.89	365.24
12.399	12.399 (0.787)	96	639397			127.52- 187.52	157.50
13 Freon 113					CAS #: 76-13-1		
12.427	12.427 (0.789)	151	1194717	20.0000	18.539	80.00- 120.00	100.00
12.427	12.427 (0.789)	153	767284			34.11- 94.11	64.22
12.399	12.399 (0.787)	101	1346941			83.01- 143.01	112.74
22 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.882	13.882 (0.881)	98	421628	20.0000	16.482	80.00- 120.00	100.00
13.882	13.882 (0.881)	61	1386698			298.00- 358.00	328.89
13.882	13.882 (0.881)	96	662284			126.99- 186.99	157.08

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
21 MTBE					CAS #: 1634-04-4		
13.855	13.855 (0.879)	73	1552405	20.0000	19.010	80.00- 120.00	100.00
13.827	13.827 (0.878)	57	711902			16.91- 76.91	45.86
13.827	13.827 (0.878)	41	637287			11.83- 71.83	41.05
25 1,1-Dichloroethane					CAS #: 75-34-3		
14.596	14.596 (0.926)	63	1562686	20.0000	18.899	80.00- 120.00	100.00
14.596	14.596 (0.926)	65	432537			0.00- 57.70	27.68
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.437	15.437 (0.980)	98	459878	20.0000	18.673	80.00- 120.00	100.00
15.437	15.437 (0.980)	61	1350801			264.63- 324.63	293.73
15.437	15.437 (0.980)	96	716048			126.49- 186.49	155.70
32 Chloroform					CAS #: 67-66-3		
15.819	15.819 (1.004)	83	1339925	20.0000	18.974	80.00- 120.00	100.00
15.819	15.819 (1.004)	85	873760			34.82- 94.82	65.21
34 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.065	16.065 (1.020)	97	1502119	20.0000	18.691	80.00- 120.00	100.00
16.065	16.065 (1.020)	99	969085			34.47- 94.47	64.51
35 Carbon Tetrachloride					CAS #: 56-23-5		
16.250	16.250 (1.031)	117	1433188	20.0000	28.761	80.00- 120.00	100.00(A)
16.281	16.281 (1.033)	119	1384797			65.73- 125.73	96.62
36 Benzene					CAS #: 71-43-2		
16.576	16.576 (0.968)	78	1782469	20.0000	16.433	80.00- 120.00	100.00
16.576	16.576 (0.968)	77	403282			0.00- 52.79	22.62
38 1,2-Dichloroethane					CAS #: 107-06-2		
16.658	16.658 (0.973)	62	1253480	20.0000	19.571	80.00- 120.00	100.00
16.658	16.658 (0.973)	64	369127			0.00- 59.27	29.45
41 Trichloroethene					CAS #: 79-01-6		
17.509	17.509 (1.022)	130	1027091	20.0000	16.038	80.00- 120.00	100.00
17.509	17.509 (1.022)	95	970369			64.71- 124.71	94.48
17.509	17.509 (1.022)	97	628417			31.19- 91.19	61.18
48 Toluene					CAS #: 108-88-3		
19.764	19.764 (1.154)	91	2210232	20.0000	17.808	80.00- 120.00	100.00
19.764	19.764 (1.154)	92	1309942			28.99- 88.99	59.27
49 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.189	20.189 (0.916)	75	1125550	20.0000	20.170	80.00- 120.00	100.00(A)
20.189	20.189 (0.916)	77	359384			1.70- 61.70	31.93

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
50 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.548	20.548 (0.932)	97	910683	20.0000	17.049	80.00- 120.00	100.00
20.548	20.548 (0.932)	99	570243			32.61- 92.61	62.62
20.548	20.548 (0.932)	83	730136			49.96- 109.96	80.17
51 Tetrachloroethene					CAS #: 127-18-4		
20.727	20.727 (0.940)	166	1356371	20.0000	16.141	80.00- 120.00	100.00
20.727	20.727 (0.940)	129	965034			41.60- 101.60	71.15
20.727	20.727 (0.940)	131	1010850			45.07- 105.07	74.53
55 1,2-Dibromoethane					CAS #: 106-93-4		
21.409	21.409 (0.971)	107	1460074	20.0000	19.398	80.00- 120.00	100.00
21.409	21.409 (0.971)	109	1386944			64.60- 124.60	94.99
57 Chlorobenzene					CAS #: 108-90-7		
22.070	22.070 (1.001)	112	2046291	20.0000	19.186	80.00- 120.00	100.00
22.070	22.070 (1.001)	114	657160			1.94- 61.94	32.11
22.070	22.070 (1.001)	77	1097519			24.15- 84.15	53.63
58 Ethyl Benzene					CAS #: 100-41-4		
22.152	22.152 (1.005)	106	841776	20.0000	19.570	80.00- 120.00	100.00
22.152	22.152 (1.005)	91	2754245			301.49- 361.49	327.19
59 m,p-Xylene					CAS #: 108-38-3		
22.317	22.317 (1.012)	106	893709	20.0000	19.784	80.00- 120.00	100.00
22.317	22.317 (1.012)	91	1910891			185.00- 245.00	213.82
61 o-Xylene					CAS #: 95-47-6		
22.839	22.839 (1.036)	106	848363	20.0000	19.883	80.00- 120.00	100.00
22.839	22.839 (1.036)	91	1906906			198.20- 258.20	224.77
67 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.677	23.677 (1.074)	83	1663405	20.0000	18.376	80.00- 120.00	100.00
23.677	23.677 (1.074)	85	1083184			34.54- 94.54	65.12
72 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.769	24.769 (1.124)	146	1383265	20.0000	18.337	80.00- 120.00	100.00
24.769	24.769 (1.124)	148	887835			34.01- 94.01	64.18
24.769	24.769 (1.124)	111	539911			8.85- 68.85	39.03
73 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.859	24.859 (1.128)	146	1231636	20.0000	16.404	80.00- 120.00	100.00
24.859	24.859 (1.128)	148	788658			34.02- 94.02	64.03
24.859	24.859 (1.128)	111	464498			7.95- 67.95	37.71
75 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.285	25.285 (1.147)	146	1226939	20.0000	18.697	80.00- 120.00	100.00

				AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
RT	EXP RT (REL RT)	MASS	RESPONSE				
75 1,2-Dichlorobenzene (continued)							
25.285	25.285 (1.147)	148	787493			33.70- 93.70	64.18
25.285	25.285 (1.147)	111	490342			9.89- 69.89	39.96
78 Naphthalene					CAS #: 91-20-3		
27.415	27.415 (1.244)	128	84585	2.00000	1.562	80.00- 120.00	100.00(H)
27.415	27.415 (1.244)	127	10116			0.00- 42.90	11.96

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
H - Operator selected an alternate compound hit.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v092912sim.d
Lab Smp Id: ICAL
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msdv.i/29Sep2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 20ppbv (50ppbv)

Calibration Date: 29-SEP-2015
Calibration Time: 19:51
Client Smp ID: Level # 11
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	100126	60076	140176	96962	-3.16
40 1,4-Difluorobenze	412832	247699	577965	409466	-0.82
56 Chlorobenzene-d5	352453	211472	493434	350782	-0.47

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/29Sep2015.b/v092912sim.d

Date : 29-SEP-2015 21:15

Client ID: Level # 11

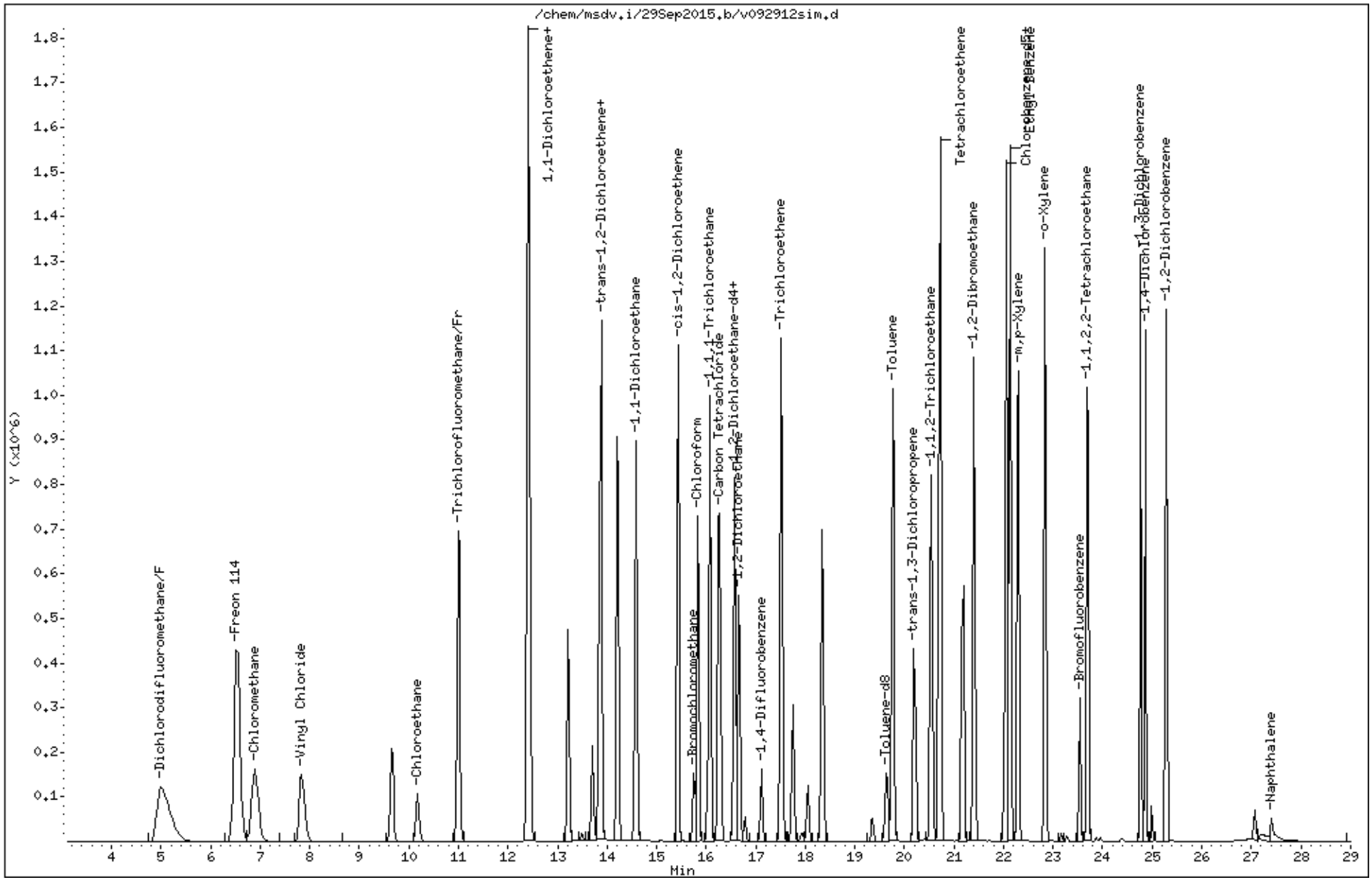
Sample Info: 100mL# 2736-233

Column phase: RTx-624

Instrument: msdv.i

Operator: gh

Column diameter: 0.32



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Client Sample ID: CCV

Lab ID#: 1509512-10A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100502**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/5/15 09:23 AM**	

Compound	%Recovery
Methylene Chloride	93
1,2,4-Trimethylbenzene	95

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	100	70-130

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdv.i Injection Date: 05-OCT-2015 09:23
Lab File ID: v100502.d Init. Cal. Date(s): 29-SEP-2015 29-SEP-2015
Analysis Type: AIR Init. Cal. Times: 17:05 21:58
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdv.i/05Oct2015.b/v15l0929a.m

COMPOUND	RRF / AMOUNT	RF5	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 65 1,2-Dichloroethane-d4	1.76334	1.62533	0.010	7.82676	30.00000	Averaged
$ 80 Toluene-d8	0.94252	0.91976	0.010	2.41515	30.00000	Averaged
$ 106 Bromofluorobenzene	0.51369	0.51629	0.010	-0.50619	30.00000	Averaged
3 Propylene	2.84305	2.62315	0.010	7.73484	30.00000	Averaged
4 Dichlorodifluoromethane/Fr1	4.07091	4.14699	0.010	-1.86895	30.00000	Averaged
6 Freon 114	3.38472	3.51126	0.010	-3.73879	30.00000	Averaged
8 Chloromethane	3.28458	3.23962	0.010	1.36906	30.00000	Averaged
9 Butane	0.58310	0.60592	0.010	-3.91266	30.00000	Averaged
10 Vinyl Chloride	2.17441	2.36318	0.010	-8.68180	30.00000	Averaged
11 1,3-Butadiene	2.87553	2.74187	0.010	4.64830	30.00000	Averaged
12 Bromomethane	1.29749	1.32782	0.010	-2.33764	30.00000	Averaged
17 Chloroethane	0.89255	0.88984	0.010	0.30406	30.00000	Averaged
18 Isopentane	2.60458	2.50429	0.010	3.85037	30.00000	Averaged
20 Trichlorofluoromethane/Fr11	4.49017	4.64704	0.010	-3.49363	30.00000	Averaged
24 Ethanol	1.32985	1.38979	0.010	-4.50712	30.00000	Averaged
30 1,1-Dichloroethene	1.17069	1.10298	0.010	5.78390	30.00000	Averaged
28 Freon 113	3.27904	3.23498	0.010	1.34372	30.00000	Averaged
31 Acetone	1.64619	1.38431	0.010	15.90787	30.00000	Averaged
33 Carbon Disulfide	4.78083	4.71716	0.010	1.33170	30.00000	Averaged
35 3-Chloroprene	0.65391	0.72053	0.010	-10.18693	30.00000	Averaged
34 2-Propanol	5.81991	6.19447	0.010	-6.43583	30.00000	Averaged
37 Methylene Chloride	1.56516	1.45599	0.010	6.97535	30.00000	Averaged
38 tert-butyl alcohol	6.28294	6.30041	0.010	-0.27810	30.00000	Averaged
39 MTBE	5.04746	4.81402	0.010	4.62485	30.00000	Averaged
40 trans-1,2-Dichloroethene	1.19626	1.19420	0.010	0.17285	30.00000	Averaged
43 Hexane	5.99300	5.35237	0.010	10.68975	30.00000	Averaged
45 Isopropyl ether	12.38741	12.67264	0.010	-2.30259	30.00000	Averaged
46 1,1-Dichloroethane	4.35221	4.30603	0.010	1.06095	30.00000	Averaged
47 Vinyl Acetate	0.39090	0.41812	0.010	-6.96251	30.00000	Averaged
49 Ethyl-tert-butyl ether	9.79827	10.12171	0.010	-3.30101	30.00000	Averaged
50 cis-1,2-Dichloroethene	1.30396	1.21300	0.010	6.97576	30.00000	Averaged
51 2-Butanone	0.82389	0.83890	0.010	-1.82235	30.00000	Averaged
53 Tetrahydrofuran	4.29190	4.28069	0.010	0.26123	30.00000	Averaged
55 Chloroform	3.73272	3.67647	0.010	1.50701	30.00000	Averaged
57 Cyclohexane	2.41888	2.32443	0.010	3.90456	30.00000	Averaged
58 1,1,1-Trichloroethane	4.16712	4.21318	0.010	-1.10549	30.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdv.i Injection Date: 05-OCT-2015 09:23
Lab File ID: v100502.d Init. Cal. Date(s): 29-SEP-2015 29-SEP-2015
Analysis Type: AIR Init. Cal. Times: 17:05 21:58
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdv.i/05Oct2015.b/v15l0929a.m

			MIN		MAX	
COMPOUND	RRF / AMOUNT	RF5	RRF	%D / %DRIFT	%D / %DRIFT	CURVE TYPE
59 Carbon Tetrachloride	2.97629	4.33810	0.010	-45.75536	30.00000	Averaged<-
63 2,2,4-Trimethylpentane	5.61693	5.57726	0.010	0.70630	30.00000	Averaged
64 Benzene	1.18343	1.22326	0.010	-3.36547	30.00000	Averaged
66 tert-amyl methyl ether	0.29238	0.29674	0.010	-1.49215	30.00000	Averaged
68 1,2-Dichloroethane	0.74365	0.80189	0.010	-7.83135	30.00000	Averaged
69 Heptane	0.77084	0.74347	0.010	3.55102	30.00000	Averaged
72 Trichloroethene	0.59367	0.61098	0.010	-2.91558	30.00000	Averaged
73 Methylcyclohexane	0.70356	0.75461	0.010	-7.25650	30.00000	Averaged
74 1,2-Dichloropropane	0.63882	0.66616	0.010	-4.27997	30.00000	Averaged
75 1,4-Dioxane	0.28116	0.30756	0.010	-9.39109	30.00000	Averaged
77 Bromodichloromethane	0.88275	0.93541	0.010	-5.96579	30.00000	Averaged
78 cis-1,3-Dichloropropene	0.76019	0.76903	0.010	-1.16403	30.00000	Averaged
79 4-Methyl-2-pentanone	1.98545	2.03407	0.010	-2.44873	30.00000	Averaged
81 Toluene	1.52408	1.54405	0.010	-1.31032	30.00000	Averaged
82 trans-1,3-Dichloropropene	0.71187	0.80434	0.010	-12.99019	30.00000	Averaged
84 1,1,2-Trichloroethane	0.64235	0.66511	0.010	-3.54430	30.00000	Averaged
86 Tetrachloroethene	0.88766	0.96725	0.010	-8.96574	30.00000	Averaged
87 2-Hexanone	0.98422	1.06771	0.010	-8.48251	30.00000	Averaged
89 Dibromochloromethane	1.14330	1.31070	0.010	-14.64219	30.00000	Averaged
90 1,2-Dibromoethane	0.93996	1.04380	0.010	-11.04737	30.00000	Averaged
93 Chlorobenzene	1.35575	1.46398	0.010	-7.98278	30.00000	Averaged
95 Ethyl Benzene	0.64571	0.69296	0.010	-7.31673	30.00000	Averaged
96 m,p-Xylene	0.70368	0.69383	0.010	1.39903	30.00000	Averaged
100 o-Xylene	0.66336	0.66882	0.010	-0.82250	30.00000	Averaged
101 Styrene	1.05930	1.01980	0.010	3.72951	30.00000	Averaged
102 Bromoform	1.06391	1.27630	0.010	-19.96277	30.00000	Averaged
103 Cumene	1.97199	2.01472	0.010	-2.16713	30.00000	Averaged
108 1,1,2,2-Tetrachloroethane	1.15410	1.18135	0.010	-2.36063	30.00000	Averaged
111 Propylbenzene	1.92953	1.88250	0.010	2.43773	30.00000	Averaged
113 4-Ethyltoluene	1.47236	1.35846	0.010	7.73554	30.00000	Averaged
114 1,3,5-Trimethylbenzene	1.36610	1.35319	0.010	0.94523	30.00000	Averaged
120 1,2,4-Trimethylbenzene	1.41851	1.34592	0.010	5.11692	30.00000	Averaged
122 1,3-Dichlorobenzene	0.93149	0.91400	0.010	1.87768	30.00000	Averaged
124 1,4-Dichlorobenzene	0.89124	0.82123	0.010	7.85599	30.00000	Averaged
127 alpha-chlorotoluene	1.20919	1.17271	0.010	3.01702	30.00000	Averaged

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdv.i Injection Date: 05-OCT-2015 09:23
Lab File ID: v100502.d Init. Cal. Date(s): 29-SEP-2015 29-SEP-2015
Analysis Type: AIR Init. Cal. Times: 17:05 21:58
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdv.i/05Oct2015.b/v15l0929a.m

COMPOUND	RRF / AMOUNT	RF5	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
128 1,2-Dichlorobenzene	0.91137	0.77675	0.010	14.77113	30.00000	Averaged
131 1,2,4-Trichlorobenzene	0.77563	0.72789	0.010	6.15460	30.00000	Averaged
132 Hexachlorobutadiene	0.58940	0.50978	0.010	13.50846	30.00000	Averaged
133 Naphthalene	0.67947	0.51125	0.010	24.75843	40.00000	Averaged

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TO15/Modified TO-14A

Data file : /chem/msdv.i/05Oct2015.b/v100502.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 05-OCT-2015 09:23
Operator : ef Inst ID: msdv.i
Smp Info : 25mL# 2736-237
Misc Info : 5.0ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m
Meth Date : 05-Oct-2015 10:04 efinn Quant Type: ISTD
Cal Date : 29-SEP-2015 21:58 Cal File: v092913.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 54 Bromochloromethane					CAS #: 74-97-5			
15.743	15.743 (1.000)	130	78102	5.00000		80.00- 120.00		100.00
15.743	15.743 (1.000)	128	58727			48.04- 108.04		75.19
15.743	15.743 (1.000)	49	246360			284.77- 344.77		315.43
* 71 1,4-Difluorobenzene					CAS #: 540-36-3			
17.111	17.111 (1.000)	114	340477	5.00000		80.00- 120.00		100.00
17.111	17.111 (1.000)	88	48340			0.00- 44.16		14.20
* 92 Chlorobenzene-d5					CAS #: 3114-55-4			
22.029	22.029 (1.000)	117	294231	5.00000		80.00- 120.00		100.00
22.029	22.029 (1.000)	82	151189			18.70- 78.70		51.38
$ 65 1,2-Dichloroethane-d4					CAS #: 17060-07-0			
16.562	16.562 (1.052)	65	126941	5.00000	4.609	80.00- 120.00		100.00
16.562	16.562 (1.052)	67	63136			19.41- 79.41		49.74
$ 80 Toluene-d8					CAS #: 2037-26-5			
19.615	19.615 (1.146)	98	313156	5.00000	4.879	80.00- 120.00		100.00
19.615	19.615 (1.146)	70	33014			0.00- 40.74		10.54

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.638	19.638 (1.148)	100	206341			34.93- 94.93	65.89
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.535	23.535 (1.068)	174	151908	5.00000	5.025	80.00- 120.00	100.00
23.535	23.535 (1.068)	95	185268			94.06- 154.06	121.96
23.535	23.535 (1.068)	176	150453			68.95- 128.95	99.04
3 Propylene					CAS #: 115-07-1		
4.447	4.447 (0.282)	41	204872	5.00000	4.613	80.00- 120.00	100.00
4.447	4.447 (0.282)	42	143166			43.41- 103.41	69.88
4.485	4.485 (0.285)	39	136563			36.60- 96.60	66.66
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
4.976	4.976 (0.316)	85	323888	5.00000	5.093	80.00- 120.00	100.00
4.976	4.976 (0.316)	87	108041			1.54- 61.54	33.36
6 Freon 114					CAS #: 76-14-2		
6.524	6.524 (0.414)	135	274236	5.00000	5.187	80.00- 120.00	100.00
6.524	6.524 (0.414)	137	89769			0.98- 60.98	32.73
6.486	6.486 (0.412)	85	322450			89.42- 149.42	117.58
8 Chloromethane					CAS #: 74-87-3		
6.826	6.826 (0.434)	50	253020	5.00000	4.932	80.00- 120.00	100.00
6.826	6.826 (0.434)	52	79334			2.41- 62.41	31.35
9 Butane					CAS #: 106-97-8		
7.658	7.658 (0.486)	58	47323	5.00000	5.196	80.00- 120.00	100.00
7.658	7.658 (0.486)	43	415699			830.80- 890.80	878.42
10 Vinyl Chloride					CAS #: 75-01-4		
7.813	7.813 (0.496)	62	184569	5.00000	5.434	80.00- 120.00	100.00
7.782	7.782 (0.494)	64	52786			0.00- 57.21	28.60
11 1,3-Butadiene					CAS #: 106-99-0		
8.061	8.061 (0.512)	54	214145	5.00000	4.768	80.00- 120.00	100.00
8.061	8.061 (0.512)	39	187617			60.61- 120.61	87.61
12 Bromomethane					CAS #: 74-83-9		
9.655	9.655 (0.613)	94	103705	5.00000	5.117	80.00- 120.00	100.00
9.655	9.655 (0.613)	96	98620			65.52- 125.52	95.10
17 Chloroethane					CAS #: 75-00-3		
10.161	10.161 (0.645)	64	69498	5.00000	4.985	80.00- 120.00	100.00
10.161	10.161 (0.645)	66	20647			0.00- 56.47	29.71

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
18 Isopentane					CAS #: 78-78-4		
10.330	10.330 (0.656)	57	195590	5.00000	4.807	80.00- 120.00	100.00
10.330	10.330 (0.656)	43	322504			135.48- 195.48	164.89
10.330	10.330 (0.656)	42	279310			110.86- 170.86	142.80
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.980	10.980 (0.697)	101	362942	5.00000	5.175	80.00- 120.00	100.00
10.980	10.980 (0.697)	103	238536			33.91- 93.91	65.72
24 Ethanol					CAS #: 64-17-5		
11.919	11.919 (0.757)	45	108545	5.00000	5.225	80.00- 120.00	100.00
11.919	11.919 (0.757)	46	43593			6.93- 66.93	40.16
11.919	11.919 (0.757)	43	16903			0.00- 45.81	15.57
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.386	12.386 (0.787)	98	86144	5.00000	4.711	80.00- 120.00	100.00
12.386	12.386 (0.787)	61	326844			350.72- 410.72	379.41
12.386	12.386 (0.787)	96	141312			129.58- 189.58	164.04
28 Freon 113					CAS #: 76-13-1		
12.413	12.413 (0.788)	151	252658	5.00000	4.933	80.00- 120.00	100.00
12.413	12.413 (0.788)	153	160023			33.77- 93.77	63.34
12.413	12.413 (0.788)	101	290480			82.21- 142.21	114.97
31 Acetone					CAS #: 67-64-1		
12.633	12.633 (0.802)	58	108117	5.00000	4.205	80.00- 120.00	100.00
12.633	12.633 (0.802)	43	360564			282.00- 342.00	333.49
33 Carbon Disulfide					CAS #: 75-15-0		
12.743	12.743 (0.809)	76	368419	5.00000	4.933	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.210	13.210 (0.839)	76	56274	5.00000	5.509	80.00- 120.00	100.00
13.210	13.210 (0.839)	41	321645			599.84- 659.84	571.57
34 2-Propanol					CAS #: 67-63-0		
13.018	13.018 (0.827)	45	483800	5.00000	5.322	80.00- 120.00	100.00
13.018	13.018 (0.827)	43	75719			0.00- 46.02	15.65
13.018	13.018 (0.827)	59	16371			0.00- 33.30	3.38
37 Methylene Chloride					CAS #: 75-09-2		
13.484	13.484 (0.856)	84	113715	5.00000	4.651	80.00- 120.00	100.00
13.484	13.484 (0.856)	49	330899			254.12- 314.12	290.99
13.484	13.484 (0.856)	51	101386			56.45- 116.45	89.16
38 tert-butyl alcohol					CAS #: 75-65-0		
13.677	13.677 (0.869)	59	492074	5.00000	5.014	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
38 tert-butyl alcohol (continued)							
13.677	13.677 (0.869)	41	106104			0.00- 51.49	21.56
13.677	13.677 (0.869)	57	56043			0.00- 40.80	11.39
39 MTBE					CAS #: 1634-04-4		
13.841	13.841 (0.879)	73	375984	5.00000	4.769	80.00- 120.00	100.00
13.841	13.841 (0.879)	57	158691			12.63- 72.63	42.21
13.841	13.841 (0.879)	41	151183			8.96- 68.96	40.21
40 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.896	13.896 (0.883)	98	93269	5.00000	4.991	80.00- 120.00	100.00
13.869	13.869 (0.881)	61	299655			297.51- 357.51	321.28
13.869	13.869 (0.881)	96	151223			130.03- 190.03	162.14
43 Hexane					CAS #: 110-54-3		
14.226	14.226 (0.904)	57	418030	5.00000	4.466	80.00- 120.00	100.00
14.226	14.226 (0.904)	43	292831			42.37- 102.37	70.05
14.226	14.226 (0.904)	86	31560			0.00- 38.41	7.55
45 Isopropyl ether					CAS #: 108-20-3		
14.583	14.583 (0.926)	45	989759	5.00000	5.115	80.00- 120.00	100.00
14.583	14.583 (0.926)	87	118637			0.00- 42.22	11.99
14.583	14.583 (0.926)	59	91142			0.00- 38.61	9.21
46 1,1-Dichloroethane					CAS #: 75-34-3		
14.583	14.583 (0.926)	63	336309	5.00000	4.947	80.00- 120.00	100.00
14.583	14.583 (0.926)	65	96580			0.00- 57.42	28.72
47 Vinyl Acetate					CAS #: 108-05-4		
14.637	14.637 (0.930)	86	32655	5.00000	5.348	80.00- 120.00	100.00
14.637	14.637 (0.930)	42	81475			210.64- 270.64	249.50
14.637	14.637 (0.930)	43	1068614			3446.49-3506.49	3272.36
49 Ethyl-tert-butyl ether					CAS #: 637-92-3		
15.071	15.071 (0.957)	59	790525	5.00000	5.165	80.00- 120.00	100.00
15.071	15.071 (0.957)	87	184492			0.00- 53.82	23.34
15.071	15.071 (0.957)	41	141447			0.00- 48.32	17.89
50 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.424	15.424 (0.980)	98	94737	5.00000	4.651	80.00- 120.00	100.00
15.424	15.424 (0.980)	61	292029			267.29- 327.29	308.25
15.424	15.424 (0.980)	96	153794			128.72- 188.72	162.34
51 2-Butanone					CAS #: 78-93-3		
15.424	15.424 (0.980)	72	65520	5.00000	5.091	80.00- 120.00	100.00
15.403	15.403 (0.978)	43	603868			804.58- 864.58	921.65

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
51 2-Butanone (continued)							
15.424	15.424 (0.980)	57	41773			28.64- 88.64	63.76
53 Tetrahydrofuran					CAS #: 109-99-9		
15.743	15.743 (1.000)	42	334330	5.00000	4.987	80.00- 120.00	100.00
15.743	15.743 (1.000)	71	61932			0.00- 48.89	18.52
15.743	15.743 (1.000)	72	66985			0.00- 47.97	20.04
55 Chloroform					CAS #: 67-66-3		
15.836	15.836 (1.006)	83	287139	5.00000	4.925	80.00- 120.00	100.00
15.836	15.836 (1.006)	85	181516			32.85- 92.85	63.22
57 Cyclohexane					CAS #: 110-82-7		
16.083	16.083 (1.022)	84	181542	5.00000	4.805	80.00- 120.00	100.00
16.083	16.083 (1.022)	56	457638			218.68- 278.68	252.08
16.083	16.083 (1.022)	41	232447			93.43- 153.43	128.04
58 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.052	16.052 (1.020)	97	329058	5.00000	5.055	80.00- 120.00	100.00
16.052	16.052 (1.020)	99	212769			32.55- 92.55	64.66
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.267	16.267 (1.033)	119	338814	5.00000	7.288	80.00- 120.00	100.00
16.267	16.267 (1.033)	117	345607			74.89- 134.89	102.00
Sum of Peak Amounts =				7.29			
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.535	16.535 (1.050)	56	435594	5.00000	4.965	80.00- 120.00	100.00
16.535	16.535 (1.050)	57	1298795			270.88- 330.88	298.17
16.535	16.535 (1.050)	41	312356			41.84- 101.84	71.71
64 Benzene					CAS #: 71-43-2		
16.562	16.562 (0.968)	78	416492	5.00000	5.168	80.00- 120.00	100.00
16.562	16.562 (0.968)	77	93073			0.00- 52.95	22.35
66 tert-amyl methyl ether					CAS #: 994-05-8		
16.617	16.617 (0.971)	87	101033	5.00000	5.075	80.00- 120.00	100.00
16.617	16.617 (0.971)	73	430109			401.74- 461.74	425.71
16.617	16.617 (0.971)	55	218309			176.52- 236.52	216.08
68 1,2-Dichloroethane					CAS #: 107-06-2		
16.672	16.672 (0.974)	62	273026	5.00000	5.392	80.00- 120.00	100.00
16.672	16.672 (0.974)	64	79729			0.00- 58.12	29.20
69 Heptane					CAS #: 142-82-5		
16.782	16.782 (0.981)	57	253133	5.00000	4.822	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
69 Heptane (continued)							
16.782	16.782 (0.981)	100	40463			0.00- 47.88	15.99
16.782	16.782 (0.981)	43	517020			180.46- 240.46	204.25
72 Trichloroethene					CAS #: 79-01-6		
17.496	17.496 (1.022)	130	208024	5.00000	5.146	80.00- 120.00	100.00
17.496	17.496 (1.022)	95	204553			71.46- 131.46	98.33
17.523	17.523 (1.024)	97	131432			35.77- 95.77	63.18
73 Methylcyclohexane					CAS #: 108-87-2		
17.743	17.743 (1.037)	83	256928	5.00000	5.363	80.00- 120.00	100.00
17.743	17.743 (1.037)	98	127903			18.11- 78.11	49.78
17.743	17.743 (1.037)	55	444124			129.45- 189.45	172.86
74 1,2-Dichloropropane					CAS #: 78-87-5		
17.935	17.935 (1.048)	63	226812	5.00000	5.214	80.00- 120.00	100.00
17.935	17.935 (1.048)	62	169583			44.27- 104.27	74.77
17.935	17.935 (1.048)	41	145168			34.00- 94.00	64.00
75 1,4-Dioxane					CAS #: 123-91-1		
18.045	18.045 (1.055)	88	104718	5.00000	5.470	80.00- 120.00	100.00
18.045	18.045 (1.055)	58	139521			101.60- 161.60	133.24
18.045	18.045 (1.055)	57	44101			13.84- 73.84	42.11
77 Bromodichloromethane					CAS #: 75-27-4		
18.347	18.347 (1.072)	83	318487	5.00000	5.298	80.00- 120.00	100.00
18.347	18.347 (1.072)	85	203829			33.15- 93.15	64.00
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.145	19.145 (1.119)	75	261838	5.00000	5.058	80.00- 120.00	100.00
19.145	19.145 (1.119)	77	84256			1.23- 61.23	32.18
19.145	19.145 (1.119)	39	221726			46.59- 106.59	84.68
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.346	19.346 (1.131)	43	692553	5.00000	5.122	80.00- 120.00	100.00
19.346	19.346 (1.131)	58	255022			5.80- 65.80	36.82
19.346	19.346 (1.131)	85	55039			0.00- 38.43	7.95
81 Toluene					CAS #: 108-88-3		
19.750	19.750 (1.154)	91	525713	5.00000	5.066	80.00- 120.00	100.00
19.750	19.750 (1.154)	92	310208			28.70- 88.70	59.01
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.212	20.212 (0.918)	75	236661	5.00000	5.650	80.00- 120.00	100.00
20.212	20.212 (0.918)	77	80365			1.04- 61.04	33.96
20.212	20.212 (0.918)	39	182628			45.23- 105.23	77.17

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
84 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.534	20.534 (0.932)	97	195697	5.00000	5.177	80.00- 120.00	100.00
20.534	20.534 (0.932)	99	122125			33.51- 93.51	62.41
20.534	20.534 (0.932)	83	153064			50.51- 110.51	78.21
86 Tetrachloroethene					CAS #: 127-18-4		
20.714	20.714 (0.940)	166	284594	5.00000	5.448	80.00- 120.00	100.00
20.714	20.714 (0.940)	129	200934			42.44- 102.44	70.60
20.714	20.714 (0.940)	131	213759			39.70- 99.70	75.11
87 2-Hexanone					CAS #: 591-78-6		
20.821	20.821 (0.945)	58	314153	5.00000	5.424	80.00- 120.00	100.00
20.821	20.821 (0.945)	43	605231			168.09- 228.09	192.65
20.821	20.821 (0.945)	100	32539			0.00- 41.01	10.36
89 Dibromochloromethane					CAS #: 124-48-1		
21.180	21.180 (0.961)	129	385649	5.00000	5.732	80.00- 120.00	100.00
21.180	21.180 (0.961)	127	287548			47.32- 107.32	74.56
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.395	21.395 (0.971)	107	307117	5.00000	5.552	80.00- 120.00	100.00
21.395	21.395 (0.971)	109	285486			62.73- 122.73	92.96
93 Chlorobenzene					CAS #: 108-90-7		
22.056	22.056 (1.001)	112	430747	5.00000	5.399	80.00- 120.00	100.00
22.056	22.056 (1.001)	114	140913			3.73- 63.73	32.71
22.056	22.056 (1.001)	77	235471			23.21- 83.21	54.67
95 Ethyl Benzene					CAS #: 100-41-4		
22.139	22.139 (1.005)	106	203890	5.00000	5.366	80.00- 120.00	100.00
22.139	22.139 (1.005)	91	640060			282.29- 342.29	313.92
96 m,p-Xylene					CAS #: 108-38-3		
22.303	22.303 (1.012)	106	204147	5.00000	4.930	80.00- 120.00	100.00
22.303	22.303 (1.012)	91	437793			172.44- 232.44	214.45
100 o-Xylene					CAS #: 95-47-6		
22.852	22.852 (1.037)	106	196786	5.00000	5.041	80.00- 120.00	100.00
22.852	22.852 (1.037)	91	416681			182.07- 242.07	211.74
101 Styrene					CAS #: 100-42-5		
22.880	22.880 (1.039)	104	300055	5.00000	4.814	80.00- 120.00	100.00
22.852	22.852 (1.037)	78	153953			19.39- 79.39	51.31
102 Bromoform					CAS #: 75-25-2		
23.173	23.173 (1.052)	173	375526	5.00000	5.998	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
102 Bromoform (continued)							
23.173	23.173 (1.052)	171	185731			22.28- 82.28	49.46
103 Cumene					CAS #: 98-82-8		
23.277	23.277 (1.057)	105	592793	5.00000	5.108	80.00- 120.00	100.00
23.277	23.277 (1.057)	120	173465			0.00- 59.48	29.26
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.689	23.689 (1.075)	83	347589	5.00000	5.118	80.00- 120.00	100.00
23.689	23.689 (1.075)	85	225618			32.49- 92.49	64.91
111 Propylbenzene					CAS #: 103-65-1		
23.767	23.767 (1.079)	91	553888	5.00000	4.878	80.00- 120.00	100.00
23.767	23.767 (1.079)	120	131625			0.00- 55.67	23.76
113 4-Ethyltoluene					CAS #: 622-96-8		
23.896	23.896 (1.085)	105	399702	5.00000	4.613	80.00- 120.00	100.00
23.896	23.896 (1.085)	120	131373			3.38- 63.38	32.87
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.947	23.947 (1.087)	105	398150	5.00000	4.953	80.00- 120.00	100.00
23.947	23.947 (1.087)	120	208193			21.28- 81.28	52.29
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.386	24.386 (1.107)	105	396012	5.00000	4.744	80.00- 120.00	100.00
24.386	24.386 (1.107)	120	198593			17.26- 77.26	50.15
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.756	24.756 (1.124)	146	268927	5.00000	4.906	80.00- 120.00	100.00
24.756	24.756 (1.124)	148	172957			33.35- 93.35	64.31
24.756	24.756 (1.124)	111	107138			10.42- 70.42	39.84
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.868	24.868 (1.129)	146	241630	5.00000	4.607	80.00- 120.00	100.00
24.868	24.868 (1.129)	148	150987			33.78- 93.78	62.49
24.868	24.868 (1.129)	111	90690			7.61- 67.61	37.53
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.002	25.002 (1.135)	91	345046	5.00000	4.849	80.00- 120.00	100.00
25.002	25.002 (1.135)	126	78199			0.00- 51.90	22.66
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.271	25.271 (1.147)	146	228543	5.00000	4.261	80.00- 120.00	100.00
25.271	25.271 (1.147)	148	150243			34.92- 94.92	65.74
25.271	25.271 (1.147)	111	96214			10.09- 70.09	42.10

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.065	27.065 (1.229)	180	214167	5.00000	4.692	80.00- 120.00	100.00
27.065	27.065 (1.229)	182	203653			64.14- 124.14	95.09
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.177	27.177 (1.234)	225	149992	5.00000	4.324	80.00- 120.00	100.00
27.177	27.177 (1.234)	223	93020			34.80- 94.80	62.02
133 Naphthalene					CAS #: 91-20-3		
27.401	27.401 (1.244)	128	15042	0.50000	0.3762	80.00- 120.00	100.00
27.446	27.446 (1.246)	127	2368			0.00- 45.63	15.75

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100502.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: 5.0ppbv (50ppbv)

Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	78102	46861	109343	78102	0.00
71 1,4-Difluorobenze	340477	204286	476668	340477	0.00
92 Chlorobenzene-d5	294231	176539	411923	294231	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.74	15.41	16.07	15.74	0.00
71 1,4-Difluorobenze	17.11	16.78	17.44	17.11	0.00
92 Chlorobenzene-d5	22.03	21.70	22.36	22.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/05Oct2015.b/v100502.d

Date : 05-OCT-2015 09:23

Client ID: CCV

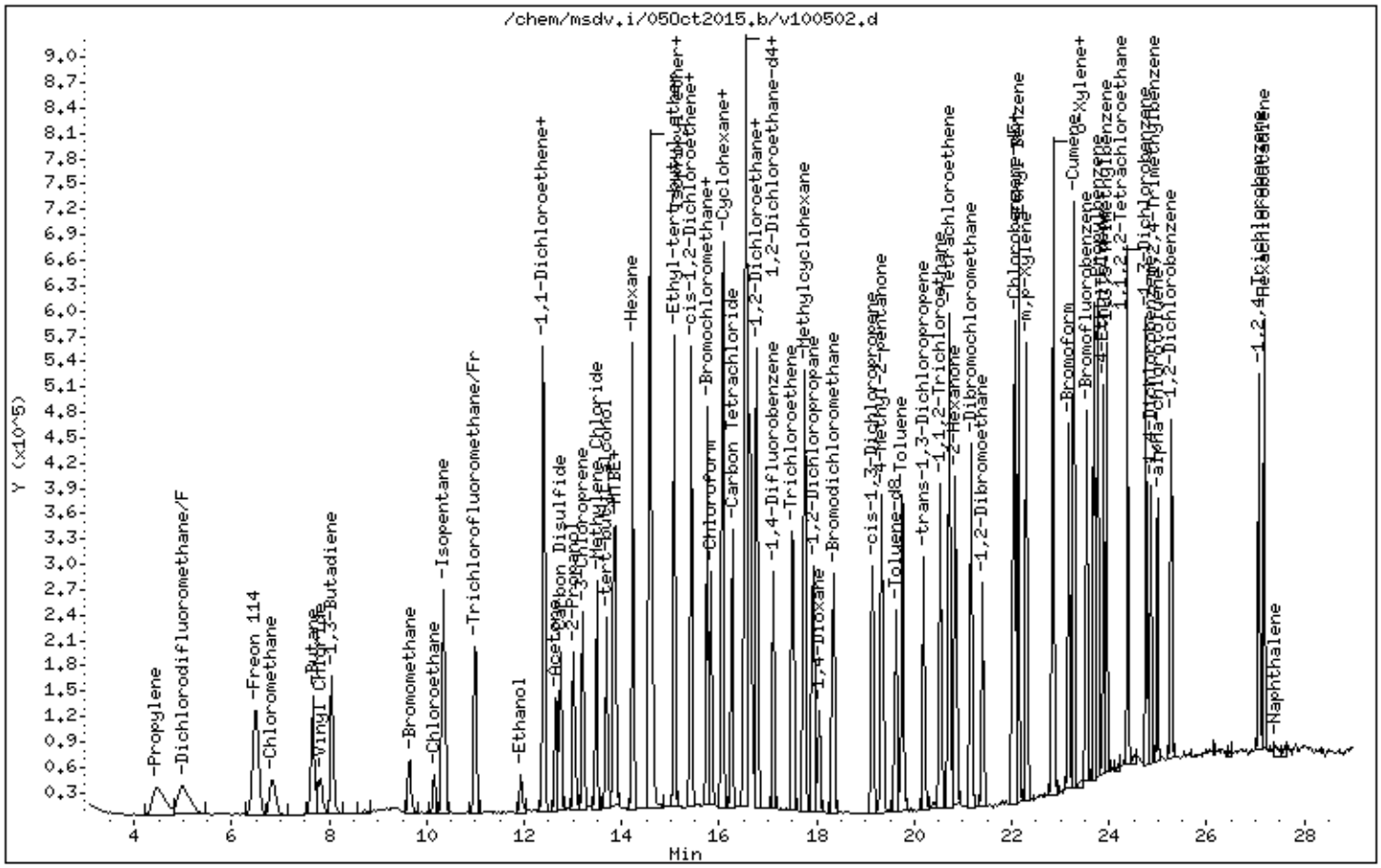
Instrument: msdv.i

Sample Info: 25mL# 2736-237

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



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Client Sample ID: CCV

Lab ID#: 1509512-10B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100502sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/5/15 09:23 AM**	

Compound	%Recovery
Vinyl Chloride	99
1,1-Dichloroethene	94
trans-1,2-Dichloroethene	89
cis-1,2-Dichloroethene	101
Chloroform	103
Benzene	88
1,2-Dichloroethane	108
Trichloroethene	87
Toluene	96
1,1,2-Trichloroethane	93
Tetrachloroethene	88
Ethyl Benzene	103
m,p-Xylene	99
o-Xylene	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	98	70-130

Report Date: 05-Oct-2015 10:04

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msdv.i Injection Date: 05-OCT-2015 09:23
Lab File ID: v100502sim.d Init. Cal. Date(s): 29-SEP-2015 29-SEP-2015
Analysis Type: AIR Init. Cal. Times: 13:55 21:15
Lab Sample ID: CCV Quant Type: ISTD
Method: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m

COMPOUND	RRF / AMOUNT	RF5	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 37 1,2-Dichloroethane-d4	1.65015	1.68947	0.010	-2.38250	30.00000	Averaged	
$ 47 Toluene-d8	0.80787	0.80266	0.010	0.64441	30.00000	Averaged	
$ 66 Bromofluorobenzene	0.55702	0.54419	0.010	2.30370	30.00000	Averaged	
1 Dichlorodifluoromethane/Fr1	4.19146	4.24914	0.010	-1.37619	30.00000	Averaged	
3 Freon 114	3.50162	3.58947	0.010	-2.50876	30.00000	Averaged	
4 Chloromethane	3.39346	3.44445	0.010	-1.50269	30.00000	Averaged	
5 Vinyl Chloride	2.38594	2.36061	0.010	1.06194	30.00000	Averaged	
9 Chloroethane	0.88103	0.93393	0.010	-6.00410	30.00000	Averaged	
11 Trichlorofluoromethane/Fr11	4.48556	4.77801	0.010	-6.51987	30.00000	Averaged	
12 1,1-Dichloroethene	1.21818	1.14852	0.010	5.71824	30.00000	Averaged	
13 Freon 113	3.32317	3.41127	0.010	-2.65132	30.00000	Averaged	
22 trans-1,2-Dichloroethene	1.31913	1.17719	0.010	10.76059	30.00000	Averaged	
21 MTBE	4.21096	4.36005	0.010	-3.54056	30.00000	Averaged	
25 1,1-Dichloroethane	4.26380	4.43930	0.010	-4.11587	30.00000	Averaged	
29 cis-1,2-Dichloroethene	1.27000	1.28074	0.010	-0.84626	30.00000	Averaged	
32 Chloroform	3.64161	3.76366	0.010	-3.35159	30.00000	Averaged	
34 1,1,1-Trichloroethane	4.14415	4.28798	0.010	-3.47055	30.00000	Averaged	
35 Carbon Tetrachloride	2.56963	4.61872	0.010	-79.74228	30.00000	Averaged	<-
36 Benzene	1.32453	1.17339	0.010	11.41048	30.00000	Averaged	
38 1,2-Dichloroethane	0.78208	0.84746	0.010	-8.35959	30.00000	Averaged	
41 Trichloroethene	0.78200	0.68325	0.010	12.62785	30.00000	Averaged	
48 Toluene	1.51556	1.46236	0.010	3.50988	30.00000	Averaged	
49 trans-1,3-Dichloropropene	0.79541	0.87230	0.010	-9.66739	30.00000	Averaged	
50 1,1,2-Trichloroethane	0.76137	0.71089	0.010	6.63044	30.00000	Averaged	
51 Tetrachloroethene	1.19779	1.05868	0.010	11.61393	30.00000	Averaged	
55 1,2-Dibromoethane	1.07288	1.13494	0.010	-5.78467	30.00000	Averaged	
57 Chlorobenzene	1.52027	1.58444	0.010	-4.22074	30.00000	Averaged	
58 Ethyl Benzene	0.61310	0.63194	0.010	-3.07331	30.00000	Averaged	
59 m,p-Xylene	0.64388	0.64027	0.010	0.56063	30.00000	Averaged	
61 o-Xylene	0.60819	0.60982	0.010	-0.26910	30.00000	Averaged	
67 1,1,2,2-Tetrachloroethane	1.29027	1.26823	0.010	1.70821	30.00000	Averaged	
72 1,3-Dichlorobenzene	1.07526	0.98559	0.010	8.33991	30.00000	Averaged	
73 1,4-Dichlorobenzene	1.07019	0.87440	0.010	18.29544	30.00000	Averaged	
75 1,2-Dichlorobenzene	0.93536	0.85823	0.010	8.24557	30.00000	Averaged	
78 Naphthalene	0.77193	0.45429	0.010	41.14937	40.00000	Averaged	<-

Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/05Oct2015.b/v100502sim.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 05-OCT-2015 09:23
Operator : ef Inst ID: msdv.i
Smp Info : 25mL# 2736-237
Misc Info : 5.0ppbv (50ppbv)
Comment : SIM GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 05-Oct-2015 10:04 efinn Quant Type: ISTD
Cal Date : 29-SEP-2015 14:34 Cal File: v092903sim.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				AMOUNTS				
				CAL-AMT	ON-COL			
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE		RATIO
==	====== ========	====	========	=======	=======	==========		=====
* 31 Bromochloromethane					CAS #: 74-97-5			
15.757	15.757 (1.000)	130	81342	5.00000		80.00- 120.00		100.00
15.757	15.757 (1.000)	128	63636			48.13- 108.13		78.23
15.757	15.757 (1.000)	49	221430			238.09- 298.09		272.22
* 40 1,4-Difluorobenzene					CAS #: 540-36-3			
17.125	17.125 (1.000)	114	339188	5.00000		80.00- 120.00		100.00
17.125	17.125 (1.000)	88	48535			0.00- 44.50		14.31
* 56 Chlorobenzene-d5					CAS #: 3114-55-4			
22.042	22.042 (1.000)	117	289088	5.00000		80.00- 120.00		100.00
22.015	22.015 (1.000)	82	135602			16.61- 76.61		46.91
$ 37 1,2-Dichloroethane-d4					CAS #: 17060-07-0			
16.548	16.548 (1.050)	65	137424	5.00000	5.119	80.00- 120.00		100.00
16.548	16.548 (1.050)	67	66538			19.91- 79.91		48.42
$ 47 Toluene-d8					CAS #: 2037-26-5			
19.629	19.629 (1.146)	98	272255	5.00000	4.968	80.00- 120.00		100.00
19.629	19.629 (1.146)	70	30173			0.00- 41.04		11.08

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.629	19.629 (1.146)	100	169852			32.99- 92.99	62.39
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	157317	5.00000	4.885	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	177364			84.02- 144.02	112.74
23.548	23.548 (1.068)	176	153410			67.56- 127.56	97.52
1 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.003	5.003 (0.318)	85	345634	5.00000	5.069	80.00- 120.00	100.00
5.003	5.003 (0.318)	87	111290			2.25- 62.25	32.20
3 Freon 114					CAS #: 76-14-2		
6.513	6.513 (0.413)	135	291975	5.00000	5.125	80.00- 120.00	100.00
6.513	6.513 (0.413)	137	93173			1.20- 61.20	31.91
4 Chloromethane					CAS #: 74-87-3		
6.853	6.853 (0.435)	50	280178	5.00000	5.075	80.00- 120.00	100.00
6.853	6.853 (0.435)	52	86328			0.99- 60.99	30.81
5 Vinyl Chloride					CAS #: 75-01-4		
7.809	7.809 (0.496)	62	192016	5.00000	4.947	80.00- 120.00	100.00
7.840	7.840 (0.498)	64	52954			0.00- 57.67	27.58
9 Chloroethane					CAS #: 75-00-3		
10.151	10.151 (0.644)	64	75967	5.00000	5.300	80.00- 120.00	100.00
10.151	10.151 (0.644)	66	20764			0.00- 57.14	27.33
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.994	10.994 (0.698)	101	388653	5.00000	5.326	80.00- 120.00	100.00
10.994	10.994 (0.698)	103	251272			34.66- 94.66	64.65
12 1,1-Dichloroethene					CAS #: 75-35-4		
12.400	12.400 (0.787)	98	93423	5.00000	4.714	80.00- 120.00	100.00
12.400	12.400 (0.787)	61	348398			331.89- 391.89	372.92
12.400	12.400 (0.787)	96	147315			127.52- 187.52	157.69
13 Freon 113					CAS #: 76-13-1		
12.400	12.400 (0.787)	151	277480	5.00000	5.132	80.00- 120.00	100.00
12.427	12.427 (0.789)	153	177621			34.11- 94.11	64.01
12.400	12.400 (0.787)	101	311076			83.01- 143.01	112.11
22 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.882	13.882 (0.881)	98	95755	5.00000	4.462	80.00- 120.00	100.00
13.882	13.882 (0.881)	61	319227			298.00- 358.00	333.38
13.882	13.882 (0.881)	96	149676			126.99- 186.99	156.31

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
21 MTBE					CAS #: 1634-04-4		
13.855	13.855 (0.879)	73	354655	5.00000	5.177	80.00- 120.00	100.00
13.828	13.828 (0.878)	57	167599			16.91- 76.91	47.26
13.828	13.828 (0.878)	41	146632			11.83- 71.83	41.35
25 1,1-Dichloroethane					CAS #: 75-34-3		
14.596	14.596 (0.926)	63	361102	5.00000	5.206	80.00- 120.00	100.00
14.596	14.596 (0.926)	65	98709			0.00- 57.70	27.34
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.437	15.437 (0.980)	98	104178	5.00000	5.042	80.00- 120.00	100.00
15.437	15.437 (0.980)	61	312613			264.63- 324.63	300.07
15.437	15.437 (0.980)	96	163634			126.49- 186.49	157.07
32 Chloroform					CAS #: 67-66-3		
15.819	15.819 (1.004)	83	306144	5.00000	5.168	80.00- 120.00	100.00
15.819	15.819 (1.004)	85	198714			34.82- 94.82	64.91
34 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.065	16.065 (1.020)	97	348793	5.00000	5.174	80.00- 120.00	100.00
16.065	16.065 (1.020)	99	223845			34.47- 94.47	64.18
35 Carbon Tetrachloride					CAS #: 56-23-5		
16.250	16.250 (1.031)	117	375696	5.00000	8.987	80.00- 120.00	100.00
16.250	16.250 (1.031)	119	361957			65.73- 125.73	96.34
36 Benzene					CAS #: 71-43-2		
16.576	16.576 (0.968)	78	398001	5.00000	4.429	80.00- 120.00	100.00
16.576	16.576 (0.968)	77	90918			0.00- 52.79	22.84
38 1,2-Dichloroethane					CAS #: 107-06-2		
16.658	16.658 (0.973)	62	287447	5.00000	5.418	80.00- 120.00	100.00
16.658	16.658 (0.973)	64	84352			0.00- 59.27	29.35
41 Trichloroethene					CAS #: 79-01-6		
17.509	17.509 (1.022)	130	231750	5.00000	4.369	80.00- 120.00	100.00
17.509	17.509 (1.022)	95	219600			64.71- 124.71	94.76
17.509	17.509 (1.022)	97	141918			31.19- 91.19	61.24
48 Toluene					CAS #: 108-88-3		
19.764	19.764 (1.154)	91	496016	5.00000	4.824	80.00- 120.00	100.00
19.764	19.764 (1.154)	92	291940			28.99- 88.99	58.86
49 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.189	20.189 (0.916)	75	252173	5.00000	5.483	80.00- 120.00	100.00
20.189	20.189 (0.916)	77	79793			1.70- 61.70	31.64

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
50 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.548	20.548 (0.932)	97	205508	5.00000	4.668	80.00- 120.00	100.00
20.548	20.548 (0.932)	99	128383			32.61- 92.61	62.47
20.548	20.548 (0.932)	83	163248			49.96- 109.96	79.44
51 Tetrachloroethene					CAS #: 127-18-4		
20.728	20.728 (0.940)	166	306051	5.00000	4.419	80.00- 120.00	100.00
20.728	20.728 (0.940)	129	218735			41.60- 101.60	71.47
20.728	20.728 (0.940)	131	230397			45.07- 105.07	75.28
55 1,2-Dibromoethane					CAS #: 106-93-4		
21.409	21.409 (0.971)	107	328099	5.00000	5.289	80.00- 120.00	100.00
21.409	21.409 (0.971)	109	311037			64.60- 124.60	94.80
57 Chlorobenzene					CAS #: 108-90-7		
22.070	22.070 (1.001)	112	458042	5.00000	5.211	80.00- 120.00	100.00
22.070	22.070 (1.001)	114	146141			1.94- 61.94	31.91
22.070	22.070 (1.001)	77	226711			24.15- 84.15	49.50
58 Ethyl Benzene					CAS #: 100-41-4		
22.152	22.152 (1.005)	106	182686	5.00000	5.154	80.00- 120.00	100.00
22.152	22.152 (1.005)	91	603894			301.49- 361.49	330.56
59 m,p-Xylene					CAS #: 108-38-3		
22.317	22.317 (1.012)	106	185095	5.00000	4.972	80.00- 120.00	100.00
22.290	22.290 (1.011)	91	399190			185.00- 245.00	215.67
61 o-Xylene					CAS #: 95-47-6		
22.839	22.839 (1.036)	106	176293	5.00000	5.013	80.00- 120.00	100.00
22.839	22.839 (1.036)	91	404113			198.20- 258.20	229.23
67 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.677	23.677 (1.074)	83	366631	5.00000	4.914	80.00- 120.00	100.00
23.677	23.677 (1.074)	85	236786			34.54- 94.54	64.58
72 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.769	24.769 (1.124)	146	284922	5.00000	4.583	80.00- 120.00	100.00
24.769	24.769 (1.124)	148	182587			34.01- 94.01	64.08
24.769	24.769 (1.124)	111	110529			8.85- 68.85	38.79
73 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.859	24.859 (1.128)	146	252777	5.00000	4.085	80.00- 120.00	100.00
24.859	24.859 (1.128)	148	161387			34.02- 94.02	63.85
24.859	24.859 (1.128)	111	94245			7.95- 67.95	37.28
75 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.285	25.285 (1.147)	146	248105	5.00000	4.588	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
75 1,2-Dichlorobenzene (continued)							
25.285	25.285 (1.147)	148	158373			33.70- 93.70	63.83
25.285	25.285 (1.147)	111	99127			9.89- 69.89	39.95
78 Naphthalene					CAS #: 91-20-3		
27.415	27.415 (1.244)	128	13132	0.50000	0.2942	80.00- 120.00	100.00
27.415	27.415 (1.244)	127	1719			0.00- 42.90	13.09

Report Date: 05-Oct-2015 10:04

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100502sim.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Client Smp ID: CCV
Level: LOW
Sample Type: AIR
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 5.0ppbv (50ppbv)

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	81342	48805	113879	81342	0.00
40 1,4-Difluorobenze	339188	203513	474863	339188	0.00
56 Chlorobenzene-d5	289088	173453	404723	289088	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/05Oct2015.b/v100502sim.d

Date : 05-OCT-2015 09:23

Client ID: CCV

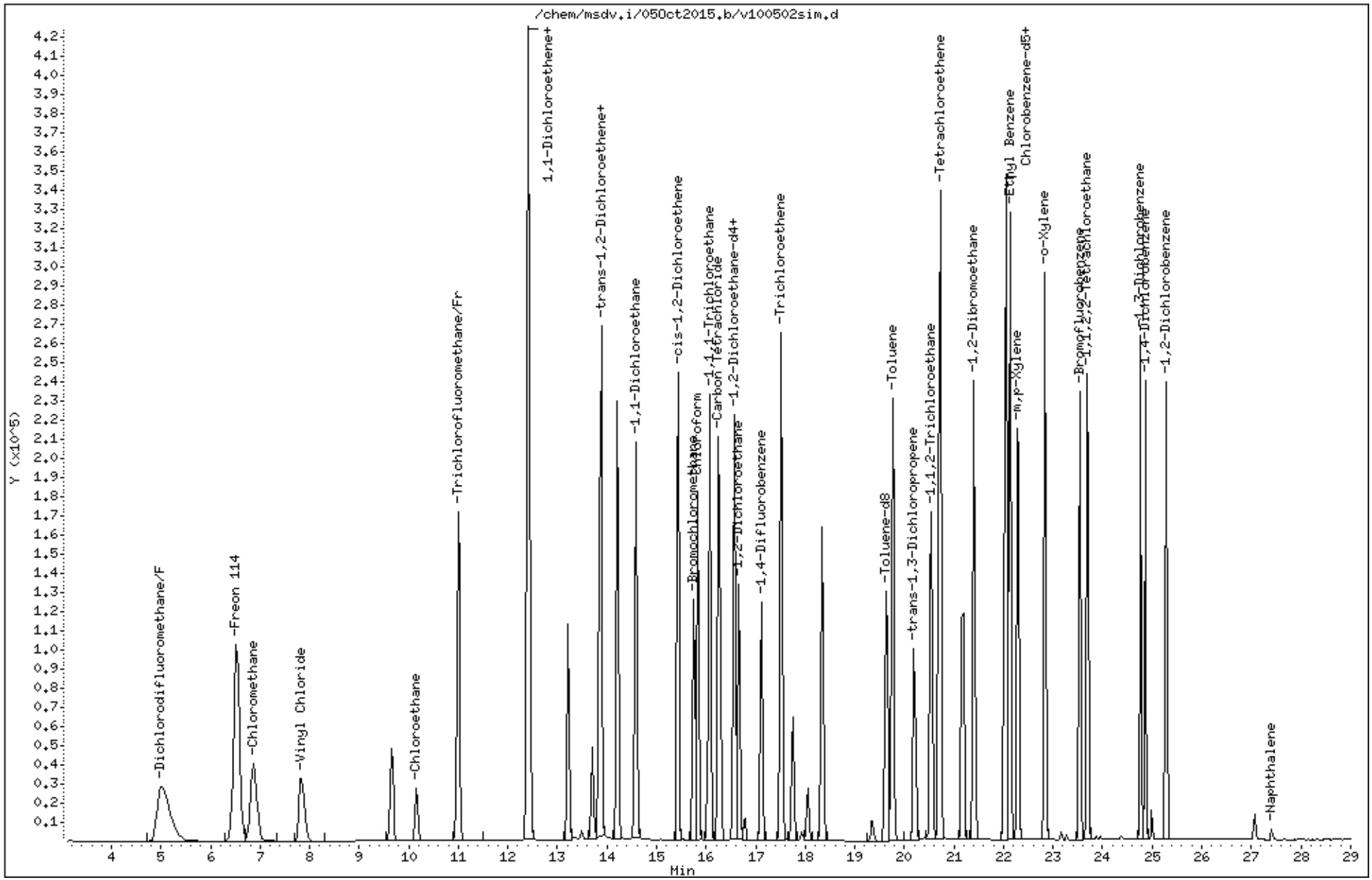
Instrument: msdv.i

Sample Info: 25mL# 2736-237

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1509512-11A

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100503**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/5/15 10:09 AM**	

Compound	%Recovery	Method Limits
Methylene Chloride	102	70-130
1,2,4-Trimethylbenzene	95	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	98	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	95	70-130

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCS Client Smp ID: LCS
Level: LOW Operator: ef
Data Type: MS DATA SampleType: LCS
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: 5.0ppbv (50ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Dichlorodifluorome	5.000	6.010	120.20	70-130
3 Propylene	5.000	5.384	107.68	60-140
6 Freon 114	5.000	6.118	122.35	70-130
8 Chloromethane	5.000	5.616	112.33	70-130
10 Vinyl Chloride	5.000	6.301	126.02	70-130
11 1,3-Butadiene	5.000	5.173	103.45	70-130
12 Bromomethane	5.000	5.591	111.83	70-130
17 Chloroethane	5.000	6.075	121.50	70-130
20 Trichlorofluoromet	5.000	6.036	120.72	70-130
24 Ethanol	5.000	6.361	127.22	70-130
28 Freon 113	5.000	5.667	113.33	70-130
30 1,1-Dichloroethene	5.000	5.300	106.00	70-130
31 Acetone	5.000	4.776	95.52	70-130
33 Carbon Disulfide	5.000	4.750	95.00	70-130
34 2-Propanol	5.000	6.085	121.70	70-130
35 3-Chloroprene	5.000	5.707	114.14	70-130
37 Methylene Chloride	5.000	5.087	101.74	70-130
39 MTBE	5.000	5.401	108.01	70-130
40 trans-1,2-Dichloro	5.000	4.709	94.18	70-130
43 Hexane	5.000	5.222	104.43	70-130
46 1,1-Dichloroethane	5.000	5.759	115.18	70-130
47 Vinyl Acetate	5.000	6.271	125.42	60-140
50 cis-1,2-Dichloroet	5.000	5.905	118.11	70-130
51 2-Butanone	5.000	5.670	113.40	70-130
53 Tetrahydrofuran	5.000	5.715	114.30	70-130
55 Chloroform	5.000	5.535	110.70	70-130
57 Cyclohexane	5.000	5.532	110.65	70-130
58 1,1,1-Trichloroeth	5.000	5.592	111.84	70-130
59 Carbon Tetrachlori	5.000	7.710	154.20*	70-130
63 2,2,4-Trimethylpen	5.000	5.424	108.48	70-130
64 Benzene	5.000	5.733	114.67	70-130
69 Heptane	5.000	5.298	105.97	70-130
68 1,2-Dichloroethane	5.000	5.844	116.89	70-130

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
72	Trichloroethene	5.000	5.618	112.37	70-130
74	1,2-Dichloropropan	5.000	5.587	111.74	70-130
75	1,4-Dioxane	5.000	5.879	117.58	70-130
77	Bromodichlorometha	5.000	5.640	112.80	70-130
78	cis-1,3-Dichloropr	5.000	5.222	104.43	70-130
79	4-Methyl-2-pentano	5.000	5.697	113.94	70-130
81	Toluene	5.000	5.504	110.09	70-130
82	trans-1,3-Dichloro	5.000	5.996	119.93	70-130
84	1,1,2-Trichloroeth	5.000	5.425	108.49	70-130
87	2-Hexanone	5.000	5.745	114.91	70-130
86	Tetrachloroethene	5.000	5.776	115.52	70-130
89	Dibromochlorometha	5.000	5.716	114.31	70-130
90	1,2-Dibromoethane	5.000	5.679	113.58	70-130
93	Chlorobenzene	5.000	5.717	114.34	70-130
95	Ethyl Benzene	5.000	5.501	110.02	70-130
96	m,p-Xylene	5.000	5.211	104.23	70-130
100	o-Xylene	5.000	5.300	106.01	70-130
101	Styrene	5.000	5.255	105.10	70-130
102	Bromoform	5.000	6.145	122.89	70-130
103	Cumene	5.000	5.351	107.02	70-130
108	1,1,2,2-Tetrachlor	5.000	5.382	107.63	70-130
111	Propylbenzene	5.000	5.181	103.62	70-130
113	4-Ethyltoluene	5.000	4.874	97.47	70-130
114	1,3,5-Trimethylben	5.000	5.170	103.40	70-130
120	1,2,4-Trimethylben	5.000	4.748	94.97	70-130
122	1,3-Dichlorobenzen	5.000	5.157	103.15	70-130
124	1,4-Dichlorobenzen	5.000	4.900	97.99	70-130
127	alpha-chlorotoluen	5.000	5.521	110.41	70-130
128	1,2-Dichlorobenzen	5.000	4.671	93.42	70-130
131	1,2,4-Trichloroben	5.000	4.590	91.79	70-130
132	Hexachlorobutadien	5.000	4.178	83.57	70-130
133	Naphthalene	0.5000	0.8067	161.35*	60-140
18	Isopentane	5.000	5.466	109.32	60-140
9	Butane	5.000	6.045	120.90	60-140
73	Methylcyclohexane	5.000	5.607	112.15	60-140

	SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65	1,2-Dichloroethane	5.000	4.916	98.33	70-130
$ 80	Toluene-d8	5.000	5.016	100.32	70-130
$ 106	Bromofluorobenzene	5.000	4.760	95.19	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/05Oct2015.b/v100503.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 05-OCT-2015 10:09
Operator : ef Inst ID: msdv.i
Smp Info : 25mL# 2736-276; LCS; LCS
Misc Info : 5.0ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m
Meth Date : 05-Oct-2015 10:04 efinn Quant Type: ISTD
Cal Date : 29-SEP-2015 21:58 Cal File: v092913.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 54 Bromochloromethane						CAS #: 74-97-5	
15.743	15.743 (1.000)	130	74712	5.00000		80.00- 120.00	100.00
15.743	15.743 (1.000)	128	57984			48.04- 108.04	77.61
15.743	15.743 (1.000)	49	244063			284.77- 344.77	326.67
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.111	17.111 (1.000)	114	340419	5.00000		80.00- 120.00	100.00
17.111	17.111 (1.000)	88	46832			0.00- 44.16	13.76
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.029	22.029 (1.000)	117	304058	5.00000		80.00- 120.00	100.00
22.029	22.029 (1.000)	82	151934			18.70- 78.70	49.97
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.562	16.562 (1.052)	65	129537	4.91628	4.916	80.00- 120.00	100.00
16.562	16.562 (1.052)	67	61679			19.41- 79.41	47.61
$ 80 Toluene-d8						CAS #: 2037-26-5	
19.638	19.615 (1.148)	98	321881	5.01604	5.016	80.00- 120.00	100.00
19.615	19.615 (1.146)	70	31647			0.00- 40.74	9.83

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.615	19.638 (1.146)	100	211500			34.93- 94.93	65.71
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.534	23.535 (1.068)	174	148685	4.75971	4.760	80.00- 120.00	100.00
23.534	23.535 (1.068)	95	183830			94.06- 154.06	123.64
23.534	23.535 (1.068)	176	152919			68.95- 128.95	102.85
3 Propylene					CAS #: 115-07-1		
4.447	4.447 (0.282)	41	228733	5.38423	5.384	80.00- 120.00	100.00
4.447	4.447 (0.282)	42	153728			43.41- 103.41	67.21
4.447	4.485 (0.282)	39	147621			36.60- 96.60	64.54
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
4.976	4.976 (0.316)	85	365583	6.01000	6.010	80.00- 120.00	100.00
4.976	4.976 (0.316)	87	114993			1.54- 61.54	31.45
6 Freon 114					CAS #: 76-14-2		
6.524	6.524 (0.414)	135	309404	6.11763	6.118	80.00- 120.00	100.00
6.524	6.524 (0.414)	137	97831			0.98- 60.98	31.62
6.486	6.486 (0.412)	85	329933			89.42- 149.42	106.64
8 Chloromethane					CAS #: 74-87-3		
6.826	6.826 (0.434)	50	275654	5.61647	5.616	80.00- 120.00	100.00
6.826	6.826 (0.434)	52	87490			2.41- 62.41	31.74
9 Butane					CAS #: 106-97-8		
7.658	7.658 (0.486)	58	52668	6.04479	6.045	80.00- 120.00	100.00
7.658	7.658 (0.486)	43	456440			830.80- 890.80	866.64
10 Vinyl Chloride					CAS #: 75-01-4		
7.782	7.813 (0.494)	62	204721	6.30088	6.301	80.00- 120.00	100.00
7.813	7.782 (0.496)	64	55827			0.00- 57.21	27.27
11 1,3-Butadiene					CAS #: 106-99-0		
8.061	8.061 (0.512)	54	222259	5.17275	5.173	80.00- 120.00	100.00
8.061	8.061 (0.512)	39	189758			60.61- 120.61	85.38
12 Bromomethane					CAS #: 74-83-9		
9.631	9.655 (0.612)	94	108405	5.59145	5.591	80.00- 120.00	100.00
9.631	9.655 (0.612)	96	100648			65.52- 125.52	92.84
17 Chloroethane					CAS #: 75-00-3		
10.161	10.161 (0.645)	64	81020	6.07488	6.075	80.00- 120.00	100.00
10.161	10.161 (0.645)	66	22396			0.00- 56.47	27.64

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
18 Isopentane					CAS #: 78-78-4		
10.330	10.330 (0.656)	57	212735	5.46614	5.466	80.00- 120.00	100.00
10.330	10.330 (0.656)	43	357362			135.48- 195.48	167.98
10.330	10.330 (0.656)	42	292971			110.86- 170.86	137.72
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.980	10.980 (0.697)	101	404989	6.03616	6.036	80.00- 120.00	100.00
10.980	10.980 (0.697)	103	250627			33.91- 93.91	61.88
24 Ethanol					CAS #: 64-17-5		
11.919	11.919 (0.757)	45	126404	6.36118	6.361	80.00- 120.00	100.00
11.919	11.919 (0.757)	46	45383			6.93- 66.93	35.90
11.919	11.919 (0.757)	43	18416			0.00- 45.81	14.57
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.386	12.386 (0.787)	98	92714	5.30009	5.300	80.00- 120.00	100.00
12.386	12.386 (0.787)	61	352687			350.72- 410.72	380.40
12.386	12.386 (0.787)	96	149897			129.58- 189.58	161.68
28 Freon 113					CAS #: 76-13-1		
12.413	12.413 (0.788)	151	277652	5.66674	5.667	80.00- 120.00	100.00
12.413	12.413 (0.788)	153	171146			33.77- 93.77	61.64
12.413	12.413 (0.788)	101	306724			82.21- 142.21	110.47
31 Acetone					CAS #: 67-64-1		
12.660	12.633 (0.804)	58	117475	4.77580	4.776	80.00- 120.00	100.00
12.633	12.633 (0.802)	43	358177			282.00- 342.00	304.90
33 Carbon Disulfide					CAS #: 75-15-0		
12.743	12.743 (0.809)	76	339317	4.74988	4.750	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.210	13.210 (0.839)	76	55765	5.70718	5.707	80.00- 120.00	100.00
13.210	13.210 (0.839)	41	318950			599.84- 659.84	571.95
34 2-Propanol					CAS #: 67-63-0		
13.018	13.018 (0.827)	45	529189	6.08519	6.085	80.00- 120.00	100.00
13.018	13.018 (0.827)	43	79984			0.00- 46.02	15.11
13.018	13.018 (0.827)	59	17271			0.00- 33.30	3.26
37 Methylene Chloride					CAS #: 75-09-2		
13.484	13.484 (0.856)	84	118972	5.08704	5.087	80.00- 120.00	100.00
13.484	13.484 (0.856)	49	340106			254.12- 314.12	285.87
13.484	13.484 (0.856)	51	108916			56.45- 116.45	91.55
39 MTBE					CAS #: 1634-04-4		
13.841	13.841 (0.879)	73	407321	5.40062	5.401	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
39 MTBE (continued)							
13.841	13.841 (0.879)	57	176421			12.63- 72.63	43.31
13.841	13.841 (0.879)	41	157042			8.96- 68.96	38.55
40 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.896	13.896 (0.883)	98	84172	4.70891	4.709	80.00- 120.00	100.00
13.869	13.869 (0.881)	61	273606			297.51- 357.51	325.06
13.869	13.869 (0.881)	96	134445			130.03- 190.03	159.73
43 Hexane					CAS #: 110-54-3		
14.226	14.226 (0.904)	57	467602	5.22169	5.222	80.00- 120.00	100.00
14.226	14.226 (0.904)	43	320989			42.37- 102.37	68.65
14.226	14.226 (0.904)	86	32158			0.00- 38.41	6.88
46 1,1-Dichloroethane					CAS #: 75-34-3		
14.582	14.583 (0.926)	63	374526	5.75907	5.759	80.00- 120.00	100.00
14.582	14.583 (0.926)	65	98832			0.00- 57.42	26.39
47 Vinyl Acetate					CAS #: 108-05-4		
14.637	14.637 (0.930)	86	36629	6.27102	6.271	80.00- 120.00	100.00
14.637	14.637 (0.930)	42	49086			210.64- 270.64	134.01
14.637	14.637 (0.930)	43	766004			3446.49-3506.49	2091.25
50 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.423	15.424 (0.980)	98	115063	5.90544	5.905	80.00- 120.00	100.00
15.423	15.424 (0.980)	61	346411			267.29- 327.29	301.06
15.423	15.424 (0.980)	96	182598			128.72- 188.72	158.69
51 2-Butanone					CAS #: 78-93-3		
15.423	15.424 (0.980)	72	69803	5.67001	5.670	80.00- 120.00	100.00
15.403	15.403 (0.978)	43	579542			804.58- 864.58	830.25
15.403	15.424 (0.978)	57	40254			28.64- 88.64	57.67
53 Tetrahydrofuran					CAS #: 109-99-9		
15.743	15.743 (1.000)	42	366509	5.71498	5.715	80.00- 120.00	100.00
15.743	15.743 (1.000)	71	64281			0.00- 48.89	17.54
15.743	15.743 (1.000)	72	67693			0.00- 47.97	18.47
55 Chloroform					CAS #: 67-66-3		
15.836	15.836 (1.006)	83	308724	5.53509	5.535	80.00- 120.00	100.00
15.836	15.836 (1.006)	85	184379			32.85- 92.85	59.72
57 Cyclohexane					CAS #: 110-82-7		
16.082	16.083 (1.022)	84	199957	5.53226	5.532	80.00- 120.00	100.00
16.082	16.083 (1.022)	56	501939			218.68- 278.68	251.02
16.082	16.083 (1.022)	41	255960			93.43- 153.43	128.01

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
58 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.052	16.052 (1.020)	97	348199	5.59205	5.592	80.00- 120.00	100.00
16.052	16.052 (1.020)	99	222303			32.55- 92.55	63.84
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.267	16.267 (1.033)	119	342886	7.71000	7.710	80.00- 120.00	100.00(R)
16.267	16.267 (1.033)	117	350911			74.89- 134.89	102.34
	Sum of Peak Concentrations =				7.710		
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.535	16.535 (1.050)	56	455246	5.42409	5.424	80.00- 120.00	100.00
16.535	16.535 (1.050)	57	1425824			270.88- 330.88	313.20
16.535	16.535 (1.050)	41	325040			41.84- 101.84	71.40
64 Benzene					CAS #: 71-43-2		
16.562	16.562 (0.968)	78	461949	5.73332	5.733	80.00- 120.00	100.00
16.562	16.562 (0.968)	77	98380			0.00- 52.95	21.30
68 1,2-Dichloroethane					CAS #: 107-06-2		
16.672	16.672 (0.974)	62	295901	5.84429	5.844	80.00- 120.00	100.00
16.672	16.672 (0.974)	64	84026			0.00- 58.12	28.40
69 Heptane					CAS #: 142-82-5		
16.782	16.782 (0.981)	57	278074	5.29850	5.298	80.00- 120.00	100.00
16.782	16.782 (0.981)	100	47580			0.00- 47.88	17.11
16.782	16.782 (0.981)	43	568269			180.46- 240.46	204.36
72 Trichloroethene					CAS #: 79-01-6		
17.523	17.496 (1.024)	130	227088	5.61829	5.618	80.00- 120.00	100.00
17.496	17.496 (1.022)	95	222427			71.46- 131.46	97.95
17.496	17.523 (1.022)	97	143775			35.77- 95.77	63.31
73 Methylcyclohexane					CAS #: 108-87-2		
17.743	17.743 (1.037)	83	268598	5.60735	5.607	80.00- 120.00	100.00
17.743	17.743 (1.037)	98	135669			18.11- 78.11	50.51
17.743	17.743 (1.037)	55	469643			129.45- 189.45	174.85
74 1,2-Dichloropropane					CAS #: 78-87-5		
17.935	17.935 (1.048)	63	242997	5.58700	5.587	80.00- 120.00	100.00
17.935	17.935 (1.048)	62	181351			44.27- 104.27	74.63
17.935	17.935 (1.048)	41	157778			34.00- 94.00	64.93
75 1,4-Dioxane					CAS #: 123-91-1		
18.045	18.045 (1.055)	88	112542	5.87920	5.879	80.00- 120.00	100.00
18.045	18.045 (1.055)	58	146978			101.60- 161.60	130.60
18.045	18.045 (1.055)	57	47088			13.84- 73.84	41.84

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
77 Bromodichloromethane					CAS #: 75-27-4		
18.347	18.347 (1.072)	83	338969	5.63998	5.640	80.00- 120.00	100.00
18.347	18.347 (1.072)	85	215883			33.15- 93.15	63.69
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.145	19.145 (1.119)	75	270254	5.22166	5.222	80.00- 120.00	100.00
19.145	19.145 (1.119)	77	85899			1.23- 61.23	31.78
19.145	19.145 (1.119)	39	212126			46.59- 106.59	78.49
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.346	19.346 (1.131)	43	770127	5.69718	5.697	80.00- 120.00	100.00
19.346	19.346 (1.131)	58	280115			5.80- 65.80	36.37
19.346	19.346 (1.131)	85	64846			0.00- 38.43	8.42
81 Toluene					CAS #: 108-88-3		
19.750	19.750 (1.154)	91	571173	5.50449	5.504	80.00- 120.00	100.00
19.750	19.750 (1.154)	92	330963			28.70- 88.70	57.94
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.212	20.212 (0.918)	75	259584	5.99642	5.996	80.00- 120.00	100.00
20.212	20.212 (0.918)	77	80660			1.04- 61.04	31.07
20.212	20.212 (0.918)	39	192497			45.23- 105.23	74.16
84 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.534	20.534 (0.932)	97	211899	5.42466	5.425	80.00- 120.00	100.00
20.534	20.534 (0.932)	99	129959			33.51- 93.51	61.33
20.534	20.534 (0.932)	83	165670			50.51- 110.51	78.18
86 Tetrachloroethene					CAS #: 127-18-4		
20.714	20.714 (0.940)	166	311785	5.77592	5.776	80.00- 120.00	100.00
20.714	20.714 (0.940)	129	220884			42.44- 102.44	70.84
20.714	20.714 (0.940)	131	230668			39.70- 99.70	73.98
87 2-Hexanone					CAS #: 591-78-6		
20.821	20.821 (0.945)	58	343876	5.74542	5.745	80.00- 120.00	100.00
20.821	20.821 (0.945)	43	688094			168.09- 228.09	200.10
20.821	20.821 (0.945)	100	35062			0.00- 41.01	10.20
89 Dibromochloromethane					CAS #: 124-48-1		
21.180	21.180 (0.961)	129	397391	5.71573	5.716	80.00- 120.00	100.00
21.180	21.180 (0.961)	127	305785			47.32- 107.32	76.95
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.395	21.395 (0.971)	107	324624	5.67918	5.679	80.00- 120.00	100.00
21.395	21.395 (0.971)	109	308952			62.73- 122.73	95.17

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
93 Chlorobenzene					CAS #: 108-90-7		
22.056	22.056 (1.001)	112	471356	5.71719	5.717	80.00- 120.00	100.00
22.056	22.056 (1.001)	114	149302			3.73- 63.73	31.67
22.056	22.056 (1.001)	77	255677			23.21- 83.21	54.24
95 Ethyl Benzene					CAS #: 100-41-4		
22.138	22.139 (1.005)	106	216007	5.50099	5.501	80.00- 120.00	100.00
22.138	22.139 (1.005)	91	705198			282.29- 342.29	326.47
96 m,p-Xylene					CAS #: 108-38-3		
22.303	22.303 (1.012)	106	223002	5.21133	5.211	80.00- 120.00	100.00
22.303	22.303 (1.012)	91	477293			172.44- 232.44	214.03
100 o-Xylene					CAS #: 95-47-6		
22.852	22.852 (1.037)	106	213819	5.30041	5.300	80.00- 120.00	100.00
22.852	22.852 (1.037)	91	468187			182.07- 242.07	218.96
101 Styrene					CAS #: 100-42-5		
22.880	22.880 (1.039)	104	338517	5.25502	5.255	80.00- 120.00	100.00
22.852	22.852 (1.037)	78	171664			19.39- 79.39	50.71
102 Bromoform					CAS #: 75-25-2		
23.173	23.173 (1.052)	173	397545	6.14462	6.145	80.00- 120.00	100.00
23.173	23.173 (1.052)	171	203117			22.28- 82.28	51.09
103 Cumene					CAS #: 98-82-8		
23.277	23.277 (1.057)	105	641666	5.35080	5.351	80.00- 120.00	100.00
23.277	23.277 (1.057)	120	180378			0.00- 59.48	28.11
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.689	23.689 (1.075)	83	377705	5.38172	5.382	80.00- 120.00	100.00
23.689	23.689 (1.075)	85	242456			32.49- 92.49	64.19
111 Propylbenzene					CAS #: 103-65-1		
23.767	23.767 (1.079)	91	607920	5.18093	5.181	80.00- 120.00	100.00
23.767	23.767 (1.079)	120	143471			0.00- 55.67	23.60
113 4-Ethyltoluene					CAS #: 622-96-8		
23.896	23.896 (1.085)	105	436362	4.87357	4.874	80.00- 120.00	100.00
23.896	23.896 (1.085)	120	149828			3.38- 63.38	34.34
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.947	23.947 (1.087)	105	429486	5.16987	5.170	80.00- 120.00	100.00
23.947	23.947 (1.087)	120	220909			21.28- 81.28	51.44
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.386	24.386 (1.107)	105	409621	4.74858	4.748	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
120 1,2,4-Trimethylbenzene (continued)							
24.386	24.386 (1.107)	120	206763			17.26- 77.26	50.48
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.756	24.756 (1.124)	146	292137	5.15729	5.157	80.00- 120.00	100.00
24.756	24.756 (1.124)	148	186035			33.35- 93.35	63.68
24.756	24.756 (1.124)	111	116140			10.42- 70.42	39.76
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.868	24.868 (1.129)	146	265555	4.89973	4.900	80.00- 120.00	100.00
24.868	24.868 (1.129)	148	164073			33.78- 93.78	61.78
24.845	24.868 (1.128)	111	99149			7.61- 67.61	37.34
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.002	25.002 (1.135)	91	405947	5.52064	5.521	80.00- 120.00	100.00
25.002	25.002 (1.135)	126	89322			0.00- 51.90	22.00
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.271	25.271 (1.147)	146	258877	4.67103	4.671	80.00- 120.00	100.00
25.271	25.271 (1.147)	148	164918			34.92- 94.92	63.71
25.271	25.271 (1.147)	111	100696			10.09- 70.09	38.90
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.065	27.065 (1.229)	180	216480	4.58964	4.590	80.00- 120.00	100.00
27.065	27.065 (1.229)	182	211146			64.14- 124.14	97.54
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.177	27.177 (1.234)	225	149758	4.17826	4.178	80.00- 120.00	100.00
27.177	27.177 (1.234)	223	97481			34.80- 94.80	65.09
133 Naphthalene					CAS #: 91-20-3		
27.401	27.401 (1.244)	128	33334	0.80673	0.8067	80.00- 120.00	100.00(R)
27.423	27.446 (1.245)	127	5526			0.00- 45.63	16.58

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100503.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: 5.0ppbv (50ppbv)

Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	78102	46861	109343	74712	-4.34
71 1,4-Difluorobenze	340477	204286	476668	340419	-0.02
92 Chlorobenzene-d5	294231	176539	411923	304058	3.34

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.74	15.41	16.07	15.74	0.00
71 1,4-Difluorobenze	17.11	16.78	17.44	17.11	0.00
92 Chlorobenzene-d5	22.03	21.70	22.36	22.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/05Oct2015.b/v100503.d

Date : 05-OCT-2015 10:09

Client ID: LCS

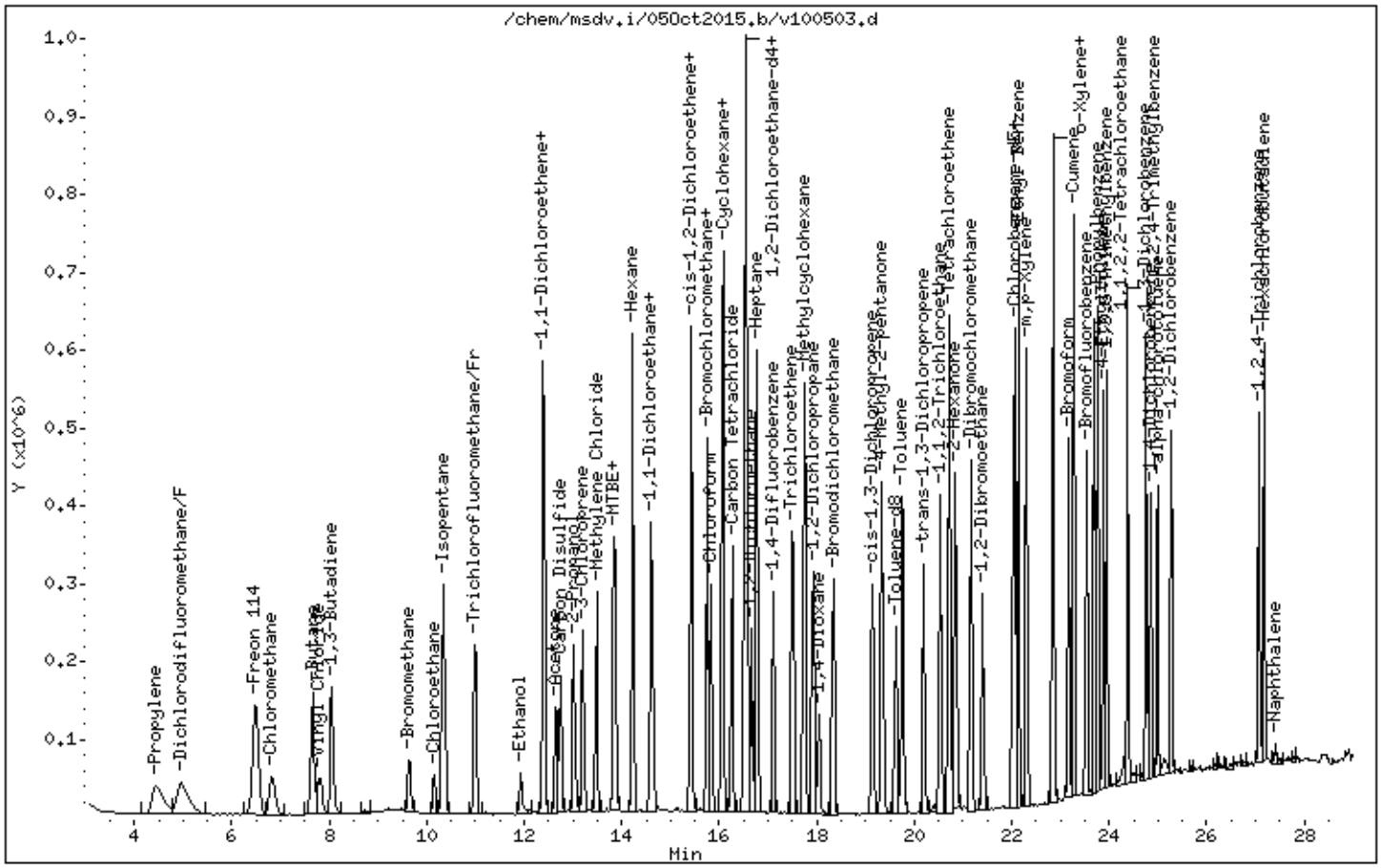
Instrument: msdv.i

Sample Info: 25mL# 2736-276; LCS; LCS

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



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Client Sample ID: LCSD

Lab ID#: 1509512-11AA

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100504**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/5/15 10:48 AM**	

Compound	%Recovery	Method Limits
Methylene Chloride	104	70-130
1,2,4-Trimethylbenzene	92	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	96	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	93	70-130

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCSD Client Smp ID: LCSD
Level: LOW Operator: sab
Data Type: MS DATA SampleType: LCSD
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: 5.0ppbv (50ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
4 Dichlorodifluorome	5.000	5.895	117.91	70-130
3 Propylene	5.000	5.190	103.81	60-140
6 Freon 114	5.000	6.160	123.20	70-130
8 Chloromethane	5.000	5.670	113.41	70-130
10 Vinyl Chloride	5.000	6.190	123.80	70-130
11 1,3-Butadiene	5.000	5.133	102.67	70-130
12 Bromomethane	5.000	5.646	112.92	70-130
17 Chloroethane	5.000	6.461	129.23	70-130
20 Trichlorofluoromet	5.000	6.023	120.45	70-130
24 Ethanol	5.000	6.537	130.74*	70-130
28 Freon 113	5.000	5.506	110.13	70-130
30 1,1-Dichloroethene	5.000	5.488	109.77	70-130
31 Acetone	5.000	5.153	103.07	70-130
33 Carbon Disulfide	5.000	4.846	96.92	70-130
34 2-Propanol	5.000	6.068	121.35	70-130
35 3-Chloroprene	5.000	5.573	111.47	70-130
37 Methylene Chloride	5.000	5.183	103.66	70-130
39 MTBE	5.000	5.313	106.27	70-130
40 trans-1,2-Dichloro	5.000	4.481	89.63	70-130
43 Hexane	5.000	4.985	99.70	70-130
46 1,1-Dichloroethane	5.000	5.609	112.19	70-130
47 Vinyl Acetate	5.000	6.424	128.48	60-140
50 cis-1,2-Dichloroet	5.000	5.970	119.41	70-130
51 2-Butanone	5.000	5.673	113.46	70-130
53 Tetrahydrofuran	5.000	5.485	109.70	70-130
55 Chloroform	5.000	5.518	110.35	70-130
57 Cyclohexane	5.000	5.503	110.06	70-130
58 1,1,1-Trichloroeth	5.000	5.615	112.30	70-130
59 Carbon Tetrachlori	5.000	7.572	151.44*	70-130
63 2,2,4-Trimethylpen	5.000	5.415	108.30	70-130
64 Benzene	5.000	5.574	111.49	70-130
69 Heptane	5.000	5.206	104.13	70-130
68 1,2-Dichloroethane	5.000	5.783	115.66	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
72 Trichloroethene	5.000	5.639	112.78	70-130
74 1,2-Dichloropropan	5.000	5.784	115.69	70-130
75 1,4-Dioxane	5.000	6.045	120.91	70-130
77 Bromodichlorometha	5.000	5.951	119.02	70-130
78 cis-1,3-Dichloropr	5.000	5.471	109.41	70-130
79 4-Methyl-2-pentano	5.000	5.820	116.40	70-130
81 Toluene	5.000	5.446	108.91	70-130
82 trans-1,3-Dichloro	5.000	6.011	120.21	70-130
84 1,1,2-Trichloroeth	5.000	5.526	110.51	70-130
87 2-Hexanone	5.000	5.680	113.59	70-130
86 Tetrachloroethene	5.000	5.625	112.50	70-130
89 Dibromochlorometha	5.000	5.850	116.99	70-130
90 1,2-Dibromoethane	5.000	5.703	114.06	70-130
93 Chlorobenzene	5.000	5.485	109.71	70-130
95 Ethyl Benzene	5.000	5.290	105.81	70-130
96 m,p-Xylene	5.000	4.950	99.01	70-130
100 o-Xylene	5.000	5.124	102.48	70-130
101 Styrene	5.000	4.920	98.40	70-130
102 Bromoform	5.000	6.159	123.18	70-130
103 Cumene	5.000	4.848	96.97	70-130
108 1,1,2,2-Tetrachlor	5.000	5.422	108.44	70-130
111 Propylbenzene	5.000	4.561	91.22	70-130
113 4-Ethyltoluene	5.000	4.425	88.50	70-130
114 1,3,5-Trimethylben	5.000	4.750	95.01	70-130
120 1,2,4-Trimethylben	5.000	4.626	92.52	70-130
122 1,3-Dichlorobenzen	5.000	4.818	96.35	70-130
124 1,4-Dichlorobenzen	5.000	4.211	84.22	70-130
127 alpha-chlorotoluen	5.000	5.256	105.12	70-130
128 1,2-Dichlorobenzen	5.000	4.165	83.30	70-130
131 1,2,4-Trichloroben	5.000	4.801	96.02	70-130
132 Hexachlorobutadien	5.000	3.534	70.67	70-130
133 Naphthalene	0.5000	0.8490	169.80*	60-140
18 Isopentane	5.000	5.410	108.20	60-140
9 Butane	5.000	6.153	123.06	60-140
73 Methylcyclohexane	5.000	5.800	116.00	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 65 1,2-Dichloroethane	5.000	4.796	95.93	70-130
$ 80 Toluene-d8	5.000	4.871	97.41	70-130
$ 106 Bromofluorobenzene	5.000	4.657	93.15	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO-14A

Data file : /chem/msdv.i/05Oct2015.b/v100504.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 05-OCT-2015 10:48
Operator : sab Inst ID: msdv.i
Smp Info : 25mL# 2736-276; LCSD; LCSD
Misc Info : 5.0ppbv (50ppbv)
Comment : Low Level GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m
Meth Date : 05-Oct-2015 10:04 efinn Quant Type: ISTD
Cal Date : 29-SEP-2015 21:58 Cal File: v092913.d
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 54 Bromochloromethane						CAS #: 74-97-5	
15.743	15.743 (1.000)	130	76222	5.00000		80.00- 120.00	100.00
15.743	15.743 (1.000)	128	58930			48.04- 108.04	77.31
15.743	15.743 (1.000)	49	255047			284.77- 344.77	334.61
* 71 1,4-Difluorobenzene						CAS #: 540-36-3	
17.111	17.111 (1.000)	114	340516	5.00000		80.00- 120.00	100.00
17.111	17.111 (1.000)	88	47508			0.00- 44.16	13.95
* 92 Chlorobenzene-d5						CAS #: 3114-55-4	
22.029	22.029 (1.000)	117	306226	5.00000		80.00- 120.00	100.00
22.029	22.029 (1.000)	82	146633			18.70- 78.70	47.88
$ 65 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.562	16.562 (1.052)	65	128937	4.79657	4.796	80.00- 120.00	100.00
16.562	16.562 (1.052)	67	63320			19.41- 79.41	49.11
$ 80 Toluene-d8						CAS #: 2037-26-5	
19.615	19.615 (1.146)	98	312639	4.87063	4.871	80.00- 120.00	100.00
19.615	19.615 (1.146)	70	33216			0.00- 40.74	10.62

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 80 Toluene-d8 (continued)							
19.615	19.638 (1.146)	100	204360			34.93- 94.93	65.37
$ 106 Bromofluorobenzene					CAS #: 460-00-4		
23.534	23.535 (1.068)	174	146523	4.65730	4.657	80.00- 120.00	100.00
23.534	23.535 (1.068)	95	176743			94.06- 154.06	120.62
23.534	23.535 (1.068)	176	133087			68.95- 128.95	90.83
3 Propylene					CAS #: 115-07-1		
4.485	4.447 (0.285)	41	224957	5.19044	5.190	80.00- 120.00	100.00
4.485	4.447 (0.285)	42	154578			43.41- 103.41	68.71
4.485	4.485 (0.285)	39	146043			36.60- 96.60	64.92
4 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.013	4.976 (0.318)	85	365864	5.89547	5.895	80.00- 120.00	100.00
5.013	4.976 (0.318)	87	116714			1.54- 61.54	31.90
6 Freon 114					CAS #: 76-14-2		
6.524	6.524 (0.414)	135	317852	6.16016	6.160	80.00- 120.00	100.00
6.524	6.524 (0.414)	137	96419			0.98- 60.98	30.33
6.486	6.486 (0.412)	85	340473			89.42- 149.42	107.12
8 Chloromethane					CAS #: 74-87-3		
6.826	6.826 (0.434)	50	283931	5.67051	5.670	80.00- 120.00	100.00
6.826	6.826 (0.434)	52	89296			2.41- 62.41	31.45
9 Butane					CAS #: 106-97-8		
7.658	7.658 (0.486)	58	54694	6.15296	6.153	80.00- 120.00	100.00
7.658	7.658 (0.486)	43	459618			830.80- 890.80	840.34
10 Vinyl Chloride					CAS #: 75-01-4		
7.813	7.813 (0.496)	62	205177	6.18981	6.190	80.00- 120.00	100.00
7.813	7.782 (0.496)	64	56666			0.00- 57.21	27.62
11 1,3-Butadiene					CAS #: 106-99-0		
8.061	8.061 (0.512)	54	225020	5.13326	5.133	80.00- 120.00	100.00
8.061	8.061 (0.512)	39	199183			60.61- 120.61	88.52
12 Bromomethane					CAS #: 74-83-9		
9.655	9.655 (0.613)	94	111675	5.64600	5.646	80.00- 120.00	100.00
9.655	9.655 (0.613)	96	105057			65.52- 125.52	94.07
17 Chloroethane					CAS #: 75-00-3		
10.161	10.161 (0.645)	64	87915	6.46128	6.461	80.00- 120.00	100.00
10.161	10.161 (0.645)	66	21802			0.00- 56.47	24.80

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
18 Isopentane					CAS #: 78-78-4		
10.330	10.330 (0.656)	57	214800	5.40987	5.410	80.00- 120.00	100.00
10.330	10.330 (0.656)	43	363872			135.48- 195.48	169.40
10.330	10.330 (0.656)	42	308235			110.86- 170.86	143.50
20 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.980	10.980 (0.697)	101	412252	6.02268	6.023	80.00- 120.00	100.00
11.004	10.980 (0.699)	103	258273			33.91- 93.91	62.65
24 Ethanol					CAS #: 64-17-5		
11.919	11.919 (0.757)	45	132525	6.53709	6.537	80.00- 120.00	100.00(R)
11.919	11.919 (0.757)	46	45825			6.93- 66.93	34.58
11.919	11.919 (0.757)	43	18518			0.00- 45.81	13.97
30 1,1-Dichloroethene					CAS #: 75-35-4		
12.386	12.386 (0.787)	98	97948	5.48838	5.488	80.00- 120.00	100.00
12.386	12.386 (0.787)	61	364491			350.72- 410.72	372.13
12.386	12.386 (0.787)	96	153780			129.58- 189.58	157.00
28 Freon 113					CAS #: 76-13-1		
12.413	12.413 (0.788)	151	275248	5.50639	5.506	80.00- 120.00	100.00
12.413	12.413 (0.788)	153	173789			33.77- 93.77	63.14
12.413	12.413 (0.788)	101	318540			82.21- 142.21	115.73
31 Acetone					CAS #: 67-64-1		
12.660	12.633 (0.804)	58	129325	5.15339	5.153	80.00- 120.00	100.00
12.633	12.633 (0.802)	43	381243			282.00- 342.00	294.79
33 Carbon Disulfide					CAS #: 75-15-0		
12.743	12.743 (0.809)	76	353182	4.84602	4.846	80.00- 120.00	100.00
35 3-Chloroprene					CAS #: 107-05-1		
13.210	13.210 (0.839)	76	55557	5.57325	5.573	80.00- 120.00	100.00
13.210	13.210 (0.839)	41	331412			599.84- 659.84	596.53
34 2-Propanol					CAS #: 67-63-0		
13.017	13.018 (0.827)	45	538317	6.06753	6.068	80.00- 120.00	100.00
13.017	13.018 (0.827)	43	86828			0.00- 46.02	16.13
13.017	13.018 (0.827)	59	16636			0.00- 33.30	3.09
37 Methylene Chloride					CAS #: 75-09-2		
13.484	13.484 (0.856)	84	123664	5.18291	5.183	80.00- 120.00	100.00
13.484	13.484 (0.856)	49	361791			254.12- 314.12	292.56
13.484	13.484 (0.856)	51	105690			56.45- 116.45	85.47
39 MTBE					CAS #: 1634-04-4		
13.841	13.841 (0.879)	73	408838	5.31335	5.313	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
39 MTBE (continued)							
13.841	13.841 (0.879)	57	176257			12.63- 72.63	43.11
13.841	13.841 (0.879)	41	153052			8.96- 68.96	37.44
40 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.869	13.896 (0.881)	98	81724	4.48138	4.481	80.00- 120.00	100.00
13.869	13.869 (0.881)	61	285354			297.51- 357.51	349.17
13.869	13.869 (0.881)	96	136795			130.03- 190.03	167.39
43 Hexane					CAS #: 110-54-3		
14.225	14.226 (0.904)	57	455408	4.98478	4.985	80.00- 120.00	100.00
14.225	14.226 (0.904)	43	315629			42.37- 102.37	69.31
14.225	14.226 (0.904)	86	32307			0.00- 38.41	7.09
46 1,1-Dichloroethane					CAS #: 75-34-3		
14.582	14.583 (0.926)	63	372165	5.60939	5.609	80.00- 120.00	100.00
14.582	14.583 (0.926)	65	99817			0.00- 57.42	26.82
47 Vinyl Acetate					CAS #: 108-05-4		
14.637	14.637 (0.930)	86	38282	6.42418	6.424	80.00- 120.00	100.00
14.637	14.637 (0.930)	42	53896			210.64- 270.64	140.79
14.637	14.637 (0.930)	43	760371			3446.49-3506.49	1986.24
50 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.423	15.424 (0.980)	98	118680	5.97041	5.970	80.00- 120.00	100.00
15.423	15.424 (0.980)	61	358358			267.29- 327.29	301.95
15.423	15.424 (0.980)	96	181216			128.72- 188.72	152.69
51 2-Butanone					CAS #: 78-93-3		
15.403	15.424 (0.978)	72	71249	5.67282	5.673	80.00- 120.00	100.00
15.403	15.403 (0.978)	43	589377			804.58- 864.58	827.21
15.423	15.424 (0.980)	57	44921			28.64- 88.64	63.05
53 Tetrahydrofuran					CAS #: 109-99-9		
15.743	15.743 (1.000)	42	358855	5.48478	5.485	80.00- 120.00	100.00
15.743	15.743 (1.000)	71	63528			0.00- 48.89	17.70
15.743	15.743 (1.000)	72	68096			0.00- 47.97	18.98
55 Chloroform					CAS #: 67-66-3		
15.836	15.836 (1.006)	83	313976	5.51773	5.518	80.00- 120.00	100.00
15.836	15.836 (1.006)	85	202000			32.85- 92.85	64.34
57 Cyclohexane					CAS #: 110-82-7		
16.082	16.083 (1.022)	84	202918	5.50296	5.503	80.00- 120.00	100.00
16.082	16.083 (1.022)	56	505457			218.68- 278.68	249.09
16.082	16.083 (1.022)	41	250109			93.43- 153.43	123.26

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
58 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.052	16.052 (1.020)	97	356703	5.61514	5.615	80.00- 120.00	100.00
16.052	16.052 (1.020)	99	226484			32.55- 92.55	63.49
59 Carbon Tetrachloride					CAS #: 56-23-5		
16.267	16.267 (1.033)	119	343566	7.57224	7.572	80.00- 120.00	100.00(R)
16.267	16.267 (1.033)	117	360541			74.89- 134.89	104.94
	Sum of Peak Concentrations =				7.572		
63 2,2,4-Trimethylpentane					CAS #: 540-84-1		
16.535	16.535 (1.050)	56	463659	5.41489	5.415	80.00- 120.00	100.00
16.535	16.535 (1.050)	57	1391695			270.88- 330.88	300.15
16.535	16.535 (1.050)	41	321818			41.84- 101.84	69.41
64 Benzene					CAS #: 71-43-2		
16.562	16.562 (0.968)	78	449281	5.57451	5.574	80.00- 120.00	100.00
16.562	16.562 (0.968)	77	105183			0.00- 52.95	23.41
68 1,2-Dichloroethane					CAS #: 107-06-2		
16.672	16.672 (0.974)	62	292873	5.78284	5.783	80.00- 120.00	100.00
16.672	16.672 (0.974)	64	89812			0.00- 58.12	30.67
69 Heptane					CAS #: 142-82-5		
16.782	16.782 (0.981)	57	273327	5.20657	5.206	80.00- 120.00	100.00
16.782	16.782 (0.981)	100	48427			0.00- 47.88	17.72
16.782	16.782 (0.981)	43	562525			180.46- 240.46	205.81
72 Trichloroethene					CAS #: 79-01-6		
17.523	17.496 (1.024)	130	227997	5.63918	5.639	80.00- 120.00	100.00
17.495	17.496 (1.022)	95	222390			71.46- 131.46	97.54
17.495	17.523 (1.022)	97	148525			35.77- 95.77	65.14
73 Methylcyclohexane					CAS #: 108-87-2		
17.743	17.743 (1.037)	83	277917	5.80025	5.800	80.00- 120.00	100.00
17.743	17.743 (1.037)	98	131860			18.11- 78.11	47.45
17.743	17.743 (1.037)	55	478722			129.45- 189.45	172.25
74 1,2-Dichloropropane					CAS #: 78-87-5		
17.935	17.935 (1.048)	63	251652	5.78434	5.784	80.00- 120.00	100.00
17.935	17.935 (1.048)	62	187859			44.27- 104.27	74.65
17.935	17.935 (1.048)	41	161126			34.00- 94.00	64.03
75 1,4-Dioxane					CAS #: 123-91-1		
18.045	18.045 (1.055)	88	115758	6.04548	6.045	80.00- 120.00	100.00
18.045	18.045 (1.055)	58	149197			101.60- 161.60	128.89
18.045	18.045 (1.055)	57	53391			13.84- 73.84	46.12

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
77 Bromodichloromethane					CAS #: 75-27-4		
18.347	18.347 (1.072)	83	357770	5.95111	5.951	80.00- 120.00	100.00
18.347	18.347 (1.072)	85	223524			33.15- 93.15	62.48
78 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
19.145	19.145 (1.119)	75	283221	5.47064	5.471	80.00- 120.00	100.00
19.145	19.145 (1.119)	77	84067			1.23- 61.23	29.68
19.145	19.145 (1.119)	39	214151			46.59- 106.59	75.61
79 4-Methyl-2-pentanone					CAS #: 108-10-1		
19.346	19.346 (1.131)	43	786958	5.82003	5.820	80.00- 120.00	100.00
19.346	19.346 (1.131)	58	277021			5.80- 65.80	35.20
19.346	19.346 (1.131)	85	64675			0.00- 38.43	8.22
81 Toluene					CAS #: 108-88-3		
19.772	19.750 (1.155)	91	565225	5.44561	5.446	80.00- 120.00	100.00
19.772	19.750 (1.155)	92	339457			28.70- 88.70	60.06
82 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.211	20.212 (0.918)	75	262053	6.01060	6.011	80.00- 120.00	100.00
20.211	20.212 (0.918)	77	83019			1.04- 61.04	31.68
20.211	20.212 (0.918)	39	192616			45.23- 105.23	73.50
84 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.534	20.534 (0.932)	97	217379	5.52555	5.526	80.00- 120.00	100.00
20.534	20.534 (0.932)	99	130357			33.51- 93.51	59.97
20.534	20.534 (0.932)	83	176053			50.51- 110.51	80.99
86 Tetrachloroethene					CAS #: 127-18-4		
20.714	20.714 (0.940)	166	305791	5.62478	5.625	80.00- 120.00	100.00
20.714	20.714 (0.940)	129	216552			42.44- 102.44	70.82
20.714	20.714 (0.940)	131	225274			39.70- 99.70	73.67
87 2-Hexanone					CAS #: 591-78-6		
20.821	20.821 (0.945)	58	342356	5.67953	5.680	80.00- 120.00	100.00
20.821	20.821 (0.945)	43	681583			168.09- 228.09	199.09
20.821	20.821 (0.945)	100	32565			0.00- 41.01	9.51
89 Dibromochloromethane					CAS #: 124-48-1		
21.180	21.180 (0.961)	129	409597	5.84958	5.850	80.00- 120.00	100.00
21.180	21.180 (0.961)	127	314473			47.32- 107.32	76.78
90 1,2-Dibromoethane					CAS #: 106-93-4		
21.395	21.395 (0.971)	107	328318	5.70314	5.703	80.00- 120.00	100.00
21.395	21.395 (0.971)	109	315298			62.73- 122.73	96.03

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
93 Chlorobenzene					CAS #: 108-90-7		
22.056	22.056 (1.001)	112	455460	5.48527	5.485	80.00- 120.00	100.00
22.056	22.056 (1.001)	114	152879			3.73- 63.73	33.57
22.056	22.056 (1.001)	77	243612			23.21- 83.21	53.49
95 Ethyl Benzene					CAS #: 100-41-4		
22.138	22.139 (1.005)	106	209215	5.29030	5.290	80.00- 120.00	100.00
22.138	22.139 (1.005)	91	672242			282.29- 342.29	321.32
96 m,p-Xylene					CAS #: 108-38-3		
22.303	22.303 (1.012)	106	213342	4.95028	4.950	80.00- 120.00	100.00
22.303	22.303 (1.012)	91	432421			172.44- 232.44	202.69
100 o-Xylene					CAS #: 95-47-6		
22.852	22.852 (1.037)	106	208171	5.12387	5.124	80.00- 120.00	100.00
22.852	22.852 (1.037)	91	440579			182.07- 242.07	211.64
101 Styrene					CAS #: 100-42-5		
22.880	22.880 (1.039)	104	319184	4.91982	4.920	80.00- 120.00	100.00
22.852	22.852 (1.037)	78	159608			19.39- 79.39	50.01
102 Bromoform					CAS #: 75-25-2		
23.173	23.173 (1.052)	173	401322	6.15908	6.159	80.00- 120.00	100.00
23.173	23.173 (1.052)	171	207232			22.28- 82.28	51.64
103 Cumene					CAS #: 98-82-8		
23.276	23.277 (1.057)	105	585567	4.84843	4.848	80.00- 120.00	100.00
23.276	23.277 (1.057)	120	167352			0.00- 59.48	28.58
108 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.689	23.689 (1.075)	83	383229	5.42177	5.422	80.00- 120.00	100.00
23.689	23.689 (1.075)	85	249098			32.49- 92.49	65.00
111 Propylbenzene					CAS #: 103-65-1		
23.767	23.767 (1.079)	91	538985	4.56092	4.561	80.00- 120.00	100.00
23.767	23.767 (1.079)	120	135045			0.00- 55.67	25.06
113 4-Ethyltoluene					CAS #: 622-96-8		
23.895	23.896 (1.085)	105	399039	4.42517	4.425	80.00- 120.00	100.00
23.895	23.896 (1.085)	120	133447			3.38- 63.38	33.44
114 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
23.947	23.947 (1.087)	105	397467	4.75058	4.750	80.00- 120.00	100.00
23.947	23.947 (1.087)	120	199111			21.28- 81.28	50.09
120 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
24.386	24.386 (1.107)	105	401888	4.62595	4.626	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
120 1,2,4-Trimethylbenzene (continued)							
24.386	24.386 (1.107)	120	190056			17.26- 77.26	47.29
122 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.756	24.756 (1.124)	146	274849	4.81774	4.818	80.00- 120.00	100.00
24.756	24.756 (1.124)	148	171819			33.35- 93.35	62.51
24.756	24.756 (1.124)	111	107449			10.42- 70.42	39.09
124 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.868	24.868 (1.129)	146	229862	4.21113	4.211	80.00- 120.00	100.00
24.868	24.868 (1.129)	148	151259			33.78- 93.78	65.80
24.845	24.868 (1.128)	111	90815			7.61- 67.61	39.51
127 alpha-chlorotoluene					CAS #: 100-44-7		
25.002	25.002 (1.135)	91	389256	5.25618	5.256	80.00- 120.00	100.00
25.002	25.002 (1.135)	126	86523			0.00- 51.90	22.23
128 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.271	25.271 (1.147)	146	232482	4.16508	4.165	80.00- 120.00	100.00
25.271	25.271 (1.147)	148	147155			34.92- 94.92	63.30
25.271	25.271 (1.147)	111	95207			10.09- 70.09	40.95
131 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
27.065	27.065 (1.229)	180	228064	4.80101	4.801	80.00- 120.00	100.00
27.065	27.065 (1.229)	182	214737			64.14- 124.14	94.16
132 Hexachlorobutadiene					CAS #: 87-68-3		
27.177	27.177 (1.234)	225	127553	3.53354	3.534	80.00- 120.00	100.00
27.177	27.177 (1.234)	223	84086			34.80- 94.80	65.92
133 Naphthalene					CAS #: 91-20-3		
27.401	27.401 (1.244)	128	35331	0.84901	0.8490	80.00- 120.00	100.00(R)
27.423	27.446 (1.245)	127	6807			0.00- 45.63	19.27

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 05-Oct-2015 11:28

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100504.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: sab
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m
Misc Info: 5.0ppbv (50ppbv)

Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	78102	46861	109343	76222	-2.41
71 1,4-Difluorobenze	340477	204286	476668	340516	0.01
92 Chlorobenzene-d5	294231	176539	411923	306226	4.08

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
54 Bromochloromethan	15.74	15.41	16.07	15.74	0.00
71 1,4-Difluorobenze	17.11	16.78	17.44	17.11	0.00
92 Chlorobenzene-d5	22.03	21.70	22.36	22.03	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/05Oct2015.b/v100504.d

Date : 05-OCT-2015 10:48

Client ID: LCSD

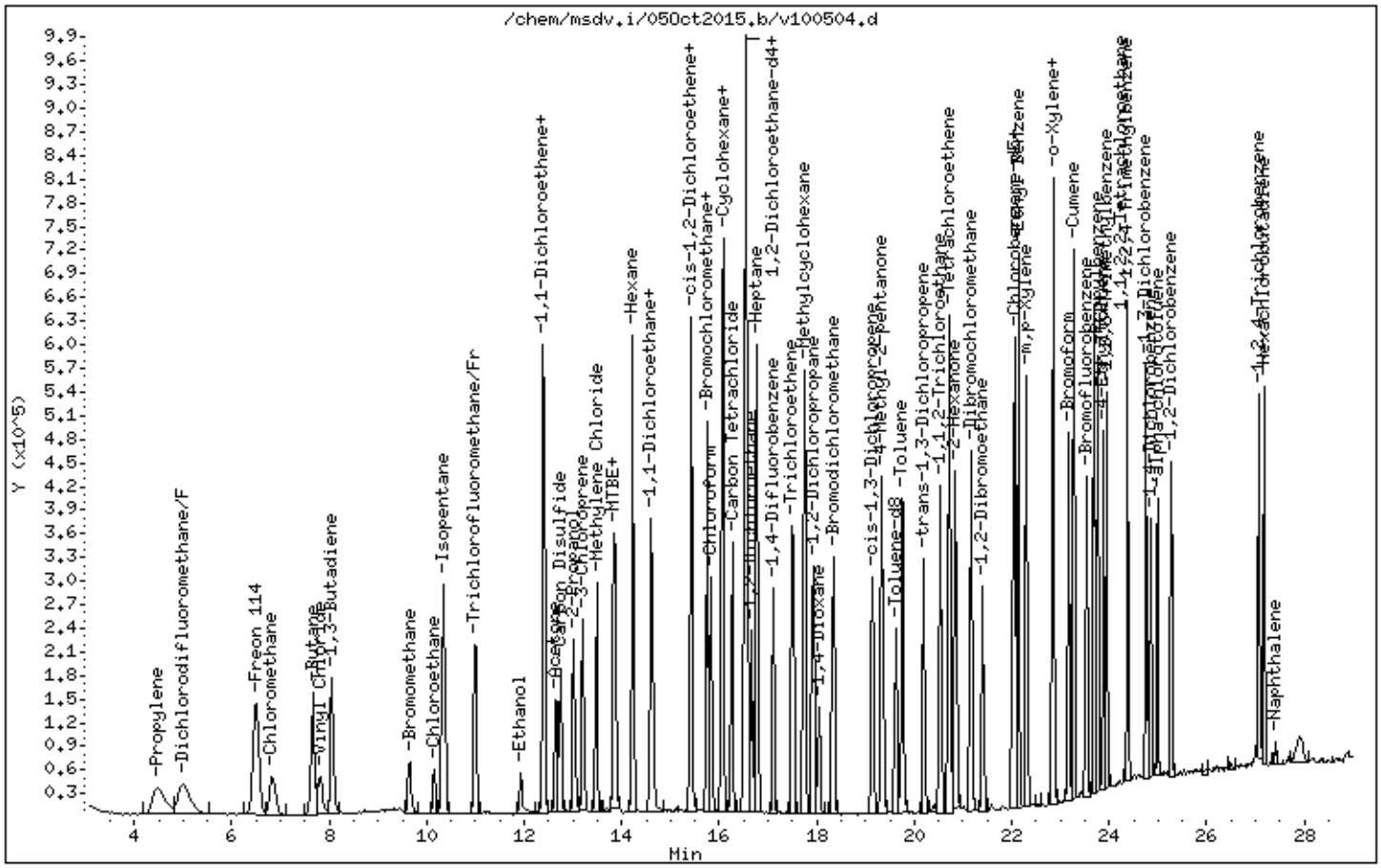
Instrument: msdv.i

Sample Info: 25mL# 2736-276; LCSD; LCSD

Operator: sab

Column phase: RTx-624

Column diameter: 0.32



eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1509512-11B

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100503sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/5/15 10:09 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	111	70-130
1,1-Dichloroethene	100	70-130
trans-1,2-Dichloroethene	81	70-130
cis-1,2-Dichloroethene	118	70-130
Chloroform	109	70-130
Benzene	96	70-130
1,2-Dichloroethane	115	70-130
Trichloroethene	94	70-130
Toluene	104	70-130
1,1,2-Trichloroethane	100	70-130
Tetrachloroethene	95	70-130
Ethyl Benzene	111	70-130
m,p-Xylene	108	70-130
o-Xylene	112	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	101	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	99	70-130

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCS Client Smp ID: LCS
Level: LOW Operator: ef
Data Type: MS DATA SampleType: LCS
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 5.0ppbv (50ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
1 Dichlorodifluorome	5.000	5.676	113.53	70-130
13 Freon 113	5.000	5.398	107.96	60-140
11 Trichlorofluoromet	5.000	5.823	116.47	60-140
3 Freon 114	5.000	5.786	115.72	70-130
4 Chloromethane	5.000	5.497	109.95	70-130
5 Vinyl Chloride	5.000	5.538	110.77	70-130
9 Chloroethane	5.000	5.947	118.94	70-130
12 1,1-Dichloroethene	5.000	5.006	100.12	70-130
21 MTBE	5.000	5.520	110.40	70-130
22 trans-1,2-Dichloro	5.000	4.059	81.18	70-130
25 1,1-Dichloroethane	5.000	5.553	111.06	70-130
29 cis-1,2-Dichloroet	5.000	5.921	118.42	70-130
32 Chloroform	5.000	5.436	108.72	70-130
34 1,1,1-Trichloroeth	5.000	5.465	109.31	70-130
35 Carbon Tetrachlori	5.000	9.091	181.82*	60-140
36 Benzene	5.000	4.786	95.73	70-130
38 1,2-Dichloroethane	5.000	5.743	114.87	70-130
41 Trichloroethene	5.000	4.675	93.49	70-130
48 Toluene	5.000	5.179	103.58	70-130
50 1,1,2-Trichloroeth	5.000	5.024	100.49	70-130
51 Tetrachloroethene	5.000	4.767	95.34	70-130
55 1,2-Dibromoethane	5.000	5.668	113.36	70-130
58 Ethyl Benzene	5.000	5.534	110.68	70-130
59 m,p-Xylene	5.000	5.423	108.47	70-130
61 o-Xylene	5.000	5.592	111.85	70-130
67 1,1,2,2-Tetrachlor	5.000	5.241	104.82	70-130
57 Chlorobenzene	5.000	5.535	110.71	60-140
49 trans-1,3-Dichloro	5.000	5.761	115.21	60-140
75 1,2-Dichlorobenzen	5.000	4.996	99.92	60-140
72 1,3-Dichlorobenzen	5.000	4.995	99.90	60-140
73 1,4-Dichlorobenzen	5.000	4.435	88.70	70-130
78 Naphthalene	0.5000	0.7064	141.28*	60-140

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCS Client Smp ID: LCS
Level: LOW Operator: ef
Data Type: MS DATA SampleType: LCS
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 5.0ppbv (50ppbv)

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 37 1,2-Dichloroethane	5.000	5.055	101.11	70-130
$ 47 Toluene-d8	5.000	4.983	99.67	70-130
$ 66 Bromofluorobenzene	5.000	4.966	99.33	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/05Oct2015.b/v100503sim.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 05-OCT-2015 10:09
Operator : ef Inst ID: msdv.i
Smp Info : 25mL# 2736-276; LCS; LCS
Misc Info : 5.0ppbv (50ppbv)
Comment : SIM GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 05-Oct-2015 10:04 efinn Quant Type: ISTD
Cal Date : 29-SEP-2015 14:34 Cal File: v092903sim.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 31 Bromochloromethane						CAS #: 74-97-5	
15.757	15.757 (1.000)	130	81473	5.00000		80.00- 120.00	100.00
15.757	15.757 (1.000)	128	62820			48.13- 108.13	77.11
15.757	15.757 (1.000)	49	221609			238.09- 298.09	272.00
* 40 1,4-Difluorobenzene						CAS #: 540-36-3	
17.125	17.125 (1.000)	114	341266	5.00000		80.00- 120.00	100.00
17.125	17.125 (1.000)	88	49044			0.00- 44.50	14.37
* 56 Chlorobenzene-d5						CAS #: 3114-55-4	
22.042	22.042 (1.000)	117	290032	5.00000		80.00- 120.00	100.00
22.015	22.015 (1.000)	82	137323			16.61- 76.61	47.35
$ 37 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.548	16.548 (1.050)	65	135930	5.05531	5.055	80.00- 120.00	100.00
16.548	16.548 (1.050)	67	66340			19.91- 79.91	48.80
$ 47 Toluene-d8						CAS #: 2037-26-5	
19.629	19.629 (1.146)	98	274780	4.98334	4.983	80.00- 120.00	100.00
19.629	19.629 (1.146)	70	30557			0.00- 41.04	11.12

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.629	19.629 (1.146)	100	171957			32.99- 92.99	62.58
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	160463	4.96626	4.966	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	181813			84.02- 144.02	113.31
23.548	23.548 (1.068)	176	156931			67.56- 127.56	97.80
1 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.003	5.003 (0.318)	85	387701	5.67660	5.676	80.00- 120.00	100.00
5.003	5.003 (0.318)	87	123583			2.25- 62.25	31.88
3 Freon 114					CAS #: 76-14-2		
6.513	6.513 (0.413)	135	330125	5.78583	5.786	80.00- 120.00	100.00
6.513	6.513 (0.413)	137	105642			1.20- 61.20	32.00
4 Chloromethane					CAS #: 74-87-3		
6.853	6.853 (0.435)	50	303977	5.49737	5.497	80.00- 120.00	100.00
6.853	6.853 (0.435)	52	94500			0.99- 60.99	31.09
5 Vinyl Chloride					CAS #: 75-01-4		
7.809	7.809 (0.496)	62	215322	5.53840	5.538	80.00- 120.00	100.00
7.809	7.840 (0.496)	64	59442			0.00- 57.67	27.61
9 Chloroethane					CAS #: 75-00-3		
10.151	10.151 (0.644)	64	85372	5.94677	5.947	80.00- 120.00	100.00
10.151	10.151 (0.644)	66	22914			0.00- 57.14	26.84
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.994	10.994 (0.698)	101	425633	5.82338	5.823	80.00- 120.00	100.00
10.994	10.994 (0.698)	103	274993			34.66- 94.66	64.61
12 1,1-Dichloroethene					CAS #: 75-35-4		
12.399	12.400 (0.787)	98	99369	5.00604	5.006	80.00- 120.00	100.00
12.399	12.400 (0.787)	61	370134			331.89- 391.89	372.48
12.399	12.400 (0.787)	96	156886			127.52- 187.52	157.88
13 Freon 113					CAS #: 76-13-1		
12.399	12.400 (0.787)	151	292305	5.39810	5.398	80.00- 120.00	100.00
12.427	12.427 (0.789)	153	187400			34.11- 94.11	64.11
12.399	12.400 (0.787)	101	328352			83.01- 143.01	112.33
22 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.882	13.882 (0.881)	98	87242	4.05875	4.059	80.00- 120.00	100.00
13.882	13.882 (0.881)	61	292989			298.00- 358.00	335.83
13.882	13.882 (0.881)	96	137928			126.99- 186.99	158.10

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
21 MTBE					CAS #: 1634-04-4		
13.855	13.855 (0.879)	73	378757	5.51996	5.520	80.00- 120.00	100.00
13.827	13.828 (0.878)	57	176977			16.91- 76.91	46.73
13.827	13.828 (0.878)	41	154233			11.83- 71.83	40.72
25 1,1-Dichloroethane					CAS #: 75-34-3		
14.596	14.596 (0.926)	63	385815	5.55313	5.553	80.00- 120.00	100.00
14.596	14.596 (0.926)	65	106485			0.00- 57.70	27.60
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.437	15.437 (0.980)	98	122531	5.92106	5.921	80.00- 120.00	100.00
15.437	15.437 (0.980)	61	367012			264.63- 324.63	299.53
15.437	15.437 (0.980)	96	192363			126.49- 186.49	156.99
32 Chloroform					CAS #: 67-66-3		
15.819	15.819 (1.004)	83	322570	5.43610	5.436	80.00- 120.00	100.00
15.819	15.819 (1.004)	85	209113			34.82- 94.82	64.83
34 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.065	16.065 (1.020)	97	369060	5.46534	5.465	80.00- 120.00	100.00
16.065	16.065 (1.020)	99	236836			34.47- 94.47	64.17
35 Carbon Tetrachloride					CAS #: 56-23-5		
16.250	16.250 (1.031)	117	380650	9.09099	9.091	80.00- 120.00	100.00(R)
16.250	16.250 (1.031)	119	365522			65.73- 125.73	96.03
36 Benzene					CAS #: 71-43-2		
16.576	16.576 (0.968)	78	432715	4.78650	4.786	80.00- 120.00	100.00
16.576	16.576 (0.968)	77	98639			0.00- 52.79	22.80
38 1,2-Dichloroethane					CAS #: 107-06-2		
16.658	16.658 (0.973)	62	306582	5.74346	5.743	80.00- 120.00	100.00
16.658	16.658 (0.973)	64	90305			0.00- 59.27	29.46
41 Trichloroethene					CAS #: 79-01-6		
17.509	17.509 (1.022)	130	249509	4.67474	4.675	80.00- 120.00	100.00
17.509	17.509 (1.022)	95	236189			64.71- 124.71	94.66
17.509	17.509 (1.022)	97	152339			31.19- 91.19	61.06
48 Toluene					CAS #: 108-88-3		
19.763	19.764 (1.154)	91	535709	5.17886	5.179	80.00- 120.00	100.00
19.763	19.764 (1.154)	92	315207			28.99- 88.99	58.84
49 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.189	20.189 (0.916)	75	265793	5.76073	5.761	80.00- 120.00	100.00
20.189	20.189 (0.916)	77	84875			1.70- 61.70	31.93

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
50 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.548	20.548 (0.932)	97	221899	5.02441	5.024	80.00- 120.00	100.00
20.548	20.548 (0.932)	99	138491			32.61- 92.61	62.41
20.548	20.548 (0.932)	83	177187			49.96- 109.96	79.85
51 Tetrachloroethene					CAS #: 127-18-4		
20.727	20.728 (0.940)	166	331224	4.76722	4.767	80.00- 120.00	100.00
20.727	20.728 (0.940)	129	237578			41.60- 101.60	71.73
20.727	20.728 (0.940)	131	250145			45.07- 105.07	75.52
55 1,2-Dibromoethane					CAS #: 106-93-4		
21.409	21.409 (0.971)	107	352740	5.66796	5.668	80.00- 120.00	100.00
21.409	21.409 (0.971)	109	334750			64.60- 124.60	94.90
57 Chlorobenzene					CAS #: 108-90-7		
22.070	22.070 (1.001)	112	488134	5.53532	5.535	80.00- 120.00	100.00
22.070	22.070 (1.001)	114	155525			1.94- 61.94	31.86
22.070	22.070 (1.001)	77	242621			24.15- 84.15	49.70
58 Ethyl Benzene					CAS #: 100-41-4		
22.152	22.152 (1.005)	106	196800	5.53377	5.534	80.00- 120.00	100.00
22.152	22.152 (1.005)	91	653529			301.49- 361.49	332.08
59 m,p-Xylene					CAS #: 108-38-3		
22.317	22.317 (1.012)	106	202557	5.42330	5.423	80.00- 120.00	100.00
22.289	22.290 (1.011)	91	437796			185.00- 245.00	216.13
61 o-Xylene					CAS #: 95-47-6		
22.838	22.839 (1.036)	106	197289	5.59229	5.592	80.00- 120.00	100.00
22.838	22.839 (1.036)	91	453753			198.20- 258.20	229.99
67 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.677	23.677 (1.074)	83	392248	5.24087	5.241	80.00- 120.00	100.00
23.677	23.677 (1.074)	85	253885			34.54- 94.54	64.73
72 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.769	24.769 (1.124)	146	311534	4.99476	4.995	80.00- 120.00	100.00
24.769	24.769 (1.124)	148	198524			34.01- 94.01	63.72
24.769	24.769 (1.124)	111	121586			8.85- 68.85	39.03
73 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.859	24.859 (1.128)	146	275304	4.43481	4.435	80.00- 120.00	100.00
24.859	24.859 (1.128)	148	175849			34.02- 94.02	63.87
24.859	24.859 (1.128)	111	102349			7.95- 67.95	37.18
75 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.285	25.285 (1.147)	146	271069	4.99604	4.996	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
75 1,2-Dichlorobenzene (continued)							
25.285	25.285 (1.147)	148	173650			33.70- 93.70	64.06
25.285	25.285 (1.147)	111	107542			9.89- 69.89	39.67
78 Naphthalene					CAS #: 91-20-3		
27.415	27.415 (1.244)	128	31630	0.70639	0.7064	80.00- 120.00	100.00(R)
27.415	27.415 (1.244)	127	3634			0.00- 42.90	11.49

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100503sim.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: ef
Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Client Smp ID: LCS
Level: LOW
Sample Type: AIR
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 5.0ppbv (50ppbv)

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	81342	48805	113879	81473	0.16
40 1,4-Difluorobenze	339188	203513	474863	341266	0.61
56 Chlorobenzene-d5	289088	173453	404723	290032	0.33

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/05Oct2015.b/v100503sim.d

Date : 05-OCT-2015 10:09

Client ID: LCS

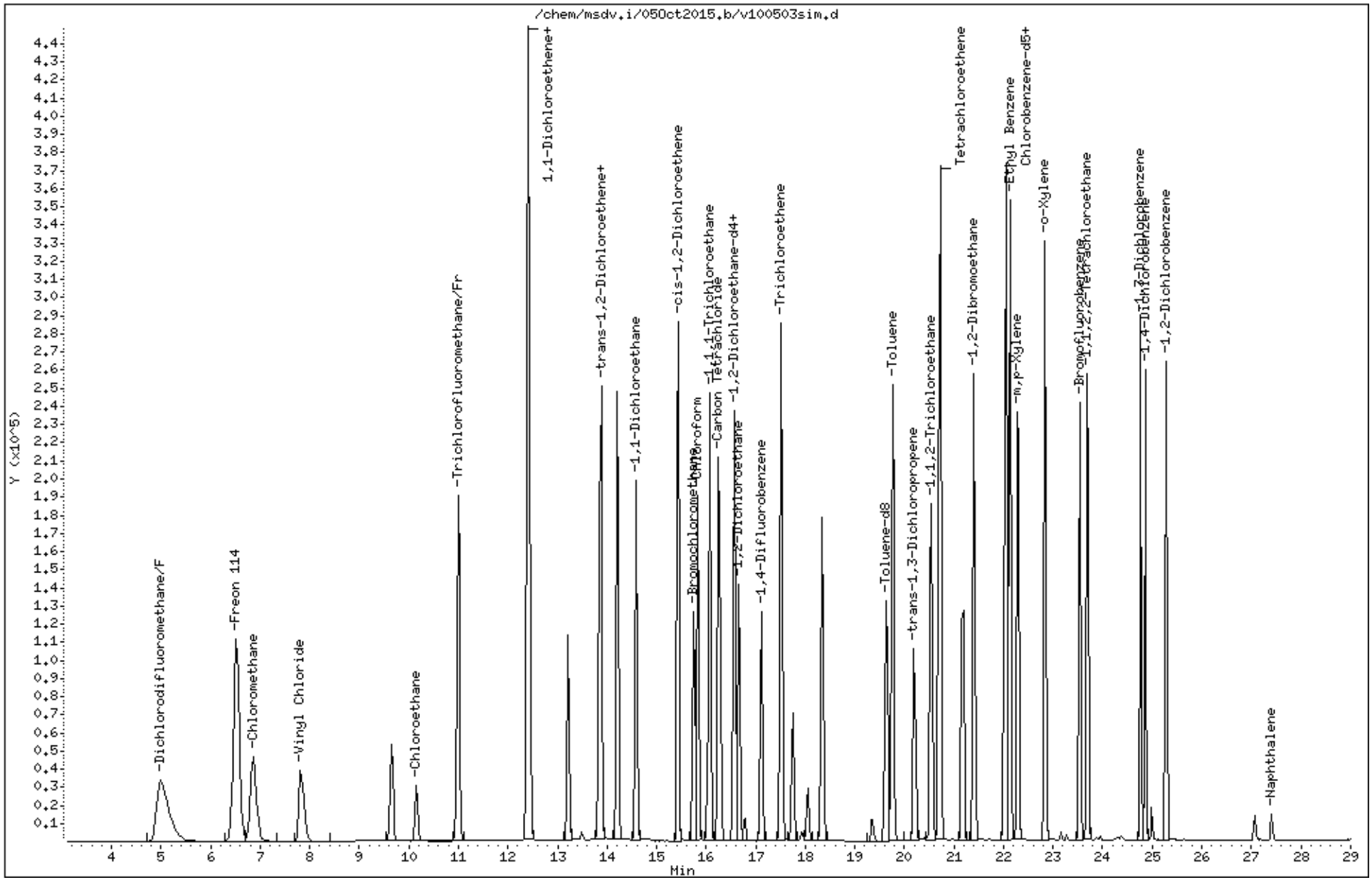
Instrument: msdv.i

Sample Info: 25mL# 2736-276; LCS; LCS

Operator: ef

Column phase: RTx-624

Column diameter: 0.32



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Client Sample ID: LCSD

Lab ID#: 1509512-11BB

MODIFIED EPA METHOD TO-15 GC/MS SIM/FULL SCAN

File Name:	**v100504sim**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/5/15 10:48 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	110	70-130
1,1-Dichloroethene	101	70-130
trans-1,2-Dichloroethene	83	70-130
cis-1,2-Dichloroethene	119	70-130
Chloroform	110	70-130
Benzene	96	70-130
1,2-Dichloroethane	116	70-130
Trichloroethene	94	70-130
Toluene	102	70-130
1,1,2-Trichloroethane	101	70-130
Tetrachloroethene	96	70-130
Ethyl Benzene	106	70-130
m,p-Xylene	101	70-130
o-Xylene	103	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	102	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	93	70-130

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCSD Client Smp ID: LCSD
Level: LOW Operator: sab
Data Type: MS DATA SampleType: LCSD
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 5.0ppbv (50ppbv)

SPIKE	COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
1	Dichlorodifluorome	5.000	5.575	111.50	70-130
13	Freon 113	5.000	5.460	109.20	60-140
11	Trichlorofluoromet	5.000	5.887	117.75	60-140
3	Freon 114	5.000	5.828	116.57	70-130
4	Chloromethane	5.000	5.497	109.94	70-130
5	Vinyl Chloride	5.000	5.482	109.65	70-130
9	Chloroethane	5.000	6.080	121.59	70-130
12	1,1-Dichloroethene	5.000	5.053	101.06	70-130
21	MTBE	5.000	5.560	111.20	70-130
22	trans-1,2-Dichloro	5.000	4.136	82.72	70-130
25	1,1-Dichloroethane	5.000	5.594	111.88	70-130
29	cis-1,2-Dichloroet	5.000	5.958	119.15	70-130
32	Chloroform	5.000	5.486	109.72	70-130
34	1,1,1-Trichloroeth	5.000	5.467	109.35	70-130
35	Carbon Tetrachlori	5.000	9.140	182.80*	60-140
36	Benzene	5.000	4.815	96.31	70-130
38	1,2-Dichloroethane	5.000	5.819	116.39	70-130
41	Trichloroethene	5.000	4.714	94.29	70-130
48	Toluene	5.000	5.118	102.37	70-130
50	1,1,2-Trichloroeth	5.000	5.044	100.88	70-130
51	Tetrachloroethene	5.000	4.804	96.08	70-130
55	1,2-Dibromoethane	5.000	5.704	114.07	70-130
58	Ethyl Benzene	5.000	5.285	105.71	70-130
59	m,p-Xylene	5.000	5.030	100.60	70-130
61	o-Xylene	5.000	5.139	102.79	70-130
67	1,1,2,2-Tetrachlor	5.000	5.253	105.06	70-130
57	Chlorobenzene	5.000	5.480	109.61	60-140
49	trans-1,3-Dichloro	5.000	5.866	117.31	60-140
75	1,2-Dichlorobenzen	5.000	4.585	91.70	60-140
72	1,3-Dichlorobenzen	5.000	4.552	91.05	60-140
73	1,4-Dichlorobenzen	5.000	4.000	79.99	70-130
78	Naphthalene	0.5000	0.7366	147.32*	60-140

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 05Oct2015
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCSD Client Smp ID: LCSD
Level: LOW Operator: sab
Data Type: MS DATA SampleType: LCSD
SpikeList File: AT12.spk Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 5.0ppbv (50ppbv)

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 37 1,2-Dichloroethane	5.000	5.075	101.50	70-130
$ 47 Toluene-d8	5.000	4.910	98.19	70-130
$ 66 Bromofluorobenzene	5.000	4.633	92.65	70-130

Eurofins Air Toxics Inc.

TO15/Modified TO14

Data file : /chem/msdv.i/05Oct2015.b/v100504sim.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 05-OCT-2015 10:48
Operator : sab Inst ID: msdv.i
Smp Info : 25mL# 2736-276; LCSD; LCSD
Misc Info : 5.0ppbv (50ppbv)
Comment : SIM GC-MS
Method : /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Meth Date : 05-Oct-2015 10:04 efinn Quant Type: ISTD
Cal Date : 29-SEP-2015 14:34 Cal File: v092903sim.d
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * 0 * CpndVariable

Cpnd Variable Local Compound Variable

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 31 Bromochloromethane						CAS #: 74-97-5	
15.757	15.757 (1.000)	130	82797	5.00000		80.00- 120.00	100.00
15.757	15.757 (1.000)	128	64301			48.13- 108.13	77.66
15.757	15.757 (1.000)	49	226361			238.09- 298.09	273.39
* 40 1,4-Difluorobenzene						CAS #: 540-36-3	
17.125	17.125 (1.000)	114	343324	5.00000		80.00- 120.00	100.00
17.125	17.125 (1.000)	88	48957			0.00- 44.50	14.26
* 56 Chlorobenzene-d5						CAS #: 3114-55-4	
22.042	22.042 (1.000)	117	290224	5.00000		80.00- 120.00	100.00
22.015	22.015 (1.000)	82	134869			16.61- 76.61	46.47
$ 37 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
16.548	16.548 (1.050)	65	138679	5.07508	5.075	80.00- 120.00	100.00
16.548	16.548 (1.050)	67	66723			19.91- 79.91	48.11
$ 47 Toluene-d8						CAS #: 2037-26-5	
19.629	19.629 (1.146)	98	272345	4.90957	4.910	80.00- 120.00	100.00
19.629	19.629 (1.146)	70	30059			0.00- 41.04	11.04

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 47 Toluene-d8 (continued)							
19.629	19.629 (1.146)	100	170563			32.99- 92.99	62.63
$ 66 Bromofluorobenzene					CAS #: 460-00-4		
23.548	23.548 (1.068)	174	149782	4.63262	4.633	80.00- 120.00	100.00
23.548	23.548 (1.068)	95	168538			84.02- 144.02	112.52
23.548	23.548 (1.068)	176	145670			67.56- 127.56	97.25
1 Dichlorodifluoromethane/Fr12					CAS #: 75-71-8		
5.003	5.003 (0.318)	85	386948	5.57497	5.575	80.00- 120.00	100.00
5.003	5.003 (0.318)	87	125559			2.25- 62.25	32.45
3 Freon 114					CAS #: 76-14-2		
6.513	6.513 (0.413)	135	337963	5.82848	5.828	80.00- 120.00	100.00
6.513	6.513 (0.413)	137	107754			1.20- 61.20	31.88
4 Chloromethane					CAS #: 74-87-3		
6.853	6.853 (0.435)	50	308896	5.49700	5.497	80.00- 120.00	100.00
6.853	6.853 (0.435)	52	97614			0.99- 60.99	31.60
5 Vinyl Chloride					CAS #: 75-01-4		
7.840	7.809 (0.498)	62	216610	5.48244	5.482	80.00- 120.00	100.00
7.840	7.840 (0.498)	64	59574			0.00- 57.67	27.50
9 Chloroethane					CAS #: 75-00-3		
10.150	10.151 (0.644)	64	88698	6.07965	6.080	80.00- 120.00	100.00
10.150	10.151 (0.644)	66	23864			0.00- 57.14	26.90
11 Trichlorofluoromethane/Fr11					CAS #: 75-69-4		
10.994	10.994 (0.698)	101	437304	5.88739	5.887	80.00- 120.00	100.00
10.994	10.994 (0.698)	103	282113			34.66- 94.66	64.51
12 1,1-Dichloroethene					CAS #: 75-35-4		
12.399	12.400 (0.787)	98	101932	5.05305	5.053	80.00- 120.00	100.00
12.399	12.400 (0.787)	61	380874			331.89- 391.89	373.65
12.399	12.400 (0.787)	96	159974			127.52- 187.52	156.94
13 Freon 113					CAS #: 76-13-1		
12.399	12.400 (0.787)	151	300459	5.45995	5.460	80.00- 120.00	100.00
12.427	12.427 (0.789)	153	190917			34.11- 94.11	63.54
12.399	12.400 (0.787)	101	334764			83.01- 143.01	111.42
22 trans-1,2-Dichloroethene					CAS #: 156-60-5		
13.882	13.882 (0.881)	98	90352	4.13622	4.136	80.00- 120.00	100.00
13.882	13.882 (0.881)	61	300202			298.00- 358.00	332.26
13.882	13.882 (0.881)	96	141680			126.99- 186.99	156.81

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
21 MTBE					CAS #: 1634-04-4		
13.855	13.855 (0.879)	73	387691	5.55982	5.560	80.00- 120.00	100.00
13.827	13.828 (0.878)	57	179061			16.91- 76.91	46.19
13.827	13.828 (0.878)	41	157865			11.83- 71.83	40.72
25 1,1-Dichloroethane					CAS #: 75-34-3		
14.596	14.596 (0.926)	63	394983	5.59418	5.594	80.00- 120.00	100.00
14.596	14.596 (0.926)	65	109052			0.00- 57.70	27.61
29 cis-1,2-Dichloroethene					CAS #: 156-59-2		
15.437	15.437 (0.980)	98	125291	5.95762	5.958	80.00- 120.00	100.00
15.437	15.437 (0.980)	61	376471			264.63- 324.63	300.48
15.437	15.437 (0.980)	96	196894			126.49- 186.49	157.15
32 Chloroform					CAS #: 67-66-3		
15.819	15.819 (1.004)	83	330832	5.48618	5.486	80.00- 120.00	100.00
15.819	15.819 (1.004)	85	214917			34.82- 94.82	64.96
34 1,1,1-Trichloroethane					CAS #: 71-55-6		
16.065	16.065 (1.020)	97	375202	5.46745	5.467	80.00- 120.00	100.00
16.065	16.065 (1.020)	99	241228			34.47- 94.47	64.29
35 Carbon Tetrachloride					CAS #: 56-23-5		
16.250	16.250 (1.031)	117	388913	9.13980	9.140	80.00- 120.00	100.00(R)
16.250	16.250 (1.031)	119	372892			65.73- 125.73	95.88
36 Benzene					CAS #: 71-43-2		
16.576	16.576 (0.968)	78	437958	4.81546	4.815	80.00- 120.00	100.00
16.576	16.576 (0.968)	77	100222			0.00- 52.79	22.88
38 1,2-Dichloroethane					CAS #: 107-06-2		
16.658	16.658 (0.973)	62	312508	5.81939	5.819	80.00- 120.00	100.00
16.658	16.658 (0.973)	64	92121			0.00- 59.27	29.48
41 Trichloroethene					CAS #: 79-01-6		
17.509	17.509 (1.022)	130	253148	4.71449	4.714	80.00- 120.00	100.00
17.509	17.509 (1.022)	95	239826			64.71- 124.71	94.74
17.509	17.509 (1.022)	97	154762			31.19- 91.19	61.13
48 Toluene					CAS #: 108-88-3		
19.763	19.764 (1.154)	91	532665	5.11856	5.118	80.00- 120.00	100.00
19.763	19.764 (1.154)	92	313288			28.99- 88.99	58.82
49 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
20.189	20.189 (0.916)	75	270814	5.86567	5.866	80.00- 120.00	100.00
20.189	20.189 (0.916)	77	85616			1.70- 61.70	31.61

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
50 1,1,2-Trichloroethane					CAS #: 79-00-5		
20.548	20.548 (0.932)	97	222919	5.04417	5.044	80.00- 120.00	100.00
20.548	20.548 (0.932)	99	139559			32.61- 92.61	62.61
20.548	20.548 (0.932)	83	178440			49.96- 109.96	80.05
51 Tetrachloroethene					CAS #: 127-18-4		
20.727	20.728 (0.940)	166	334014	4.80420	4.804	80.00- 120.00	100.00
20.727	20.728 (0.940)	129	239140			41.60- 101.60	71.60
20.727	20.728 (0.940)	131	252469			45.07- 105.07	75.59
55 1,2-Dibromoethane					CAS #: 106-93-4		
21.409	21.409 (0.971)	107	355189	5.70354	5.704	80.00- 120.00	100.00
21.409	21.409 (0.971)	109	335303			64.60- 124.60	94.40
57 Chlorobenzene					CAS #: 108-90-7		
22.070	22.070 (1.001)	112	483608	5.48036	5.480	80.00- 120.00	100.00
22.070	22.070 (1.001)	114	154649			1.94- 61.94	31.98
22.070	22.070 (1.001)	77	239612			24.15- 84.15	49.55
58 Ethyl Benzene					CAS #: 100-41-4		
22.152	22.152 (1.005)	106	188095	5.28550	5.285	80.00- 120.00	100.00
22.152	22.152 (1.005)	91	625224			301.49- 361.49	332.40
59 m,p-Xylene					CAS #: 108-38-3		
22.317	22.317 (1.012)	106	187993	5.03003	5.030	80.00- 120.00	100.00
22.289	22.290 (1.011)	91	406548			185.00- 245.00	216.26
61 o-Xylene					CAS #: 95-47-6		
22.838	22.839 (1.036)	106	181427	5.13926	5.139	80.00- 120.00	100.00
22.838	22.839 (1.036)	91	416677			198.20- 258.20	229.67
67 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
23.677	23.677 (1.074)	83	393415	5.25298	5.253	80.00- 120.00	100.00
23.677	23.677 (1.074)	85	253747			34.54- 94.54	64.50
72 1,3-Dichlorobenzene					CAS #: 541-73-1		
24.769	24.769 (1.124)	146	284132	4.55241	4.552	80.00- 120.00	100.00
24.769	24.769 (1.124)	148	181373			34.01- 94.01	63.83
24.769	24.769 (1.124)	111	110865			8.85- 68.85	39.02
73 1,4-Dichlorobenzene					CAS #: 106-46-7		
24.859	24.859 (1.128)	146	248460	3.99973	4.000	80.00- 120.00	100.00
24.859	24.859 (1.128)	148	158583			34.02- 94.02	63.83
24.859	24.859 (1.128)	111	92522			7.95- 67.95	37.24
75 1,2-Dichlorobenzene					CAS #: 95-50-1		
25.285	25.285 (1.147)	146	248943	4.58520	4.585	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
75 1,2-Dichlorobenzene (continued)							
25.285	25.285 (1.147)	148	158621			33.70- 93.70	63.72
25.285	25.285 (1.147)	111	98509			9.89- 69.89	39.57
78 Naphthalene					CAS #: 91-20-3		
27.414	27.415 (1.244)	128	33004	0.73659	0.7366	80.00- 120.00	100.00(R)
27.414	27.415 (1.244)	127	3993			0.00- 42.90	12.10

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msdv.i
Lab File ID: v100504sim.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: sab
Calibration Date: 05-OCT-2015
Calibration Time: 09:23
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR
Method File: /chem/msdv.i/05Oct2015.b/v15l0929a.m/v15s0929a.m
Misc Info: 5.0ppbv (50ppbv)

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	81342	48805	113879	82797	1.79
40 1,4-Difluorobenze	339188	203513	474863	343324	1.22
56 Chlorobenzene-d5	289088	173453	404723	290224	0.39

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
31 Bromochloromethan	15.76	15.43	16.09	15.76	0.00
40 1,4-Difluorobenze	17.12	16.79	17.45	17.12	0.00
56 Chlorobenzene-d5	22.04	21.71	22.37	22.04	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msdv.i/05Oct2015.b/v100504sim.d

Date : 05-OCT-2015 10:48

Client ID: LCSD

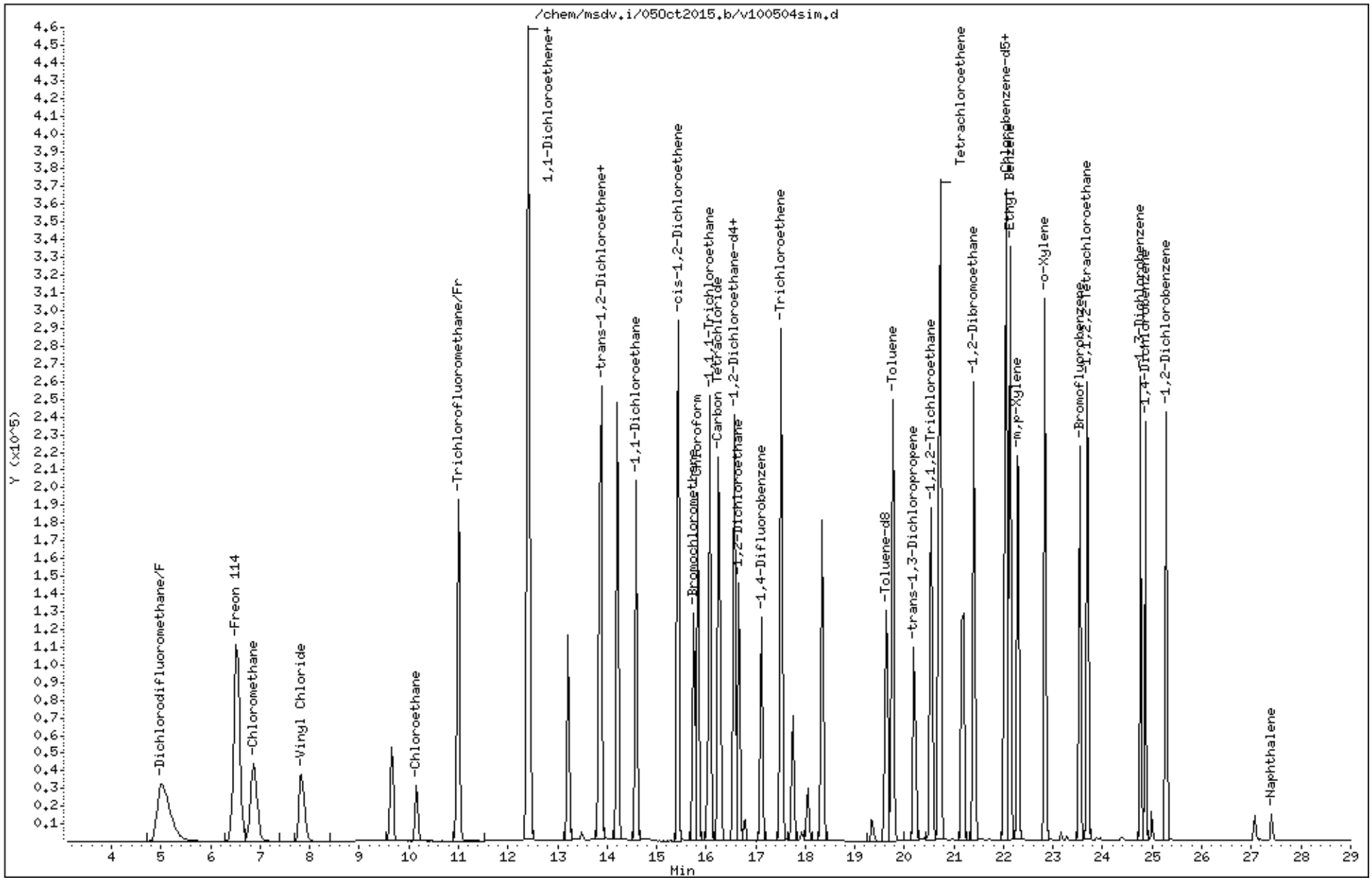
Sample Info: 25mL# 2736-276; LCSD; LCSD

Column phase: RTx-624

Instrument: msdv.i

Operator: sab

Column diameter: 0.32



Eurofins Air Toxics, Inc. **MSD-V** **Logbook #2725**

BFB Verification of 176/174 m/z Ratio: (424490 / 439564) x100 = 96.5%	
Tekmar Purge Flow:	2
Vacuum:	55 10/5/15

IS/S Std. #: 2736 · 2760		Exp. Date: 12/22/15
BCM	78102	Exp: 81342
1,4-DFB	340477	339188
CB-d5	294231	289088

Verified CCV IS vs ICAL mid-point (-40%D): 83

File ID:	V100502
Compound:	Toluene-d8
Initials:	SB

Calculation Check:

ppbv of compound = $\frac{\text{Area}_{\text{Sample}}}{\text{Area}_{\text{IS}}} \times \frac{\text{Conc}_{\text{IS}}}{\text{RRF}}$ = $\frac{(313156)}{(340477)} \times \frac{(5.000)}{(0.9452)}$ = 4.879

SOP# (Circle one): 6 / (83) / (38) / 91 / 109 Method (Circle one): ~~TO-14A~~/TO-15/TO-17 Reported Result: 4.879

Method Name: V15L0729A (V15S0729A

	Use	File	Lab ID#	Can#	Pressure	Amt. Loaded	DF	Loaded By-Initials	Date Analyzed	Time Analyzed	Reviewed By-Initials	Comments/Standard Expiration Date
1	✓	V100502	BFB Tune entered	2299-806	50ng	2mL	1.00	SB	10/5/15	0904	SB	
2	✓	02	CCV (5.0ppbv)	2736-237	5.0ppbv	25mL	1.00	SB		0923	SB	5x5" 1/20/15 CCV 71502
3	✓	03	LCS (5.0ppbv)	2736-2760	5.0ppbv	25mL	1.00	SB		1009	SB	5x5" 9/15/14 ~~10/5/14~~ 10/30/15 200.1
4	✓	04	(CSD) (50ppbv)	↓	5ppbv	25mL	1.00	SB		1048	MB	d
5	X	05	Lab Blank	35248	Humid	250mL	1.00	MB		1142	MB	
6	✓	06	Lab Blank	35248	Humid	250mL	1.00	MB		1251	MB	
7	✓	07	1509512-01A	6L1237	9.0"Hg→5.0psi	250mL	1.91	MB		1351	MB	
8	✓	08	-02A	34235	8.0"Hg→5.0psi	250mL	1.83	MB		1446	GH	
9	✓	09	-03AB	34340	7.0"Hg-5psi	100mL	4.38	GH		1537	GH	E Etch, 1,4-DCB, Naph(NTC) dil NTC
10	✓	10	-04AB	34461	8.0"Hg-5psi	100mL	4.58	GH		1624	GH	E Etch dil NTC
11	✓	11	-05AB	35166	9.0"Hg-5psi	250mL	1.91	GH		1719	GH	~~E Etch, Hexane~~ GH 10/6/15 (dil NTC)
12	✓	12	-06AB	34356	7.0"Hg-5psi	100mL	4.38	GH		1804	GH	E Etch, Hexane (NTC) dil NTC
13	✓	13	-07AB	33980	7.0"Hg-5psi	25mL	17.5	GH		1849	GH	5% Etch, 2-Prop, NTC
14	✓	14	-08AB	33977	7.5"Hg-5psi	25mL	1.79	GH		1952	GH	E Etch, 2-Prop, Naph (NTC)

Reviewed

10/5/15
Date

Eurofins Air Toxics Inc.

Data file : /var/chem/msdv.i/29Sep2015.b/v092901.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 29-SEP-2015 13:21
Operator : db Inst ID: msdv.i
Smp Info : 2.0uL# 2299-805; BFB; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msdv.i/29Sep2015.b/bfb60.m
Meth Date : 29-Sep-2015 13:37 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
6.486	6.640	-0.154	95	549193			100.00- 100.00	100.00
6.486	6.640	-0.154	50	154218			8.00- 40.00	28.08
6.486	6.640	-0.154	75	247577			30.00- 66.00	45.08
6.486	6.640	-0.154	96	37020			5.00- 9.00	6.74
6.486	6.640	-0.154	173	2151			0.00- 1.99	0.51
6.486	6.640	-0.154	174	423637			50.00- 120.00	77.14
6.486	6.640	-0.154	175	28426			4.00- 9.00	6.71
6.486	6.640	-0.154	176	409177			93.00- 101.00	96.59
6.486	6.640	-0.154	177	26234			5.00- 9.00	6.41

Data File: /var/chem/msdv.i/29Sep2015.b/v092901.d

Date : 29-SEP-2015 13:21

Client ID: BFB

Instrument: msdv.i

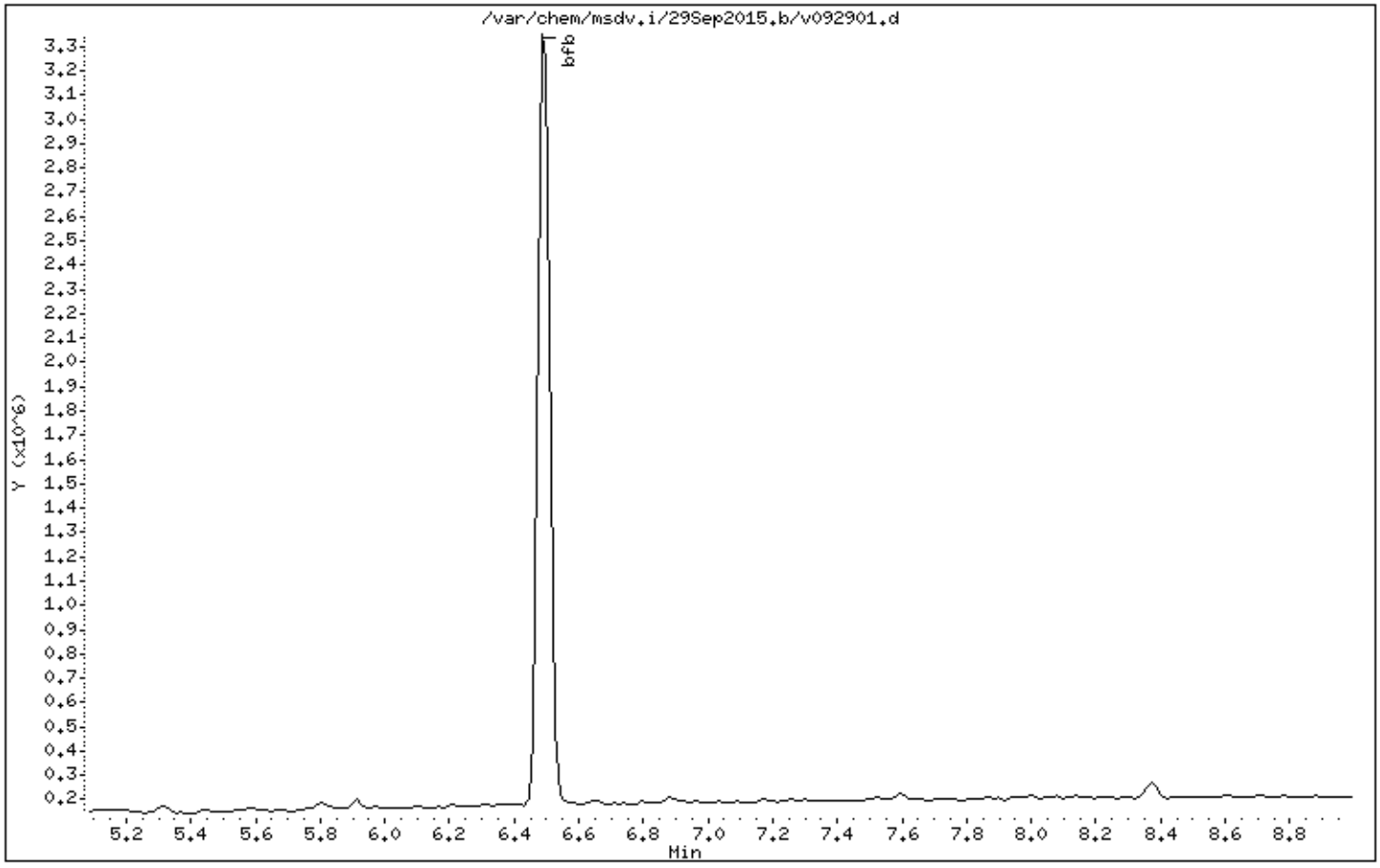
Sample Info: 2.0uL# 2299-805; BFB; BFB

Volume Injected (uL): 1.0

Operator: db

Column phase:

Column diameter: 2.00



Data File: /var/chem/msdv.i/29Sep2015.b/v092901.d

Date : 29-SEP-2015 13:21

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL# 2299-805; BFB; BFB

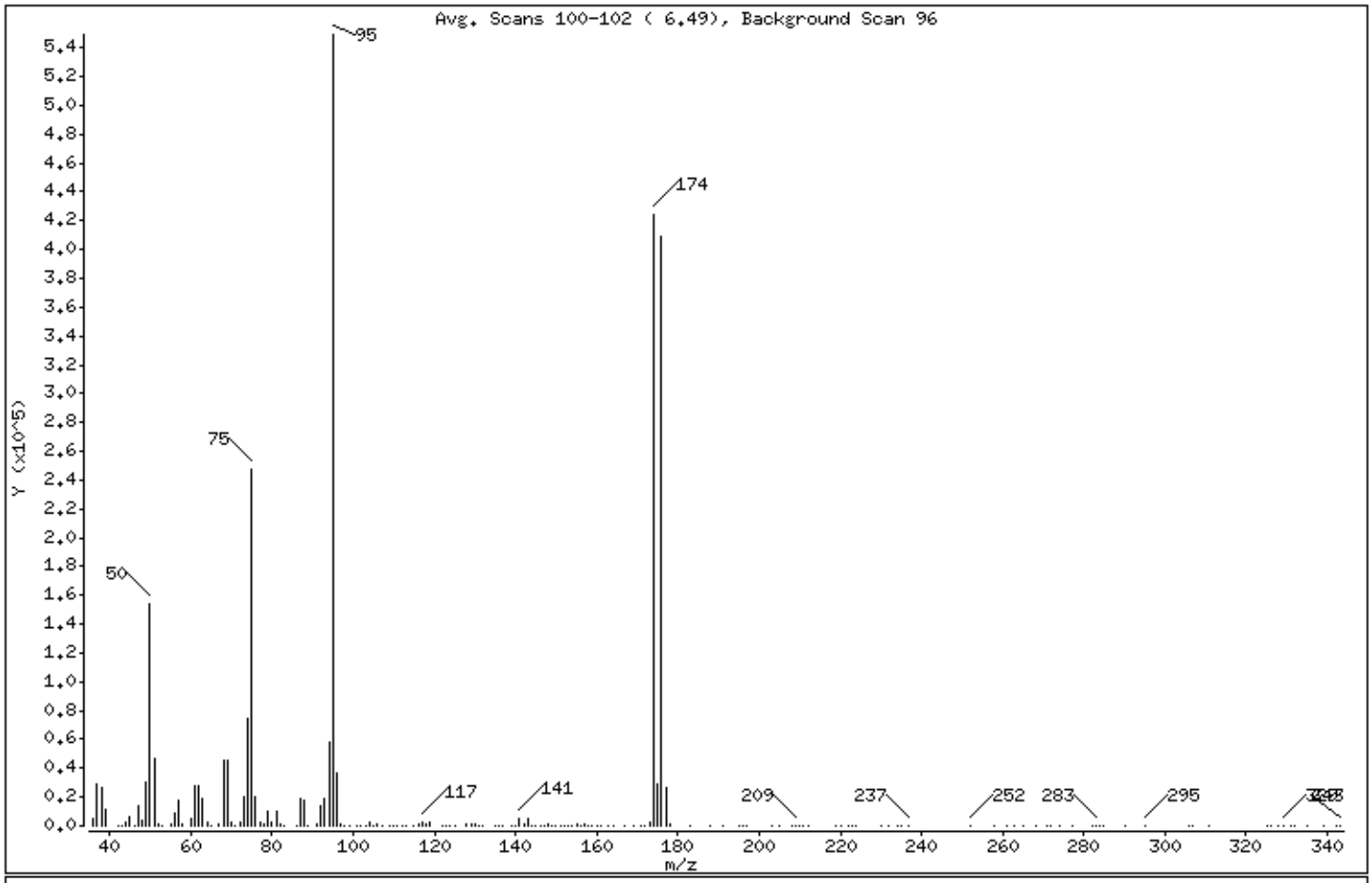
Volume Injected (uL): 1.0

Operator: db

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	28.08
75	30.00 - 66.00% of mass 95	45.08
96	5.00 - 9.00% of mass 95	6.74
173	Less than 1.99% of mass 174	0.39 (0.51)
174	50.00 - 120.00% of mass 95	77.14
175	4.00 - 9.00% of mass 174	5.18 (6.71)
176	93.00 - 101.00% of mass 174	74.51 (96.59)
177	5.00 - 9.00% of mass 176	4.78 (6.41)

Date : 29-SEP-2015 13:21

Client ID: BFB Instrument: msdv.i

Sample Info: 2.0uL# 2299-805; BFB; BFB

Volume Injected (uL): 1.0 Operator: db

Column phase: Column diameter: 2.00

Data File: v092901.d
Spectrum: Avg. Scans 100-102 (6.49), Background Scan 96
Location of Maximum: 95.00
Number of points: 172

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4664	87.00	19112	142.00	705	212.00	50
37.00	28408	88.00	17640	143.00	5232	219.00	14
38.00	25952	89.00	78	144.00	472	220.00	111
39.00	11347	91.00	1200	145.00	293	222.00	55
42.00	32	92.00	13617	146.00	531	223.00	66
43.00	143	93.00	19456	147.00	567	224.00	53
44.00	2386	94.00	57784	148.00	1024	230.00	59
45.00	6727	95.00	549184	149.00	10	232.00	124
46.00	476	96.00	37016	150.00	314	234.00	103
47.00	14056	97.00	1129	151.00	80	235.00	69
48.00	3975	98.00	384	152.00	345	237.00	198
49.00	30704	99.00	70	153.00	458	252.00	201
50.00	154176	101.00	209	154.00	76	258.00	57
51.00	47280	102.00	13	155.00	1344	261.00	81
52.00	1837	103.00	185	156.00	51	263.00	63
53.00	188	104.00	1897	157.00	780	265.00	18
55.00	1259	105.00	556	158.00	158	268.00	5
56.00	9317	106.00	1805	159.00	182	271.00	52
57.00	17488	107.00	141	160.00	182	272.00	19
58.00	842	109.00	69	161.00	414	274.00	65
60.00	5390	110.00	274	163.00	168	277.00	69
61.00	28104	111.00	206	164.00	137	282.00	219
62.00	27784	112.00	257	167.00	322	283.00	235
63.00	19296	113.00	287	169.00	609	284.00	14
64.00	1941	115.00	392	171.00	419	285.00	65
65.00	207	116.00	1816	172.00	527	290.00	56
67.00	1034	117.00	2596	173.00	2151	295.00	120
68.00	45704	118.00	1812	174.00	423616	306.00	57
69.00	45648	119.00	2055	175.00	28424	307.00	62
70.00	2759	122.00	198	176.00	409152	311.00	68
71.00	308	123.00	24	177.00	26232	325.00	33
72.00	1934	124.00	405	178.00	839	326.00	84
73.00	19672	125.00	252	183.00	66	328.00	141
74.00	75000	128.00	1501	188.00	71	329.00	290
75.00	247552	129.00	986	191.00	565	331.00	112

Date : 29-SEP-2015 13:21

Client ID: BFB Instrument: msdv.i

Sample Info: 2.0uL# 2299-805; BFB; BFB

Volume Injected (uL): 1.0 Operator: db

Column phase: Column diameter: 2.00

Data File: v092901.d
Spectrum: Avg. Scans 100-102 (6.49), Background Scan 96
Location of Maximum: 95.00
Number of points: 172

m/z	Y	m/z	Y	m/z	Y	m/z	Y
76.00	20328	130.00	1883	195.00	135	332.00	70
77.00	2323	131.00	626	196.00	55	335.00	156
78.00	1582	132.00	203	197.00	2	339.00	123
79.00	9742	135.00	412	203.00	48	342.00	92
80.00	3016	136.00	139	205.00	19	343.00	89
81.00	9844	137.00	582	208.00	363		
82.00	1771	139.00	16	209.00	629		
83.00	324	140.00	443	210.00	211		
86.00	307	141.00	5259	211.00	55		

Eurofins Air Toxics Inc.

Data file : /var/chem/msdv.i/05Oct2015.b/v100501.d
Lab Smp Id: Client Smp ID: BFB
Inj Date : 05-OCT-2015 09:04
Operator : ef Inst ID: msdv.i
Smp Info : 2.0uL# 2299-805; BFB; BFB
Misc Info : 50ng
Comment :
Method : /var/chem/msdv.i/05Oct2015.b/bfb60.m
Meth Date : 05-Oct-2015 09:21 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
6.500	6.640	-0.140	95	512768			100.00- 100.00	100.00
6.500	6.640	-0.140	50	142068			8.00- 40.00	27.71
6.500	6.640	-0.140	75	227878			30.00- 66.00	44.44
6.500	6.640	-0.140	96	32392			5.00- 9.00	6.32
6.500	6.640	-0.140	173	2617			0.00- 1.99	0.60
6.500	6.640	-0.140	174	439509			50.00- 120.00	85.71
6.500	6.640	-0.140	175	29813			4.00- 9.00	6.78
6.500	6.640	-0.140	176	424490			93.00- 101.00	96.58
6.500	6.640	-0.140	177	27787			5.00- 9.00	6.55

Data File: /var/chem/msdv.i/05Oct2015.b/v100501.d

Date : 05-OCT-2015 09:04

Client ID: BFB

Instrument: msdv.i

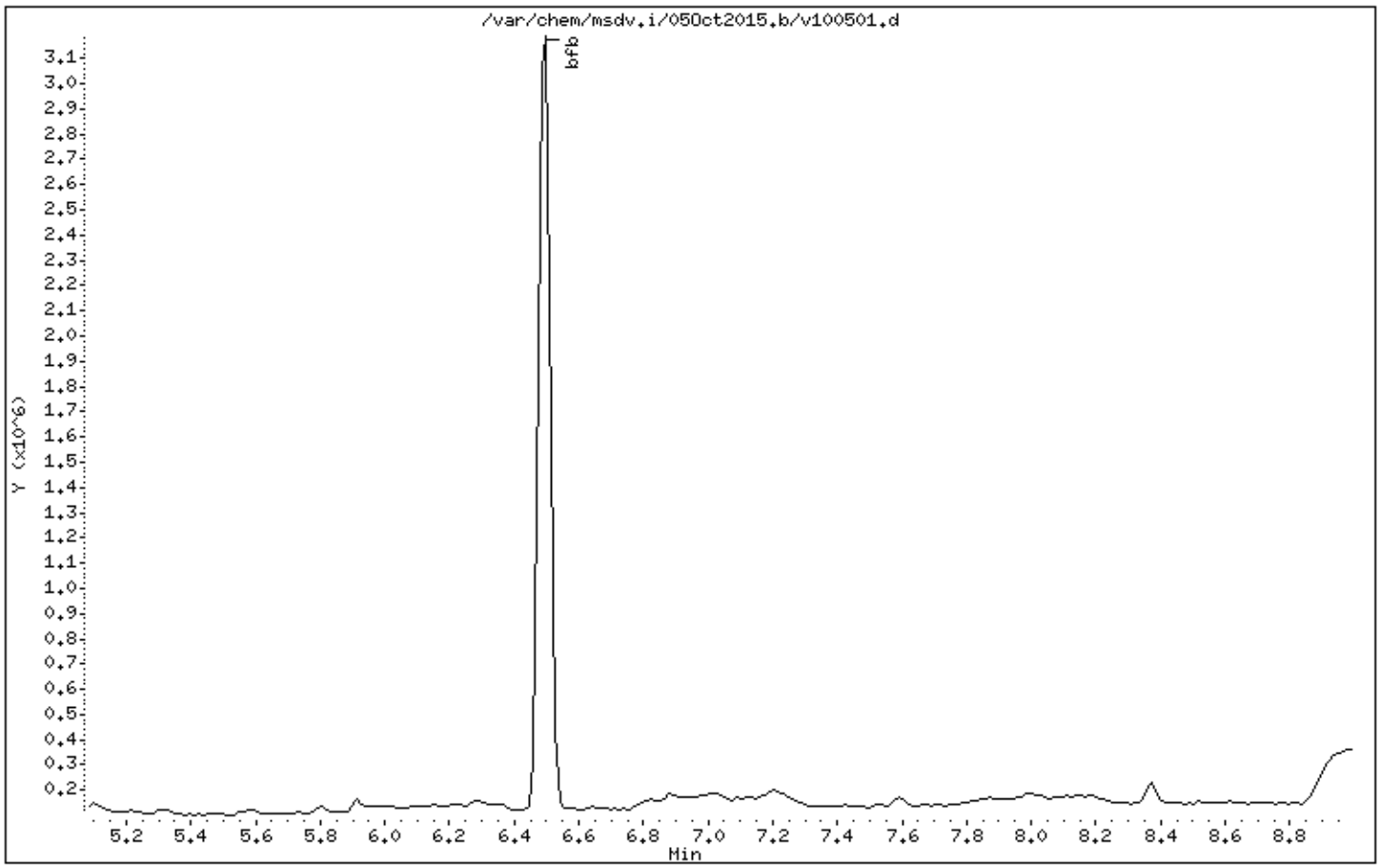
Sample Info: 2.0uL# 2299-805; BFB; BFB

Volume Injected (uL): 1.0

Operator: ef

Column phase:

Column diameter: 2.00



Data File: /var/chem/msdv.i/05Oct2015.b/v100501.d

Date : 05-OCT-2015 09:04

Client ID: BFB

Instrument: msdv.i

Sample Info: 2.0uL# 2299-805; BFB; BFB

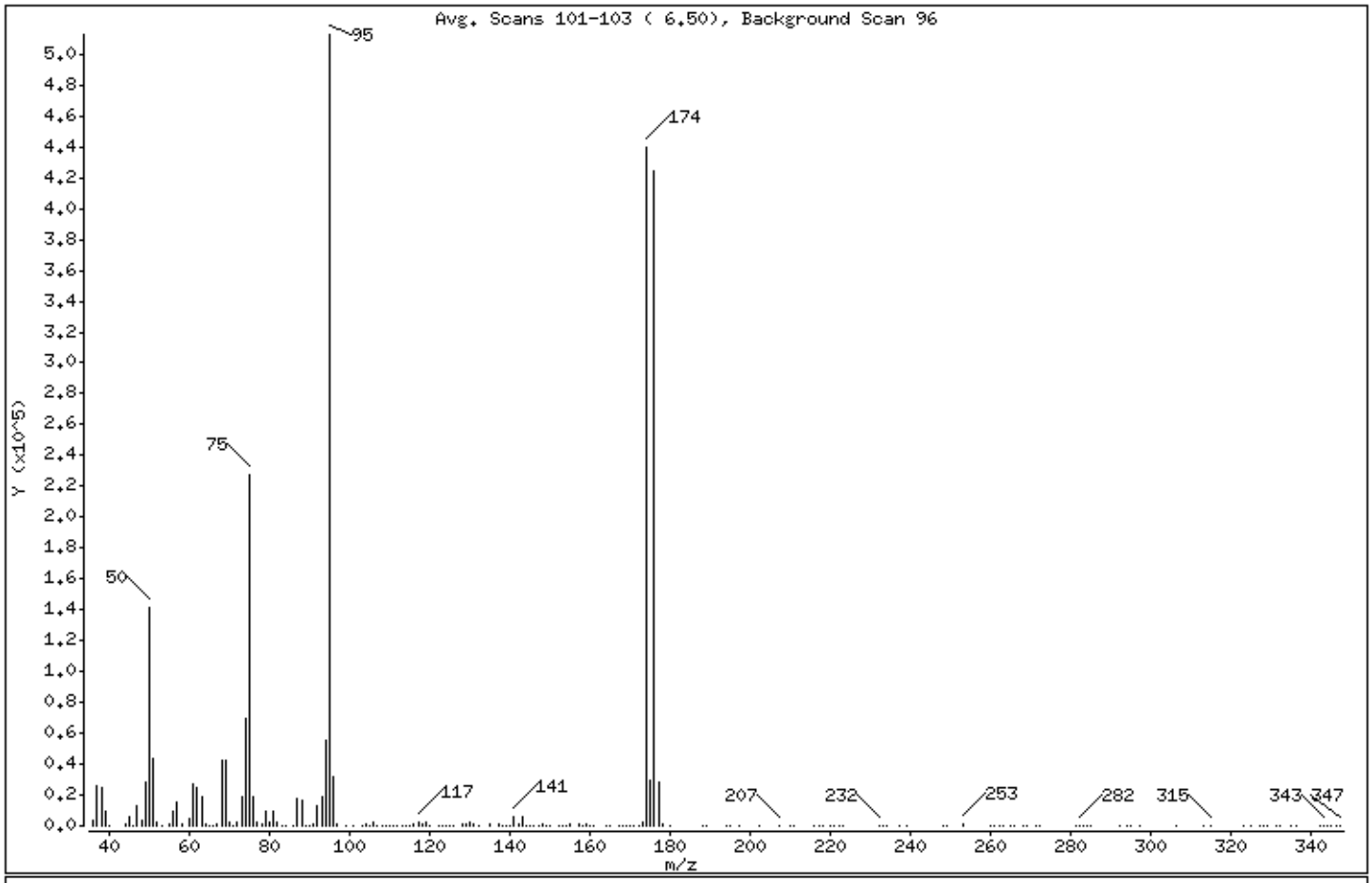
Volume Injected (uL): 1.0

Operator: ef

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	27.71
75	30.00 - 66.00% of mass 95	44.44
96	5.00 - 9.00% of mass 95	6.32
173	Less than 1.99% of mass 174	0.51 (0.60)
174	50.00 - 120.00% of mass 95	85.71
175	4.00 - 9.00% of mass 174	5.81 (6.78)
176	93.00 - 101.00% of mass 174	82.78 (96.58)
177	5.00 - 9.00% of mass 176	5.42 (6.55)

Date : 05-OCT-2015 09:04

Client ID: BFB Instrument: msdv.i

Sample Info: 2.0uL# 2299-805; BFB; BFB

Volume Injected (uL): 1.0 Operator: ef

Column phase: Column diameter: 2.00

Data File: v100501.d
Spectrum: Avg. Scans 101-103 (6.50), Background Scan 96
Location of Maximum: 95.00
Number of points: 186

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	4044	89.00	129	144.00	496	232.00	289
37.00	25720	90.00	105	145.00	281	233.00	152
38.00	24672	91.00	1215	146.00	567	234.00	134
39.00	9480	92.00	12750	147.00	119	237.00	52
40.00	238	93.00	19312	148.00	876	239.00	111
44.00	1405	94.00	55120	149.00	282	248.00	58
45.00	5742	95.00	512768	150.00	578	249.00	87
46.00	423	96.00	32392	152.00	196	253.00	876
47.00	12534	97.00	638	153.00	421	260.00	255
48.00	3742	99.00	119	154.00	454	261.00	57
49.00	27760	101.00	345	155.00	1380	262.00	94
50.00	142016	103.00	344	157.00	970	263.00	64
51.00	44176	104.00	1731	158.00	228	265.00	196
52.00	1957	105.00	468	159.00	628	266.00	164
53.00	123	106.00	1799	160.00	56	268.00	58
55.00	1694	107.00	557	161.00	422	269.00	266
56.00	8883	108.00	98	164.00	91	271.00	73
57.00	15600	109.00	143	165.00	288	272.00	64
58.00	651	110.00	441	167.00	197	281.00	58
60.00	5048	111.00	79	168.00	144	282.00	167
61.00	26896	112.00	212	169.00	141	283.00	123
62.00	24984	113.00	582	170.00	371	284.00	58
63.00	18384	114.00	79	171.00	466	285.00	60
64.00	1658	115.00	390	172.00	341	292.00	79
65.00	97	116.00	1597	173.00	2617	294.00	71
66.00	58	117.00	2712	174.00	439488	295.00	52
67.00	899	118.00	1590	175.00	29808	297.00	74
68.00	42480	119.00	2502	176.00	424448	306.00	102
69.00	42864	120.00	167	177.00	27784	313.00	7
70.00	2853	122.00	78	178.00	1028	315.00	113
71.00	225	123.00	56	180.00	112	323.00	169
72.00	2331	124.00	427	188.00	78	325.00	66
73.00	18288	125.00	361	189.00	123	327.00	233
74.00	69544	126.00	211	194.00	99	328.00	128
75.00	227840	128.00	1357	195.00	258	329.00	9

Date : 05-OCT-2015 09:04

Client ID: BFB Instrument: msdv.i

Sample Info: 2.0uL# 2299-805; BFB; BFB

Volume Injected (uL): 1.0 Operator: ef

Column phase: Column diameter: 2.00

Data File: v100501.d
Spectrum: Avg. Scans 101-103 (6.50), Background Scan 96
Location of Maximum: 95.00
Number of points: 186

m/z	Y	m/z	Y	m/z	Y	m/z	Y
76.00	18440	129.00	768	197.00	86	331.00	61
77.00	2348	130.00	1890	202.00	71	332.00	62
78.00	966	131.00	789	207.00	332	335.00	135
79.00	9671	132.00	213	210.00	124	336.00	86
80.00	2814	135.00	599	211.00	135	342.00	114
81.00	9806	137.00	669	216.00	57	343.00	237
82.00	1912	138.00	59	217.00	122	344.00	127
83.00	269	139.00	150	218.00	180	345.00	211
84.00	71	140.00	451	220.00	95	346.00	88
86.00	211	141.00	5571	221.00	2	347.00	59
87.00	17200	142.00	760	222.00	69		
88.00	16512	143.00	5453	223.00	18		

Shipping/ Receiving Documents

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Eurofins Air Toxics, Inc. Sample Receipt Confirmation Cover Page

Thank you for choosing Eurofins Air Toxics, Inc. (EATL). We have received your samples and have listed any Sample Receipt Descrepancies below.

In order to expedite analysis and reporting, please review the attached information for accuracy.

For corrections call: **Ausha Scott at 916-985-1000**

EATL will proceed with the analysis as specified on the Chain of Custody (COC) and Sample Receipt Summary page.

Please note : The Sample Receipt Confirmation, including the total workorder charge, is subject to change upon secondary review. Our aim is to provide a confirmation to you in a timely manner. Sample Receipt Discrepancies, if any, may not include discrepancies regarding sample receipt pressure(s). Additionally, the COC will be provided with the final report.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 6:30 A.M to 5:30 P.M. PST

eurofins | Air Toxics

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Page 1 of 1

Project Manager Bob Lippencott

Collected by: (Print and Sign) R Wamsley/M Hall

Company AECOM Email bob.lippencott@aecom.com

Address 1220 Washington St City Bakersfield State Cal Zip 93301

Phone 317-231-6500 Fax 317-231-6594

Project Info:
P.O. # TAL 000594203
Project # TAL 000594203
Project Name Colonial Materials

Turn Around Time:
☒ Normal
☐ Rush
_____ specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psig)
01A	1-AA (092215)	6L1237	9-22-15	1044-1243	TO-15, Project List	30	9		
02A	2-AA (092215)	5L14335	9-22-15	1612-1617	TO-15, Project List	30	7.5		
03A	6-IA (092215)	3084480	9-22-15	1105-1058	TO-15, Project List	30	7.5		
04A	1-IA (092215)	34481 / 12077	9-22-15	1206-1202	TO-15, Project List	30	8.5		
05A	4-IA (092215)	3511 / 12077	9-22-15	1224-1209	TO-15, Project List	30	8.0		
06A	5-IA (092215)	3511b	9-22-15	1403-1305	TO-15, Project List	30	9.5		
07A	2-IA (092215)	34356	9-22-15	1413-1408	TO-15, Project List	30	7.5		
08A	3-IA (092215)	33480	9-22-15	1534-1533	TO-15 Project List	30	7		
09A	4-IA (092215)	33877	9-22-15	1644-1647	TO-15 Project List	30	7		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
C Mardis	9-24-15 1500	Candice Martinez	9/25/15 1235
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:

Lab Use Only

Shipper Name	Air Bill #	Temp °C	Condition	Custody Seals Intact?	Work Order #
FedEx		N/A	Good	Yes No None	1509512

Form 1256 rev.1

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SAMPLE RECEIPT SUMMARY

WORKORDER 1509512

Client

Ms. Marie Heap
Arcadis U.S., Inc.
132 East Washington St., Suite 600
Indianapolis, IN 46204

Phone

317-231-6500

Fax

317-231-6514

Date Promised: 10/13/15
Date Completed: 10/12/15
Date Received: 9/30/15
PO#: IN000899.2013
Project#: IN000899.2013 Grenada Manufacturing

Sales Rep: N/A

Total $: $ 1,990.00
Logged By: JCW

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	1-AA(092215)	Modified TO-15	9/23/2015	9.0 "Hg	$150.00
01B	1-AA(092215)	Modified TO-15	9/23/2015	9.0 "Hg	$0.00
02A	2-AA(092215)	Modified TO-15	9/23/2015	8.0 "Hg	$150.00
02B	2-AA(092215)	Modified TO-15	9/23/2015	8.0 "Hg	$0.00
03A	6-IA(092215)	Modified TO-15	9/23/2015	7.0 "Hg	$150.00
03B	6-IA(092215)	Modified TO-15	9/23/2015	7.0 "Hg	$0.00
04A	1-IA(092215)	Modified TO-15	9/23/2015	8.0 "Hg	$150.00
04B	1-IA(092215)	Modified TO-15	9/23/2015	8.0 "Hg	$0.00
05A	5-IA(092215)	Modified TO-15	9/23/2015	9.0 "Hg	$150.00
05B	5-IA(092215)	Modified TO-15	9/23/2015	9.0 "Hg	$0.00
06A	2-IA(092215)	Modified TO-15	9/23/2015	7.0 "Hg	$150.00
06B	2-IA(092215)	Modified TO-15	9/23/2015	7.0 "Hg	$0.00
07A	3-IA(092215)	Modified TO-15	9/23/2015	7.0 "Hg	$150.00
07B	3-IA(092215)	Modified TO-15	9/23/2015	7.0 "Hg	$0.00
08A	4-IA(092215)	Modified TO-15	9/23/2015	7.5 "Hg	$150.00
08B	4-IA(092215)	Modified TO-15	9/23/2015	7.5 "Hg	$0.00
09A	Lab Blank	Modified TO-15	NA	NA	$0.00
09B	Lab Blank	Modified TO-15	NA	NA	$0.00
10A	CCV	Modified TO-15	NA	NA	$0.00
10B	CCV	Modified TO-15	NA	NA	$0.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: Grenada/20635

BILL TO: Accounts Payable
Arcadis U.S., Inc.
630 Plaza Drive
Suite 600
Highlands Ranch, CO 80129

Analysis Code: pptv

TERMS:

Reporting Method: Modified TO-15 Hi/Lo (Sh)-Arcadis (Grenada)

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SAMPLE RECEIPT SUMMARY Continued

Client

Ms. Marie Heap
Arcadis U.S., Inc.
132 East Washington St., Suite 600
Indianapolis, IN 46204

Phone

317-231-6500

Fax

317-231-6514

Date Promised: 10/13/15
Date Completed: 10/12/15
Date Received: 9/30/15
PO#: IN000899.2013
Project#: IN000899.2013 Grenada Manufacturing

Sales Rep: N/A

Total $: $ 1,990.00
Logged By: JCW

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
11A	LCS	Modified TO-15	NA	NA	$0.00
11AA	LCSD	Modified TO-15	NA	NA	$0.00
11B	LCS	Modified TO-15	NA	NA	$0.00
11BB	LCSD	Modified TO-15	NA	NA	$0.00

Misc. Charges	6 Liter Summa Canister (SIM Certified) (10) @ $60.00 each., Shipment 10	$600.00
	Flow Controller-24 hr (SIM Certified) (10) @ $15.00 each., Shipment 103	$150.00
	eCVP (8) @ $5.00 each.	$40.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: Grenada/20635

BILL TO: Accounts Payable
Arcadis U.S., Inc.
630 Plaza Drive
Suite 600
Highlands Ranch, CO 80129

Analysis Code: pptv

TERMS:

Reporting Method: Modified TO-15 Hi/Lo (Sh)-Arcadis (Grenada)

Sample Discrepancy Report

Identification

Initiated By: HDB **Project ID:**20635 **PM**: AS **Date:** 10/12/2015 **Discrepancy Type:** ☒ **1.** ☐ **2.** ☐ **3.**

Workorder(s) affected:1509512 **Sample(s) affected:** -02A/B

1. Sample Receipt Discrepancies

Narration Not Required:

1.1. ☐ Sample container (cartridge/tube/VOA vial) was received broken, however sample was intact.

1.2. ☐ No brass cap on canister.

1.3. ☐ Date of Collection noted on first sample, but no arrow down to indicate all samples.

Notify Lab for further determination:

1.4. ☐ Tedlar bag received with minimal volume.

Initials: _____ Date: _____

Narration Required in Lab Narrative and Sample Confirmation:

1.5. ☐ COC was not filled out in ink.

1.6. ☐ COC improperly relinquished / received.

1.7. ☒ Sample tags / can numbers do not match the COC.

1.8. ☐ Sample date ☐ error / ☐ missing on COC but noted on sample tag (check one).

1.9. ☐ Custody Seal on the outside of the container was ☐ broken / ☐ improperly placed (check one).

1.10. ☐ ID-none on the sample Tag/Blank

1.11. ☐ Other (describe below).

Describe the Discrepancy: -02A/B: COC has 5L34325, can has sh34235

2. Sample Receipt/Screening Discrepancies requiring PM notification

Document on Cover Page of Sample Receipt Confirmation and in Receiving Notes of Lab Narrative

If Section II. is filled out PM must be notified within 24 hrs of initiation

2.1. ☐ COC was not received with samples.

2.2. ☐ Analysis method(s) is ☐ not specified / ☐ incorrectly specified (check one) on the COC.

2.3. ☐ Incorrect sampling media / container for analysis requested.

2.4. ☐ Number of samples on the COC does not match the number of samples that were received.

2.5. ☐ Samples were received expired.

2.6. ☐ Sampling date (time for sulfur) is not documented for ☐ *some* / ☐ *any* samples (check one).

2.7. ☐ Sample received with amount of H_2O in the Tedlar Bag.

2.8. ☐ Sample cannot be analyzed. Container was ☐ received broken / ☐ leaking / ☐ flat / ☐ defective.

2.9. ☐ Tedlar bag / canister received emitting a strong odor; Sample ☐ can / ☐ cannot (check one) be analyzed.

2.10. ☐ Tedlar Bag for Sulfur analysis has metal fitting.

2.11. ☐ Environmental Supply Company valves

2.12. ☐ Sorbent samples-sampling volume was not provided

2.13. ☐ Flow controller used – canister samples received at ambient or under pressure.

2.14. ☐ Canister was at ambient pressure at time of pressurization and (check all that apply):
- ☐ Canister failed leak check on two manifolds,
- ☐ Canister valve was open,
- ☐ Brass nut was loose/not present.
- ☐ Sample can be analyzed
- ☐ Cannot be analyzed

2.15. ☐ Canister sample received with a vacuum difference >5.0"Hg between the receipt vac. And the final vac. reported on the COC, indicating loss of vacuum.

2.16. ☐ Canister sample received at >15"Hg (*not* identified as a Trip/Field Blank).

2.17. ☐ Canister Trip Blank received at low vacuum (<25"Hg).

2.18. ☐ Sorbent Sample received outside method required temperature of 2°C to 6°C; ☐ ice / ☐ blue ice (check one) was present. A temp. Blank ☐ was / ☐ was not present (check one).

2.19. ☐ Flow Controller RPD of = 20% was not met.

2.20. ☐ Other (describe below)

Initials: _____ **Date:** _____ **Notify Receiving:** ☐ **Notify PM:** ☐

Describe the Discrepancy:

3. Lab Discrepancies requiring Team Leader/PM notification

Document in Analytical Notes of Lab Narrative

If Section III. is filled out PM must be notified within 24 hrs of initiation

3.1. ☐ Tedlar Bag found to be leaking at the time of analysis; sample ☐ can / ☐ cannot (check one) be analyzed.

3.2. ☐ Tedlar Bag found to be flat/low volume; sample cannot be analyzed.

3.3. ☐ Sulfur samples received with insufficient time to analyze prior to expiration.

3.4. ☐ Canister found to be leaking at the time of analysis.

3.5. ☐ VOST tube saturated; bag dilution necessary.

3.6. ☐ Sample loss due to instrument malfunction / broken glassware.

3.7. ☐ Low/high surrogate recoveries noted in QC/sample(s) for extractable samples.

3.8. ☐ Reporting Limit was raised.

3.9. ☐ Post weight > Pre weight in field/lab Blank for PM10/TSP samples.

3.10. ☐ Other (describe below).

Initials: _____ **Date:** _____ **Notify Receiving:** ☐ **Notify PM:** ☐ _____

Team Lead Initials: _____ **Date:** _____

Describe the Discrepancy: _____

_____

_____

How Does this Affect Client: _____

_____

_____

Project Manager Use Only

Project Manager Notification ☐ **Section 2 Complete** ☐ **Section 3 Complete**

Action:

☐ It is not necessary to notify the client. Narrate the discrepancy in Receiving Notes/Analytical Notes of Lab Narrative.

PM Initials:_____ Date: _____

☐ Client notification required. See attached client contact / email, or comments below:

Client Notification:

PM Initials:_____ Person notified: _____ Date: _____

☐ Waiting for Client Reply

Comments: _____

_____

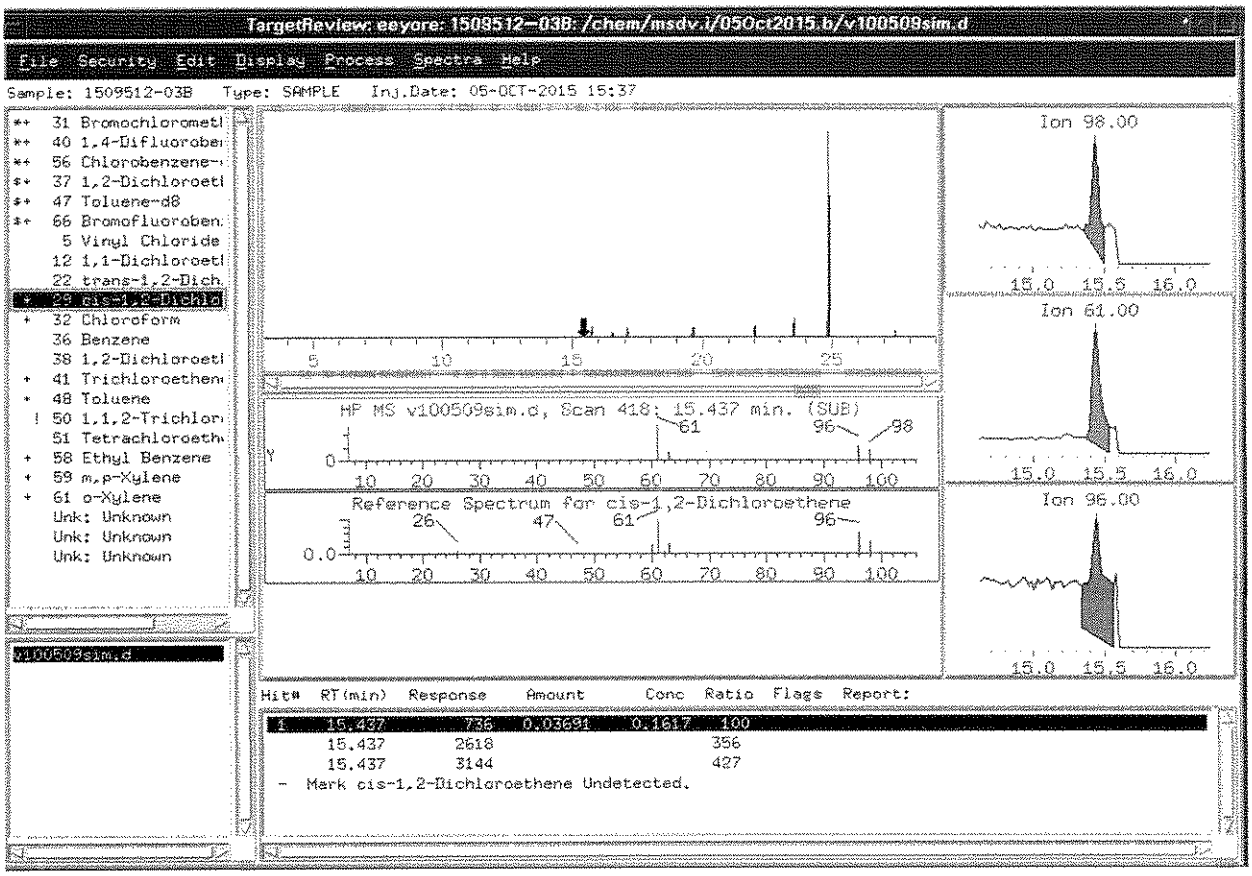
☐ Notify Lab Name: _____ Date: _____ **Notify Receiving:** ☐

☐ **Additional notifications attached.**

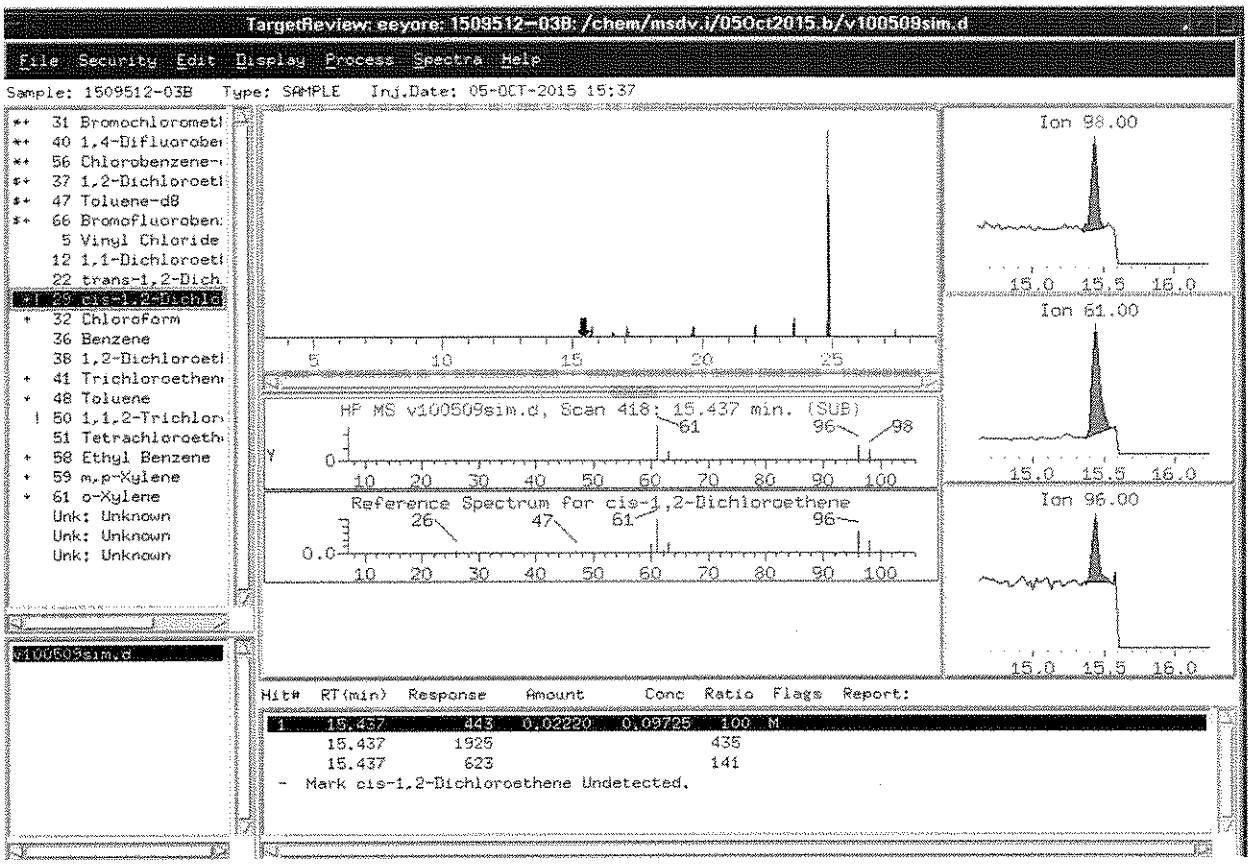
Additional Comments:

_____

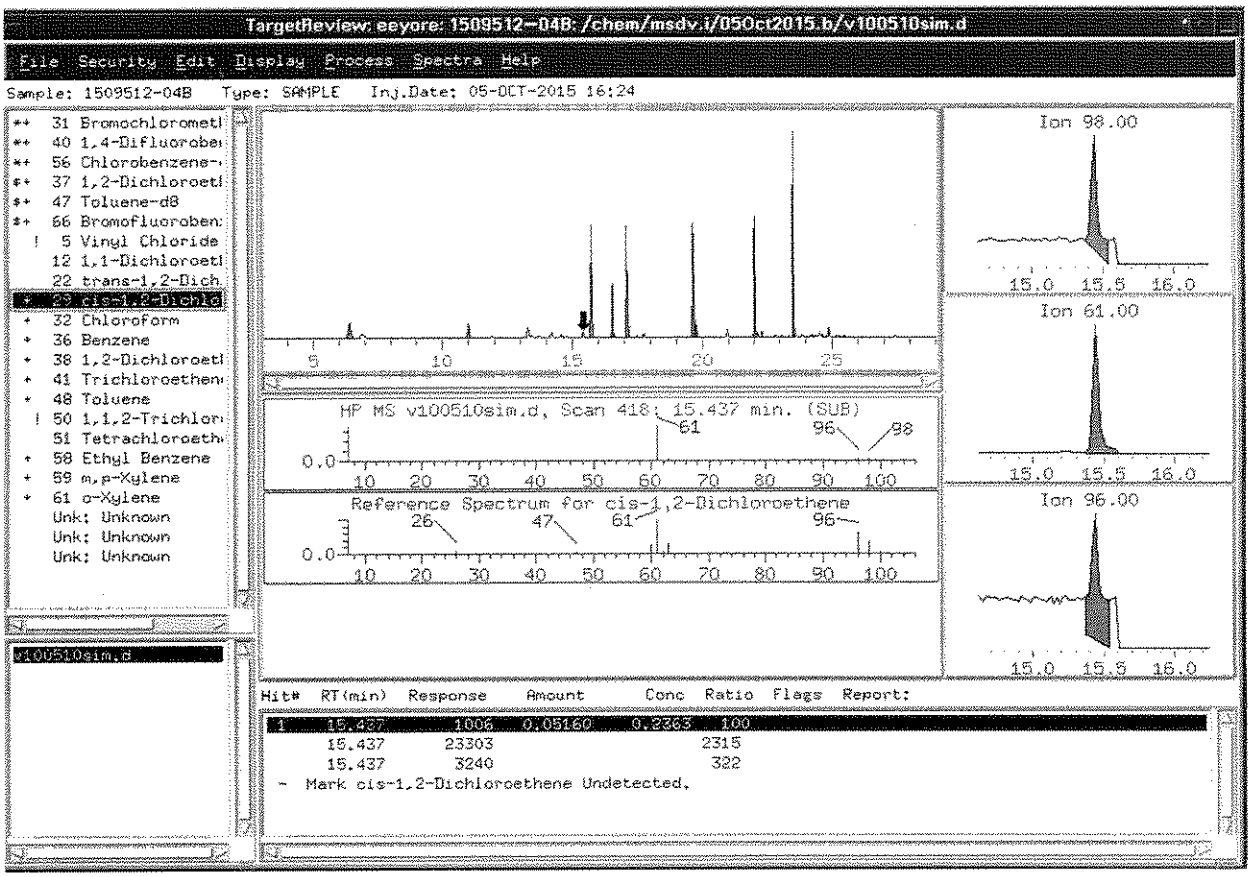
Other Records



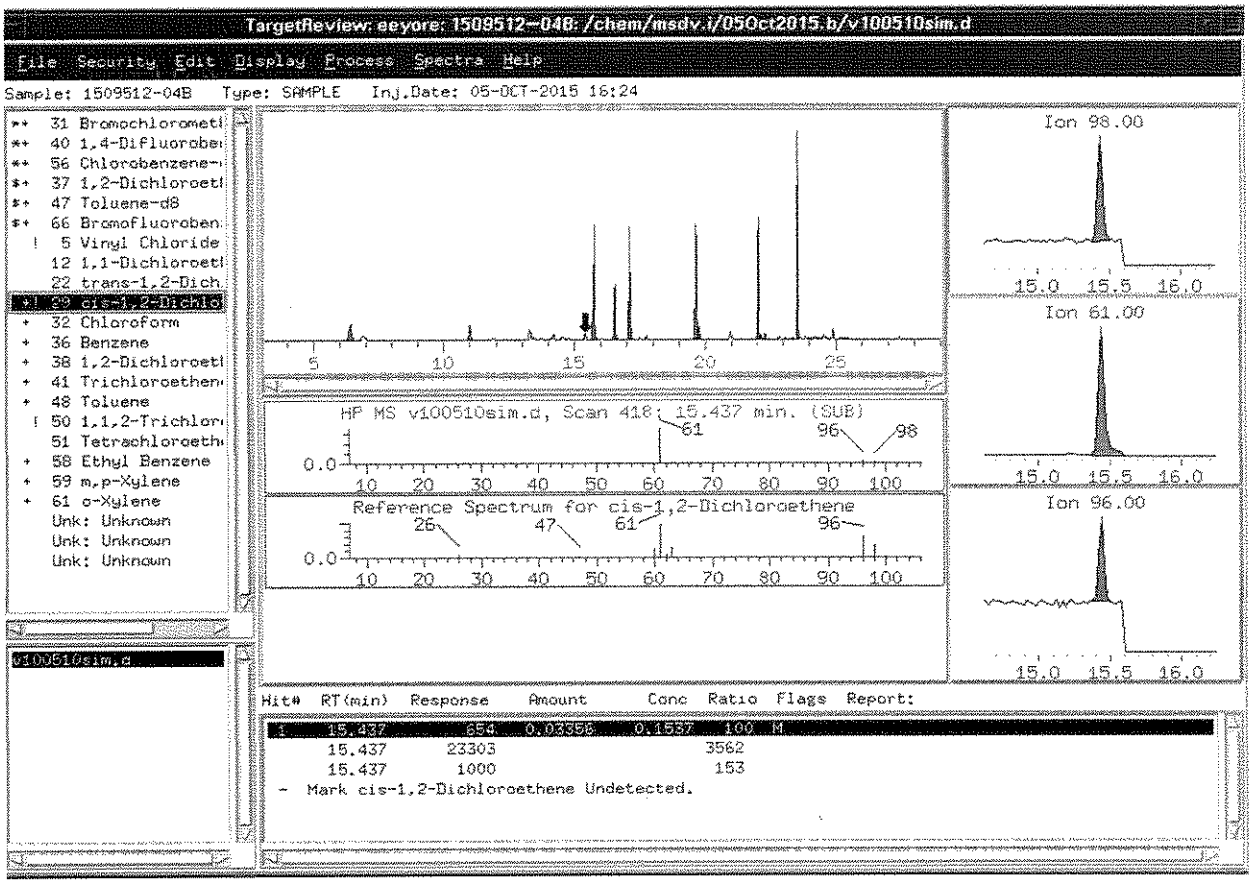
before HRB 10/12/15



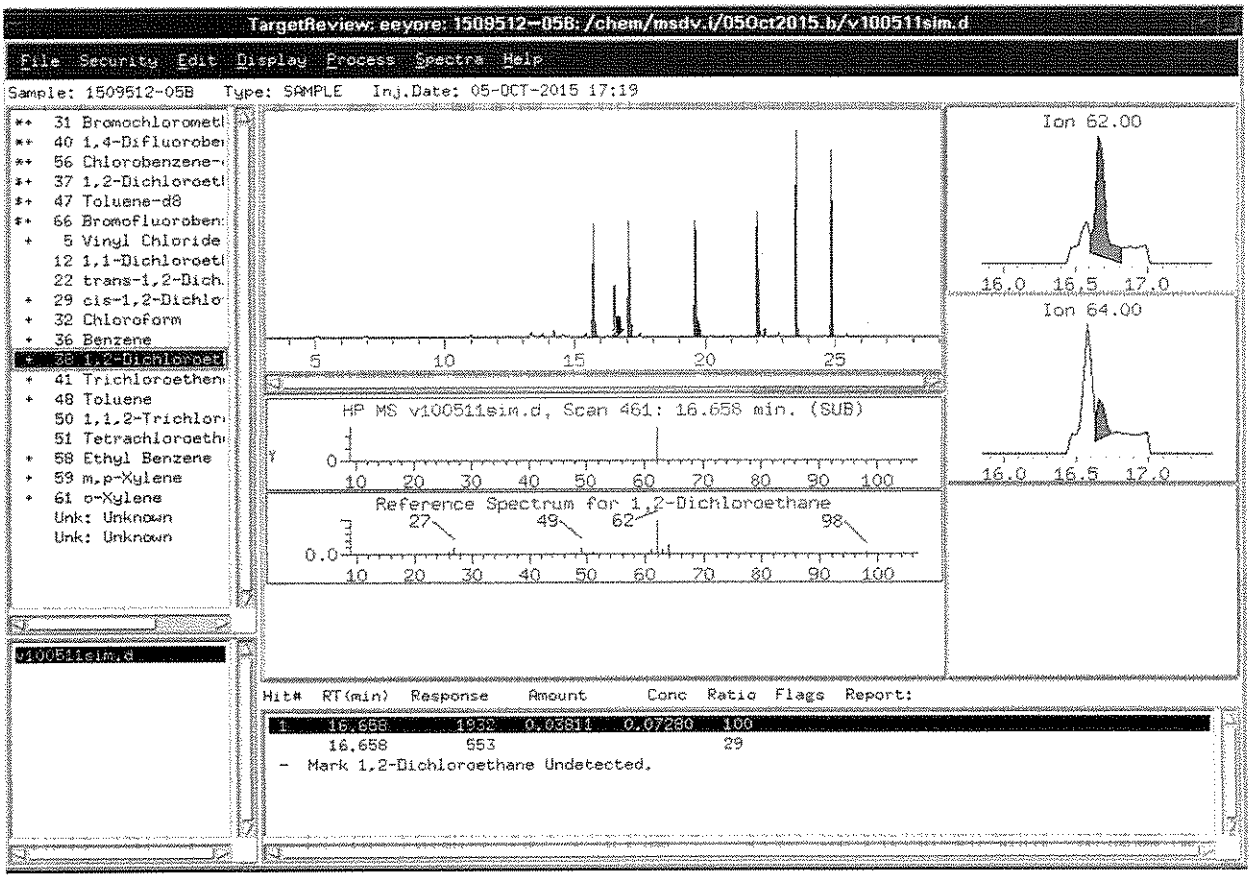
after HGB 10/12/15
baseline correction



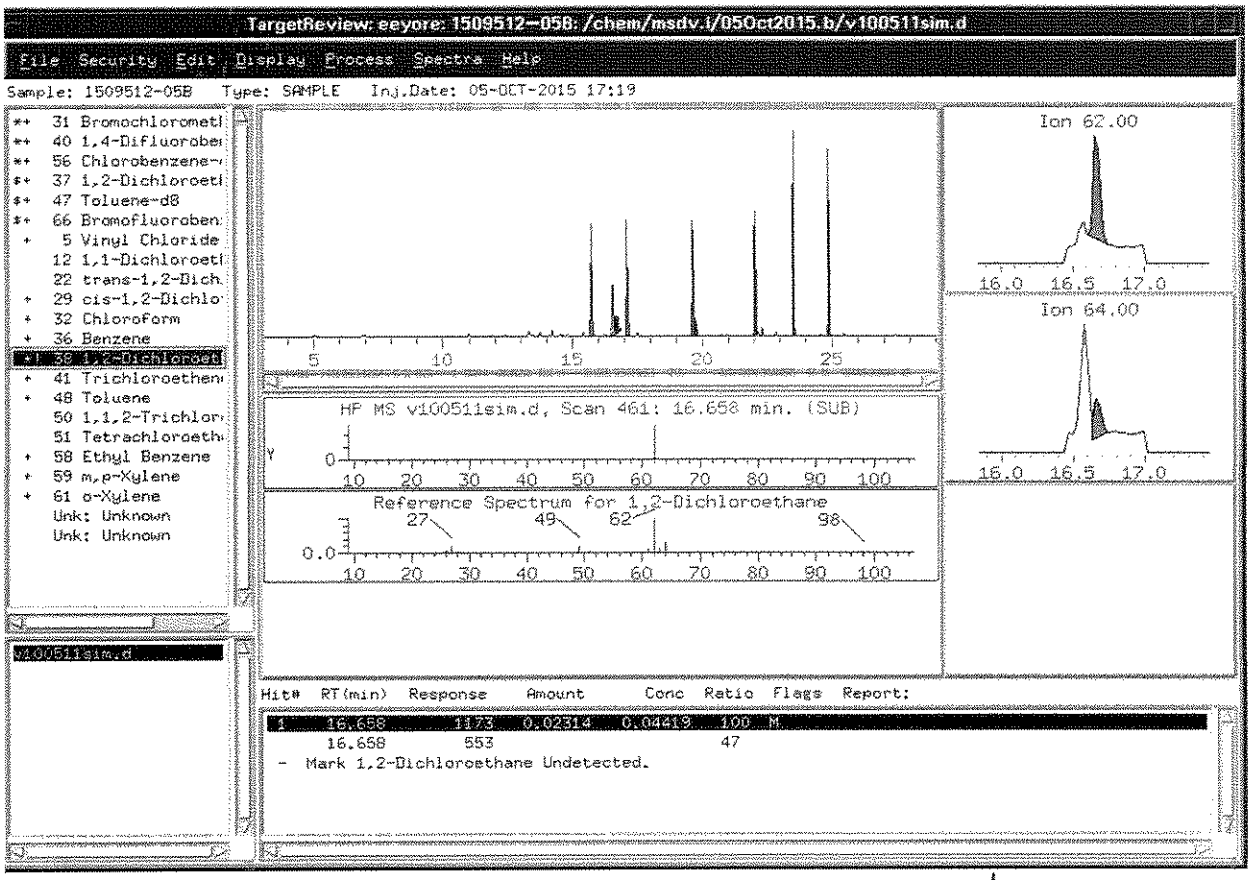
before HAB 10/12/15



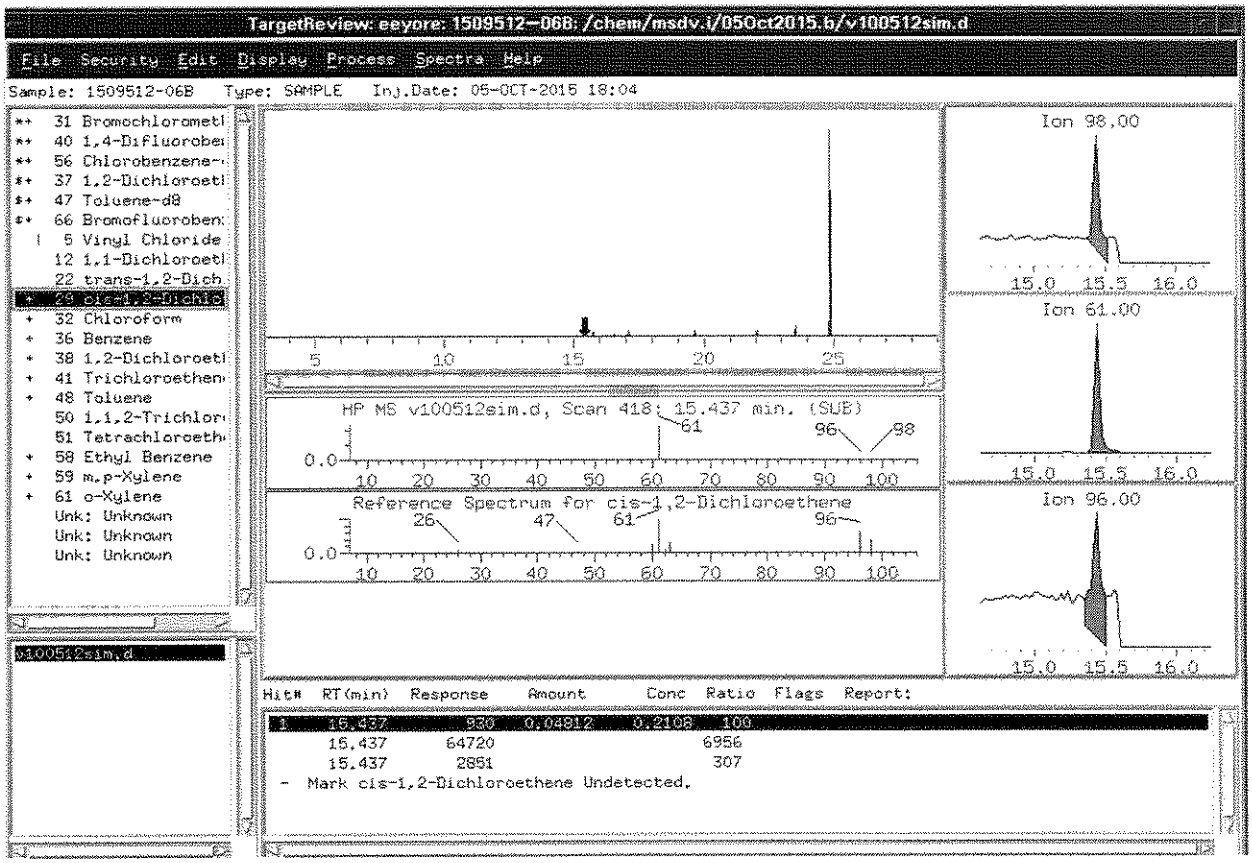
after #28 10/12/15
baseline correction



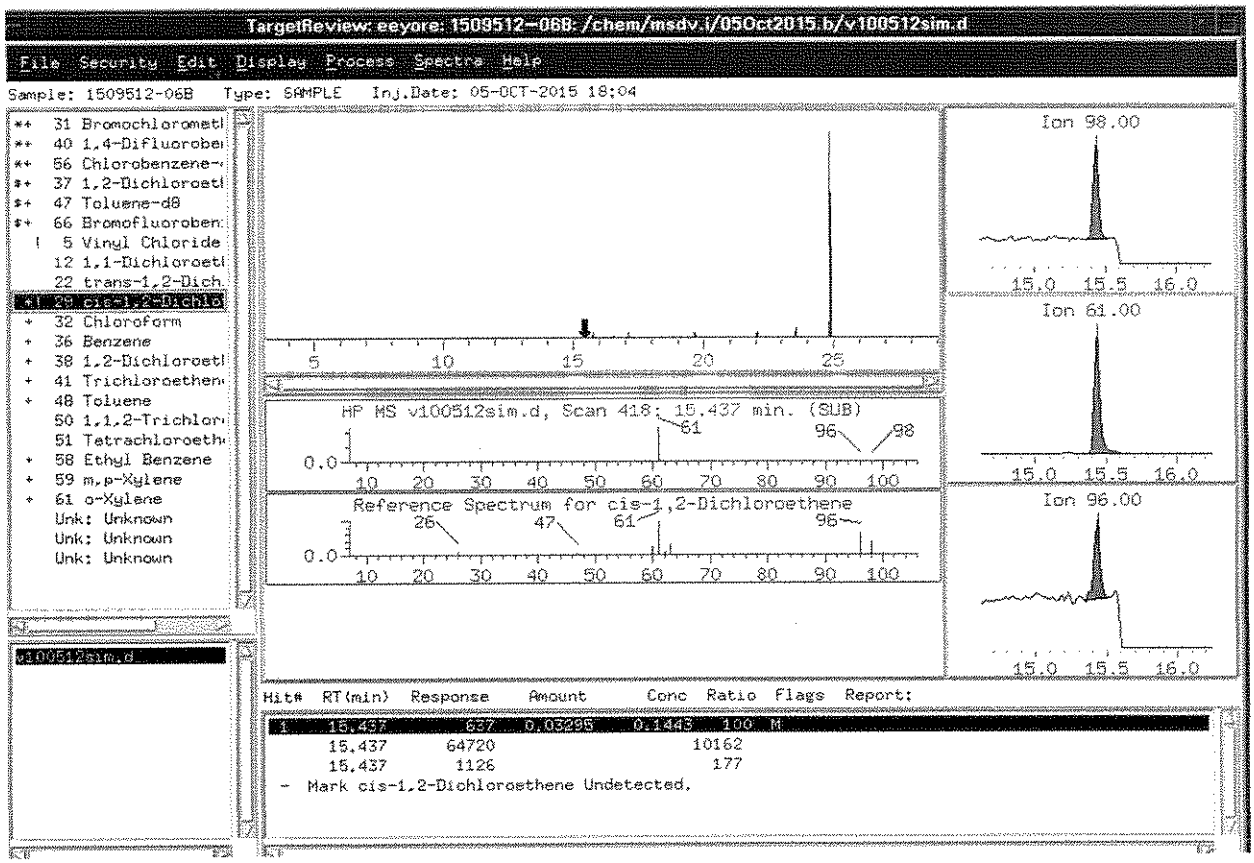
before HSB 10/12/15



after HSB 10/12/15
manual integration



before AEB 10/12/15



after HOB 10/12/15

baseline correction

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7\text{psi} + \text{Final Pressure (psi)}}{14.7\text{psi} - [\text{Init. Pressure (“Hg)}) * (14.7\text{psi}/30\text{”Hg})]}$$

$$\text{Dilution Factor} = \frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7\text{psi} + \text{Final Pressure (psi)}}{14.7\text{psi} + \text{Initial Pressure (psi)}}$$

Initial Vacuum (" of Hg)	5 psi Final Pressure Dilution Factor	15 psi Final Pressure Dilution Factor
0.0	1.34	2.02
0.2	1.35	2.03
0.4	1.36	2.05
0.5	1.36	2.05
0.6	1.37	2.06
0.8	1.38	2.08
1.0	1.39	2.09
1.2	1.40	2.10
1.4	1.40	2.12
1.5	1.41	2.13
1.6	1.42	2.13
1.8	1.42	2.15
2.0	1.44	2.16
2.2	1.45	2.18
2.4	1.46	2.20
2.5	1.46	2.20
2.6	1.47	2.21
2.8	1.48	2.23
3.0	1.49	2.24
3.2	1.50	2.26
3.4	1.51	2.28
3.5	1.52	2.29
3.6	1.52	2.30
3.8	1.53	2.31
4.0	1.55	2.33
4.2	1.56	2.35
4.4	1.57	2.37
4.5	1.58	2.38
4.6	1.58	2.39
4.8	1.60	2.40
5.0	1.61	2.42
5.2	1.62	2.44
5.4	1.63	2.46
5.5	1.64	2.47
5.6	1.65	2.48
5.8	1.66	2.50
6.0	1.68	2.52
6.2	1.69	2.55
6.4	1.70	2.57
6.5	1.71	2.58
6.6	1.72	2.59
6.8	1.73	2.61
7.0	1.75	2.64
7.2	1.76	2.66
7.4	1.78	2.68
7.5	1.79	2.69
7.6	1.79	2.70

Initial Vacuum (" of Hg)	5 psi Final Pressure Dilution Factor	15 psi Final Pressure Dilution Factor
7.7	1.80	2.72
7.8	1.81	2.73
8.0	1.83	2.76
8.2	1.84	2.78
8.4	1.86	2.81
8.5	1.87	2.82
8.6	1.88	2.83
8.8	1.90	2.86
9.0	1.91	2.89
9.2	1.93	2.91
9.4	1.95	2.94
9.5	1.96	2.96
9.6	1.97	2.97
9.8	1.99	3.00
10.0	2.01	3.03
10.2	2.03	3.06
10.4	2.05	3.09
10.5	2.06	3.11
10.6	2.07	3.12
10.8	2.09	3.16
11.0	2.12	3.19
11.2	2.14	3.22
11.4	2.16	3.26
11.5	2.17	3.28
11.6	2.18	3.29
11.8	2.21	3.33
12.0	2.23	3.37
12.2	2.26	3.40
12.4	2.28	3.44
12.5	2.30	3.46
12.6	2.31	3.48
12.8	2.34	3.52
13.0	2.36	3.56
13.2	2.39	3.61
13.4	2.42	3.65
13.5	2.44	3.67
13.6	2.45	3.70
13.8	2.48	3.74
14.0	2.51	3.79
14.2	2.54	3.84
14.4	2.58	3.88
14.5	2.59	3.91
14.6	2.61	3.94
14.8	2.64	3.99
15.0	2.68	4.04
15.2	2.72	4.10
15.4	2.75	4.15

Initial Vacuum (" of Hg)	5 psi Final Pressure Dilution Factor	15 psi Final Pressure Dilution Factor
15.5	2.77	4.18
15.6	2.79	4.21
15.8	2.83	4.27
16.0	2.87	4.33
16.2	2.91	4.39
16.4	2.96	4.46
16.5	2.98	4.49
16.6	3.00	4.52
16.8	3.05	4.59
17.0	3.09	4.66
17.2	3.14	4.74
17.4	3.19	4.81
17.5	3.22	4.85
17.6	3.24	4.89
17.8	3.30	4.97
18.0	3.35	5.05
18.2	3.41	5.14
18.4	3.47	5.22
18.5	3.50	5.27
18.6	3.53	5.32
18.8	3.59	5.41
19.0	3.65	5.51
19.2	3.72	5.61
19.4	3.79	5.72
19.5	3.83	5.77
19.6	3.87	5.83
19.8	3.94	5.94
20.0	4.02	6.06
20.2	4.10	6.18
20.4	4.19	6.31
20.5	4.23	6.38
20.6	4.28	6.45
20.8	4.37	6.59
21.0	4.47	6.73
21.2	4.57	6.89
21.4	4.67	7.05
21.5	4.73	7.13
21.6	4.79	7.22
21.8	4.90	7.39
22.0	5.03	7.58
22.4	5.29	7.98

Initial Vacuum (" of Hg)	5 psi Final Pressure Dilution Factor	15 psi Final Pressure Dilution Factor
22.5	5.36	8.08
22.6	5.43	8.19
22.8	5.58	8.42
23.0	5.74	8.66
23.2	5.91	8.91
23.4	6.09	9.18
23.5	6.19	9.32
23.6	6.28	9.47
23.8	6.48	9.78
24.0	6.70	10.10
24.2	6.93	10.45
24.4	7.18	10.82
24.5	7.31	11.02
24.6	7.45	11.22
24.8	7.73	11.66
25.0	8.04	12.12
25.2	8.38	12.63
25.4	8.74	13.18
25.5	8.93	13.47
25.6	9.14	13.78
25.8	9.57	14.43
26.0	10.05	15.15
26.2	10.58	15.95
26.4	11.17	16.84
26.5	11.49	17.32
26.6	11.82	17.83
26.8	12.56	18.94
27.0	13.40	20.20
27.2	14.36	21.65
27.4	15.46	23.31
27.5	16.08	24.24
27.6	16.75	25.26
27.8	18.27	27.55
28.0	20.10	30.31
28.2	22.34	33.67
28.4	25.13	37.88
28.5	26.80	40.41
28.6	28.72	43.29
28.8	33.50	50.51
29.0	40.20	60.61

Compound Listing

Modified TO-15 Hi/Lo (Sh)-Arcadis (Grenada)

CAS Number	Compound	Detection Limit ppbv	Type
75-01-4	Vinyl Chloride	0.010	
75-35-4	1,1-Dichloroethene	0.010	
156-60-5	trans-1,2-Dichloroethene	0.10	
156-59-2	cis-1,2-Dichloroethene	0.020	
67-66-3	Chloroform	0.020	
107-06-2	1,2-Dichloroethane	0.020	
79-01-6	Trichloroethene	0.020	
108-88-3	Toluene	0.020	
79-00-5	1,1,2-Trichloroethane	0.020	
127-18-4	Tetrachloroethene	0.020	
100-41-4	Ethyl Benzene	0.020	
75-09-2	Methylene Chloride	0.20	
95-63-6	1,2,4-Trimethylbenzene	0.10	
17060-07-0	1,2-Dichloroethane-d4		
2037-26-5	Toluene-d8		
460-00-4	4-Bromofluorobenzene		
108-38-3	m,p-Xylene	0.040	
95-47-6	o-Xylene	0.020	
71-43-2	Benzene	0.050	

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Media Certification Report

Canister Number: 6L# 6L1237 w/FP chain
Can#: 103570-6L1237
Date : 09/16/15 4:48
Data File: o091535.d

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.01	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.01	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.05	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.01	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.01	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.01	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.01	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.02	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	0.10	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.01	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.01	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.01	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.05	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.01	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.01	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
4-Bromofluorobenzene	460-00-4		99.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	99.00	% Recovery

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Media Certification Report

Canister Number: 6L#34235 w/200ml#
Can#: 103570-34235
Date : 09/16/15 5:15
Data File: o091536.d

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.01	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.01	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.05	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.01	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.01	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.01	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.01	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.02	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	0.10	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.01	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.01	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.01	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.05	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.01	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.01	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
4-Bromofluorobenzene	460-00-4		100.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	100.00	% Recovery

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Media Certification Report

Canister Number: 6L# 30840
Can#: 103570-30840
Date : 09/15/15 19:19
Data File: o091515.d

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.01	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.01	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.05	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.01	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Benzene	71-43-2	0.03	ND	ppbv
Benzene	71-43-2	0.25	ND	ppbv
Chloroform	67-66-3	0.01	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.01	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.01	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.02	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	0.10	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.01	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.01	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.01	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.05	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.01	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.01	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
4-Bromofluorobenzene	460-00-4		99.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	99.00	% Recovery

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Media Certification Report

Canister Number: 6L#34481 w/24hrs chain #3
Can#: 103570-34481
Date : 09/15/15 16:00
Data File: o091508.d

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.01	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.01	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.05	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.01	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.01	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.01	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.01	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.02	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	0.10	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.01	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.01	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.01	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.05	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.01	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.01	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
4-Bromofluorobenzene	460-00-4		100.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	100.00	% Recovery

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www.airtoxics.com
1-800-985-5955

Media Certification Report

Canister Number: 6L#35166 w/200ml#
Can#: 103570-35166
Date : 09/16/15 6:12
Data File: o091538.d

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.01	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.01	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.05	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.01	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.01	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.01	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.01	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.02	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	0.10	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.01	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.01	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.01	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.05	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.01	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.01	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
4-Bromofluorobenzene	460-00-4		99.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	99.00	% Recovery

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www.airtoxics.com
1-800-985-5955

Media Certification Report

Canister Number: 6L# 34356w/24hrs chain #1
Can#: 103570-34356
Date : 09/15/15 15:02
Data File: o091506.d

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.01	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.01	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.05	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.01	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.01	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.01	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.01	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.02	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	0.10	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.01	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.01	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.01	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.05	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.01	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.01	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
4-Bromofluorobenzene	460-00-4		98.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	98.00	% Recovery

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Media Certification Report

Canister Number: 6L# 33980
Can#: 103570-33980
Date : 09/15/15 2:27
Data File: o091433.d

www.airtoxics.com
1-800-985-5955

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.01	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.01	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.05	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.01	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.01	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.01	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.01	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.02	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	0.10	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.01	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.01	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.01	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.05	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.01	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.01	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
4-Bromofluorobenzene	460-00-4		97.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	97.00	% Recovery

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Media Certification Report

Canister Number: 6L# 33877
Can#: 103570-33877
Date : 09/15/15 4:18
Data File: o091437.d

www.airtoxics.com
1-800-985-5955

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.01	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.01	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.05	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.01	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Chloroform	67-66-3	0.01	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.01	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.01	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.02	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	0.10	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.01	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.01	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.01	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.05	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.01	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.01	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
4-Bromofluorobenzene	460-00-4		98.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	98.00	% Recovery

Eurofins Air Toxics, Inc.	Data Review Checklist			Release Date: 03/26/15
Workorder # 1509512	Form F1.27	Revision #11	Revision date: 03/26/15	Page 1 of 2

S1	S2	S3	S4	D	Section 1 – Spec Out
					Initials/Instrument/Date — S1: MSD-V MB 10/5/15 — S2: — S3: — S4:
✓					Project Identification (PID), Project Requirements Table (PRT), Daily QC and ICAL met Criteria
✓					Lumen QC and ICAL evaluation (ref. SOP/Method) report initialed and in folder
NA					Manual Integrations included and approved
✓					Chain of Custody verified for special comments (add comments below)
✓					Non-standard Target sublist printed

Profile, analyses, reporting, special notes and unusual circumstances:

S1: Ø out Short List.

A1	A2	A3	A4	D	Section 2 – Sample Analysis
					Initials/Date — A1: MB 10/5/15 — A2: GH 10/5/15 — A3: — A4:
✓	✓				Internal Standard/Surrogate Recoveries, Dilution Factors, Load Volumes, Initial/Final Pressures, and Canister #s Verified
NA	NA			NA	a) Tedlar Bag IDs verified against COC b) Tedlar Bag ID confirmed with loading sequence/leg of instrument
NA	↓				Manual Integrations/Bag or Can Dilution Forms/Re-pressurization Forms/Bag-Can Transfer Forms present (circle all that apply)
✓	✓				12/24 Hr clock time & Hold Time met for all samples
NA	✓			NA	Re-analysis of sample(s) have been evaluated for comparability and/or samples have been checked for trends (Inf/Eff).
✓	✓				All runs have been evaluated for potential carry-over (TPHg/non-Target/over-range compounds etc)

Analytical and special notes:

A1: 01AB = full load.

A2: 02AB, 05AB, 08AB = full load
03AB, 04AB, 06AB, 07AB - di INTC

D1	D2	D3	D4	T	3T	Section 3 – Target Data Reduction
						Technical Review Needed? Circle one: Yes/No — T:
						Initials/Instrument/Date MSD-V 10/5/15 — D1: HOB 10/12/15 — D2: — D3: — D4:
NA						CAR # (if applicable)
						Spectra Verified (documentation of spectral defense included if applicable)
NA						TICs resemble reference spectra/ TICs between sample dups. are consistent (if applicable)
						Lab Narrative is correct
NA						TPH/NMOC calculations complete and included in folder

Special notes: CIS 12DCE manual int → -03B, -04B, -06B
12DCA manual int → -05B

A	3T	Section 4- Atlas Data Entry
		Lumen verified and included in folder — Circle one: Yes/No
		Initials/Date: HOB 10/12/15 — 3rd Tier: (needed only for DOD or per client request)
		Sample Discrepancy Report (SDR) complete and approved (if applicable)
NA		Manually entered results are checked
		At least one result per sample is verified against Target quant sheets
		Appropriate data qualifier flags are applied
		Final Invoice is correct/ Final PDF report, COC and EDD reviewed and correct

Special Notes:

Note (1) *Please check all the appropriate boxes. Indicate "NA" for any statement that doesn't apply*
Note (2) 3rd Tier Report Reviewer and Write Up Reviewer must be separate individuals for DoD & Client Specific Projects

Workorder # :				Reason for Reissue:
W	T	3T	Q	
				Reissue Request form Present
				Client or QA or Lab contact present with reason for reissue
				Review all affected data
				Report header has correct R1, R2 etc
				The Lab Narrative clearly explains the reissue (Date, Reason and whether client requested)
				Date for Reissue in Report Header matches date in Lab Narrative
				Check Project Profile for correct reporting instructions (multiple clients, # hardcopies, etc)
				Corrective Action issued - #
				The reissued workorder has been approved by QA Manager or a Technical Director

Additional Comments:

Write Up (Initials/Date)	Tech Review (Initials/Date)	*3rd Tier Review *3rd Tier Report Review is for DoD & Client Specific projects only (Initials/Date)	QA Review (Initials/Date)

Workorder # :				Reason for Reissue:
W	T	3T	Q	
				Reissue Request form Present
				Client or QA or Lab contact present with reason for reissue
				Review all affected data
				Report header has correct R1, R2 etc
				The Lab Narrative clearly explains the reissue (Date, Reason and whether client requested)
				Date for Reissue in Report Header matches date in Lab Narrative
				Check Project Profile for correct reporting instructions (multiple clients, # hardcopies, etc)
				Corrective Action issued - #
				The reissued workorder has been approved by QA Manager or a Technical Director

Additional Comments:

Write Up (Initials/Date)	Tech Review (Initials/Date)	*3rd Tier Review *3rd Tier Report Review is for DoD & Client Specific projects only (Initials/Date)	QA Review (Initials/Date)

Note (1) *Please check all the appropriate boxes. Indicate "NA" for any statement that doesn't apply*
Note (2) 3rd Tier Report Reviewer and Write Up Reviewer must be separate individuals for DoD & Client Specific Projects

Not Applicable

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Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager Rob Lippencamp
Collected by: (Print and Sign) R. Wedrick / M. Head [signature]
Company ARCADIS Email Rob.Lippencamp@arcadis.com
Address 132 E. Washington St Ste 600 City Indianapolis State IN Zip 46204
Phone 317-231-6500 Fax 317-231-6514

Project Info:
P.O. # IN000899.2013
Project # IN000899.2013
Project Name Grenada Manufacturing

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	1-AA (092215)	6L1237	9-22-15/9-23-15	1044-1043	TO-15, Project List	30	9		
02A	2-AA (092215)	5L34325	9-22-15/9-23-15	1612 ~~1051~~ 1617	TO-15, Project List	30	7.25		
03A	6-IA (092215)	308400	9-22-15/9-23-15	1105-1058	TO-15, Project List	30	7.5		
04A	1-IA (092215)	MH 34481 ~~12077~~	9-22-15/9-23-15	1206-1202	TO-15, Project List	30	~~30~~ 7.5 MH		
MH 9-23-15	~~1-Dup-IA (092215)~~	MH 12077 ~~34481~~	9-22-15/9-23-15	~~1206-1202~~	~~TO-15, Project List~~	~~30~~	~~30~~		
05A	5-IA (092215)	35166	9-22-15/9-23-15	1303-1305	TO-15, Project List	30	9.5		
06A	2-IA (092215)	34356	9-22-15/9-23-15	1417-1408	TO-15, Project List	30	7.5		
07A	3-IA (092215)	33980	9-22-15/9-23-15	1533-1533	TO-15, Project List	30	7		
08A	4-IA (092215)	33877	9-22-15/9-23-15	1647-1647	TO-15 Project List	30	7		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	9-24-15 1500	Candice H Cortney [signature]	1235 9/30/15
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes:

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fedex		N/A	Good	Yes No None	1509512

Form 1293 rev.11

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10/15/2015
Ms. Marie Heap
Arcadis U.S., Inc.
132 East Washington St., Suite 600

Indianapolis IN 46204

Project Name: GRENADA MANUFACTURING
Project #: LA003307.0001.00004
Workorder #: 1510233

Dear Ms. Marie Heap

The following report includes the data for the above referenced project for sample(s) received on 10/12/2015 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Ausha Scott

Project Manager

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WORK ORDER #: 1510233

Work Order Summary

CLIENT:	Ms. Marie Heap Arcadis U.S., Inc. 132 East Washington St., Suite 600 Indianapolis, IN 46204	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317-231-6500	**P.O. #**	LA003307.0001.00004
FAX:	317-231-6514	**PROJECT #**	LA003307.0001.00004 GRENADA MANUFACTURING
DATE RECEIVED:	10/12/2015	**CONTACT:**	Ausha Scott
DATE COMPLETED:	10/15/2015		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SG-4 (100715)	TO-15	7.0 "Hg	15 psi
02A	SG-7 (100715)	TO-15	7.5 "Hg	15 psi
03A	SG-8 (100715)	TO-15	7.0 "Hg	15 psi
04A	Lab Blank	TO-15	NA	NA
05A	CCV	TO-15	NA	NA
06A	LCS	TO-15	NA	NA
06AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Mayo DATE: 10/15/15

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

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(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1510233

Three 1 Liter Summa Canister (100% Certified) samples were received on October 12, 2015. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-4 (100715)

Lab ID#: 1510233-01A

No Detections Were Found.

Client Sample ID: SG-7 (100715)

Lab ID#: 1510233-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	1.3	3.5	6.6	17
m,p-Xylene	1.3	3.0	5.8	13
o-Xylene	1.3	1.8	5.8	8.1
1,2,4-Trimethylbenzene	1.3	2.8	6.6	14

Client Sample ID: SG-8 (100715)

Lab ID#: 1510233-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	1.3	1.6	7.1	8.7

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Client Sample ID: SG-4 (100715)

Lab ID#: 1510233-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17101413**	**Date of Collection:**	**10/7/15 3:20:00 PM**
Dil. Factor:	**2.64**	**Date of Analysis:**	**10/14/15 08:17 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.4	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Methylene Chloride	13	Not Detected	46	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Chloroform	1.3	Not Detected	6.4	Not Detected
Benzene	1.3	Not Detected	4.2	Not Detected
1,2-Dichloroethane	1.3	Not Detected	5.3	Not Detected
Trichloroethene	1.3	Not Detected	7.1	Not Detected
Toluene	1.3	Not Detected	5.0	Not Detected
1,1,2-Trichloroethane	1.3	Not Detected	7.2	Not Detected
Tetrachloroethene	1.3	Not Detected	9.0	Not Detected
Ethyl Benzene	1.3	Not Detected	5.7	Not Detected
m,p-Xylene	1.3	Not Detected	5.7	Not Detected
o-Xylene	1.3	Not Detected	5.7	Not Detected
1,2,4-Trimethylbenzene	1.3	Not Detected	6.5	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	107	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	91	70-130

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Client Sample ID: SG-7 (100715)

Lab ID#: 1510233-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17101411**	**Date of Collection:**	**10/7/15 3:41:00 PM**
Dil. Factor:	**2.69**	**Date of Analysis:**	**10/14/15 07:18 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.4	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.3	Not Detected
Methylene Chloride	13	Not Detected	47	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.3	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.3	Not Detected
Chloroform	1.3	3.5	6.6	17
Benzene	1.3	Not Detected	4.3	Not Detected
1,2-Dichloroethane	1.3	Not Detected	5.4	Not Detected
Trichloroethene	1.3	Not Detected	7.2	Not Detected
Toluene	1.3	Not Detected	5.1	Not Detected
1,1,2-Trichloroethane	1.3	Not Detected	7.3	Not Detected
Tetrachloroethene	1.3	Not Detected	9.1	Not Detected
Ethyl Benzene	1.3	Not Detected	5.8	Not Detected
m,p-Xylene	1.3	3.0	5.8	13
o-Xylene	1.3	1.8	5.8	8.1
1,2,4-Trimethylbenzene	1.3	2.8	6.6	14

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	89	70-130

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Client Sample ID: SG-8 (100715)

Lab ID#: 1510233-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17101409**	**Date of Collection:**	**10/7/15 3:46:00 PM**
Dil. Factor:	**2.64**	**Date of Analysis:**	**10/14/15 06:19 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.4	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Methylene Chloride	13	Not Detected	46	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Chloroform	1.3	Not Detected	6.4	Not Detected
Benzene	1.3	Not Detected	4.2	Not Detected
1,2-Dichloroethane	1.3	Not Detected	5.3	Not Detected
Trichloroethene	1.3	1.6	7.1	8.7
Toluene	1.3	Not Detected	5.0	Not Detected
1,1,2-Trichloroethane	1.3	Not Detected	7.2	Not Detected
Tetrachloroethene	1.3	Not Detected	9.0	Not Detected
Ethyl Benzene	1.3	Not Detected	5.7	Not Detected
m,p-Xylene	1.3	Not Detected	5.7	Not Detected
o-Xylene	1.3	Not Detected	5.7	Not Detected
1,2,4-Trimethylbenzene	1.3	Not Detected	6.5	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	107	70-130
1,2-Dichloroethane-d4	107	70-130
4-Bromofluorobenzene	88	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1510233-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17101408**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/14/15 05:00 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	88	70-130

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Client Sample ID: CCV

Lab ID#: 1510233-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17101403**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/14/15 01:48 PM**	

Compound	%Recovery
Vinyl Chloride	84
1,1-Dichloroethene	80
Methylene Chloride	92
trans-1,2-Dichloroethene	87
cis-1,2-Dichloroethene	84
Chloroform	87
Benzene	93
1,2-Dichloroethane	94
Trichloroethene	87
Toluene	92
1,1,2-Trichloroethane	84
Tetrachloroethene	79
Ethyl Benzene	86
m,p-Xylene	89
o-Xylene	89
1,2,4-Trimethylbenzene	87

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	113	70-130
1,2-Dichloroethane-d4	109	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: LCS

Lab ID#: 1510233-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17101404**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/14/15 02:27 PM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	104	70-130
1,1-Dichloroethene	96	70-130
Methylene Chloride	107	70-130
trans-1,2-Dichloroethene	91	70-130
cis-1,2-Dichloroethene	108	70-130
Chloroform	102	70-130
Benzene	109	70-130
1,2-Dichloroethane	105	70-130
Trichloroethene	102	70-130
Toluene	109	70-130
1,1,2-Trichloroethane	103	70-130
Tetrachloroethene	93	70-130
Ethyl Benzene	105	70-130
m,p-Xylene	106	70-130
o-Xylene	107	70-130
1,2,4-Trimethylbenzene	105	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	109	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	97	70-130

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Client Sample ID: LCSD

Lab ID#: 1510233-06AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17101405**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/14/15 03:03 PM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	100	70-130
1,1-Dichloroethene	91	70-130
Methylene Chloride	100	70-130
trans-1,2-Dichloroethene	86	70-130
cis-1,2-Dichloroethene	102	70-130
Chloroform	96	70-130
Benzene	109	70-130
1,2-Dichloroethane	106	70-130
Trichloroethene	103	70-130
Toluene	110	70-130
1,1,2-Trichloroethane	100	70-130
Tetrachloroethene	92	70-130
Ethyl Benzene	103	70-130
m,p-Xylene	106	70-130
o-Xylene	107	70-130
1,2,4-Trimethylbenzene	105	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	110	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	99	70-130



Electronic Comprehensive Validation Package (eCVP)

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COMPREHENSIVE VALIDATION PACKAGE

TO-15

INVENTORY SHEET

Work Order #: 1510233

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-Surrogate Recovery Summary (If Applicable)		
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Comments:

Completed by:

Vera Belitsky	Vera Belitsky / Document Control	10/23/15
(Signature)	(Print Name & Title)	(Date)

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WORK ORDER #: 1510233

Work Order Summary

CLIENT:	Ms. Marie Heap Arcadis U.S., Inc. 132 East Washington St., Suite 600 Indianapolis, IN 46204	**BILL TO:**	Accounts Payable Arcadis U.S., Inc. 630 Plaza Drive Suite 600 Highlands Ranch, CO 80129
PHONE:	317-231-6500	**P.O. #**	LA003307.0001.00004
FAX:	317-231-6514	**PROJECT #**	LA003307.0001.00004 GRENADA MANUFACTURING
DATE RECEIVED:	10/12/2015	**CONTACT:**	Ausha Scott
DATE COMPLETED:	10/15/2015		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SG-4 (100715)	TO-15	7.0 "Hg	15 psi
02A	SG-7 (100715)	TO-15	7.5 "Hg	15 psi
03A	SG-8 (100715)	TO-15	7.0 "Hg	15 psi
04A	Lab Blank	TO-15	NA	NA
05A	CCV	TO-15	NA	NA
06A	LCS	TO-15	NA	NA
06AA	LCSD	TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 10/15/15

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291,
TX NELAP - T104704343-14-7, UT NELAP CA009332014-5, VA NELAP - 460197, WA NELAP - C935
Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2014, Expiration date: 10/17/2015.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 956
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

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LABORATORY NARRATIVE
EPA Method TO-15
Arcadis U.S., Inc.
Workorder# 1510233

Three 1 Liter Summa Canister (100% Certified) samples were received on October 12, 2015. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

There were no analytical discrepancies.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Sample Extract Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
SG-4 (100715)	1510233-01A	10/ 7/2015	10/12/2015	NA	7	10/14/2015	NA	Good
SG-7 (100715)	1510233-02A	10/ 7/2015	10/12/2015	NA	7	10/14/2015	NA	Good
SG-8 (100715)	1510233-03A	10/ 7/2015	10/12/2015	NA	7	10/14/2015	NA	Good
Lab Blank	1510233-04A	NA	NA	NA	NA	10/14/2015	NA	Good
CCV	1510233-05A	NA	NA	NA	NA	10/14/2015	NA	Good
LCS	1510233-06A	NA	NA	NA	NA	10/14/2015	NA	Good
LCSD	1510233-06AA	NA	NA	NA	NA	10/14/2015	NA	Good

Sample Results and Raw Data

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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-4 (100715)

Lab ID#: 1510233-01A

No Detections Were Found.

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Client Sample ID: SG-4 (100715)

Lab ID#: 1510233-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17101413**	**Date of Collection: 10/7/15 3:20:00 PM**	
Dil. Factor:	**2.64**	**Date of Analysis: 10/14/15 08:17 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.4	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Methylene Chloride	13	Not Detected	46	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Chloroform	1.3	Not Detected	6.4	Not Detected
Benzene	1.3	Not Detected	4.2	Not Detected
1,2-Dichloroethane	1.3	Not Detected	5.3	Not Detected
Trichloroethene	1.3	Not Detected	7.1	Not Detected
Toluene	1.3	Not Detected	5.0	Not Detected
1,1,2-Trichloroethane	1.3	Not Detected	7.2	Not Detected
Tetrachloroethene	1.3	Not Detected	9.0	Not Detected
Ethyl Benzene	1.3	Not Detected	5.7	Not Detected
m,p-Xylene	1.3	Not Detected	5.7	Not Detected
o-Xylene	1.3	Not Detected	5.7	Not Detected
1,2,4-Trimethylbenzene	1.3	Not Detected	6.5	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	107	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	91	70-130

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EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/14oct15.b/17101413.d
Lab Smp Id: 1510233-01A
Inj Date : 14-OCT-2015 20:17
Operator : sn Inst ID: msd17.i
Smp Info : 200ml n2140
Misc Info : 7.0 Hg->15 psi
Comment : STANDARD LEVEL GC/MS
Method : /var/chem/msd17.i/14oct15.b/175q0921c.m
Meth Date : 14-Oct-2015 19:48 snguyen Quant Type: ISTD
Cal Date : 24-SEP-2015 16:22 Cal File: 17092416.d
Als bottle: 5
Dil Factor: 2.64000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.64000	Dilution Factor

	RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
*	98 Bromochloromethane					CAS #: 74-97-5		
	5.528	5.521 (1.000)	130	95990	25.0000		80.00- 120.00	100.00
	5.528	5.521 (1.000)	128	69908			46.54- 106.54	72.83
	5.528	5.521 (1.000)	49	104429			83.83- 143.83	108.79
*	123 1,4-Difluorobenzene					CAS #: 540-36-3		
	6.409	6.409 (1.000)	114	344536	25.0000		80.00- 120.00	100.00
	6.409	6.409 (1.000)	88	51166			0.00- 44.86	14.85
*	163 Chlorobenzene-d5					CAS #: 3114-55-4		
	8.859	8.859 (1.000)	117	357774	25.0000		80.00- 120.00	100.00
	8.859	8.859 (1.000)	82	191946			23.93- 83.93	53.65
$	117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
	6.058	6.058 (1.096)	65	127944	24.7357	24.736	80.00- 120.00	100.00
	6.058	6.058 (1.096)	67	67978			25.51- 85.51	53.13

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.190)	98	380646	26.7961	26.796	80.00- 120.00	100.00
7.627	7.627 (1.190)	70	42376			0.00- 40.39	11.13
7.627	7.627 (1.190)	100	231345			33.97- 93.97	60.78
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.847	9.854 (1.112)	174	208834	22.8614	22.861	80.00- 120.00	100.00
9.847	9.854 (1.112)	95	243014			79.64- 139.64	116.37
9.854	9.854 (1.112)	176	199261			65.80- 125.80	95.42

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17101413.d
Lab Smp Id: 1510233-01A
Analysis Type: VOA
Quant Type: ISTD
Operator: sn
Method File: /var/chem/msd17.i/14oct15.b/175q0921c.m
Misc Info: 7.0 Hg->15 psi

Calibration Date: 14-OCT-2015
Calibration Time: 13:48
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	91736	55042	128430	95990	4.64
123 1,4-Difluorobenze	354085	212451	495719	344536	-2.70
163 Chlorobenzene-d5	343866	206320	481412	357774	4.04

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.53	0.13
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

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RECOVERY REPORT

Client Name: Client SDG: 14oct15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1510233-01A
Level: LOW Operator: sn
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /var/chem/msd17.i/14oct15.b/175q0921c.m
Misc Info: 7.0 Hg->15 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	24.736	98.94	70-130
$ 146 Toluene-d8	25.000	26.796	107.18	70-130
$ 177 4-Bromofluorobenze	25.000	22.861	91.45	70-130

Data File: /chem/msd17.i/14oct15.b/17101413.d

Page 1

Date : 14-OCT-2015 20:17

Client ID:

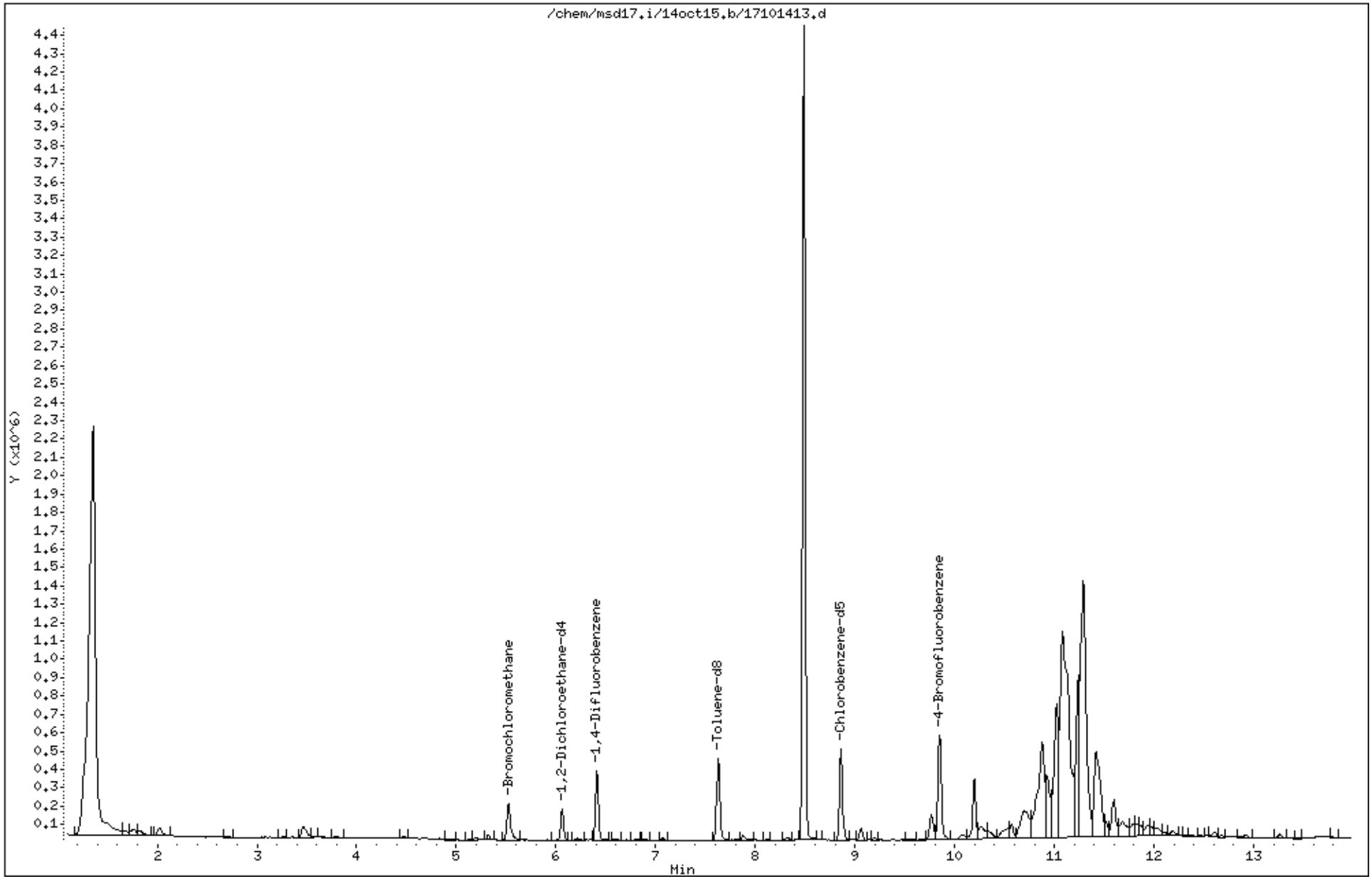
Instrument: msd17.i

Sample Info: 200ml n2140

Operator: sn

Column phase: RTX-624

Column diameter: 0.25



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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-7 (100715)

Lab ID#: 1510233-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloroform	1.3	3.5	6.6	17
m,p-Xylene	1.3	3.0	5.8	13
o-Xylene	1.3	1.8	5.8	8.1
1,2,4-Trimethylbenzene	1.3	2.8	6.6	14

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Client Sample ID: SG-7 (100715)

Lab ID#: 1510233-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17101411**	**Date of Collection: 10/7/15 3:41:00 PM**	
Dil. Factor:	**2.69**	**Date of Analysis: 10/14/15 07:18 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.4	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.3	Not Detected
Methylene Chloride	13	Not Detected	47	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.3	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.3	Not Detected
Chloroform	1.3	3.5	6.6	17
Benzene	1.3	Not Detected	4.3	Not Detected
1,2-Dichloroethane	1.3	Not Detected	5.4	Not Detected
Trichloroethene	1.3	Not Detected	7.2	Not Detected
Toluene	1.3	Not Detected	5.1	Not Detected
1,1,2-Trichloroethane	1.3	Not Detected	7.3	Not Detected
Tetrachloroethene	1.3	Not Detected	9.1	Not Detected
Ethyl Benzene	1.3	Not Detected	5.8	Not Detected
m,p-Xylene	1.3	3.0	5.8	13
o-Xylene	1.3	1.8	5.8	8.1
1,2,4-Trimethylbenzene	1.3	2.8	6.6	14

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	89	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/14oct15.b/17101411.d
Lab Smp Id: 1510233-02A
Inj Date : 14-OCT-2015 19:18
Operator : sn Inst ID: msd17.i
Smp Info : 200ml 36508
Misc Info : 7.5 Hg->15 psi
Comment : STANDARD LEVEL GC/MS
Method : /var/chem/msd17.i/14oct15.b/175q0921c.m
Meth Date : 14-Oct-2015 19:48 snguyen Quant Type: ISTD
Cal Date : 24-SEP-2015 16:22 Cal File: 17092416.d
Als bottle: 3
Dil Factor: 2.69000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.69000	Dilution Factor

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.528	5.521 (1.000)	130	86787	25.0000		80.00- 120.00	100.00
5.528	5.521 (1.000)	128	67667			46.54- 106.54	77.97
5.528	5.521 (1.000)	49	103555			83.83- 143.83	119.32
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.409	6.409 (1.000)	114	335458	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	50845			0.00- 44.86	15.16
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.859	8.859 (1.000)	117	348700	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	187449			23.93- 83.93	53.76
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.058	6.058 (1.096)	65	122421	26.1777	26.178	80.00- 120.00	100.00
6.058	6.058 (1.096)	67	64655			25.51- 85.51	52.81

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.190)	98	363390	26.2736	26.274	80.00- 120.00	100.00
7.627	7.627 (1.190)	70	38333			0.00- 40.39	10.55
7.627	7.627 (1.190)	100	224967			33.97- 93.97	61.91
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.854	9.854 (1.112)	174	197784	22.2152	22.215	80.00- 120.00	100.00
9.847	9.854 (1.112)	95	235152			79.64- 139.64	118.89
9.854	9.854 (1.112)	176	189277			65.80- 125.80	95.70
100 Chloroform					CAS #: 67-66-3		
5.585	5.585 (1.010)	83	16316	1.30722	3.516	80.00- 120.00	100.00
5.585	5.585 (1.010)	85	11965			34.67- 94.67	73.33
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	13390	1.13217	3.046	80.00- 120.00	100.00
9.031	9.031 (1.019)	91	29343			167.83- 227.83	219.13
171 o-Xylene					CAS #: 95-47-6		
9.374	9.374 (1.058)	106	7575	0.69031	1.857	80.00- 120.00	100.00
9.367	9.374 (1.057)	91	14977			181.11- 241.11	197.70
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.478	10.477 (1.183)	120	13769	1.04746	2.818	80.00- 120.00	100.00
10.478	10.477 (1.183)	105	32447			183.76- 243.76	235.65

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17101411.d
Lab Smp Id: 1510233-02A
Analysis Type: VOA
Quant Type: ISTD
Operator: sn
Method File: /var/chem/msd17.i/14oct15.b/175q0921c.m
Misc Info: 7.5 Hg->15 psi

Calibration Date: 14-OCT-2015
Calibration Time: 13:48
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	91736	55042	128430	86787	-5.39
123 1,4-Difluorobenze	354085	212451	495719	335458	-5.26
163 Chlorobenzene-d5	343866	206320	481412	348700	1.41

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.53	0.13
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 15-Oct-2015 06:37

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 14oct15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1510233-02A
Level: LOW Operator: sn
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /var/chem/msd17.i/14oct15.b/175q0921c.m
Misc Info: 7.5 Hg->15 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	26.178	104.71	70-130
$ 146 Toluene-d8	25.000	26.274	105.09	70-130
$ 177 4-Bromofluorobenze	25.000	22.215	88.86	70-130

Data File: /chem/msd17.i/14oct15.b/17101411.d

Page 1

Date : 14-OCT-2015 19:18

Client ID:

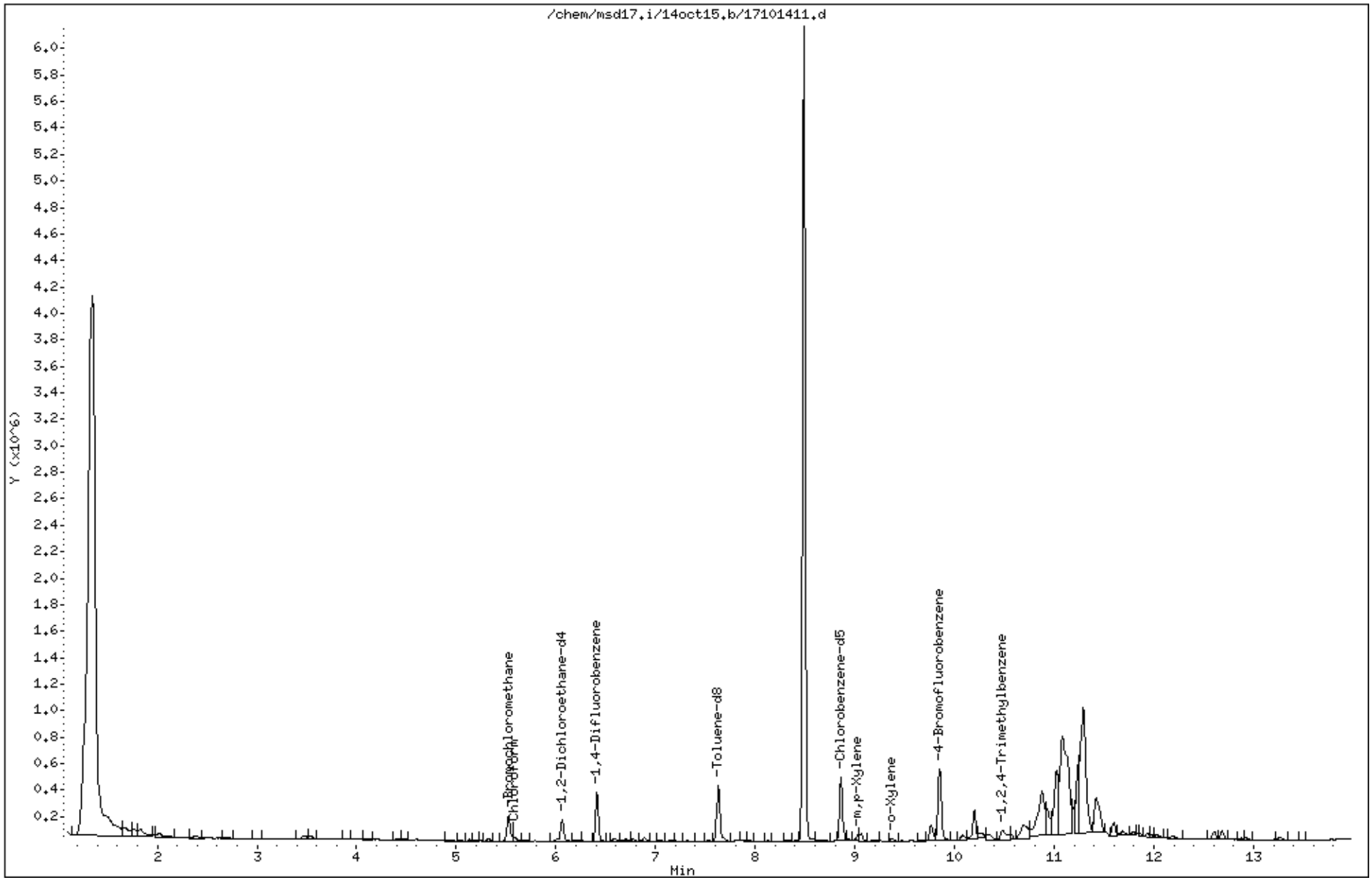
Instrument: msd17.i

Sample Info: 200ml 36508

Operator: sn

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd17.i/14oct15.b/17101411.d

Date : 14-OCT-2015 19:18

Client ID:

Instrument: msd17.i

Sample Info: 200ml 36508

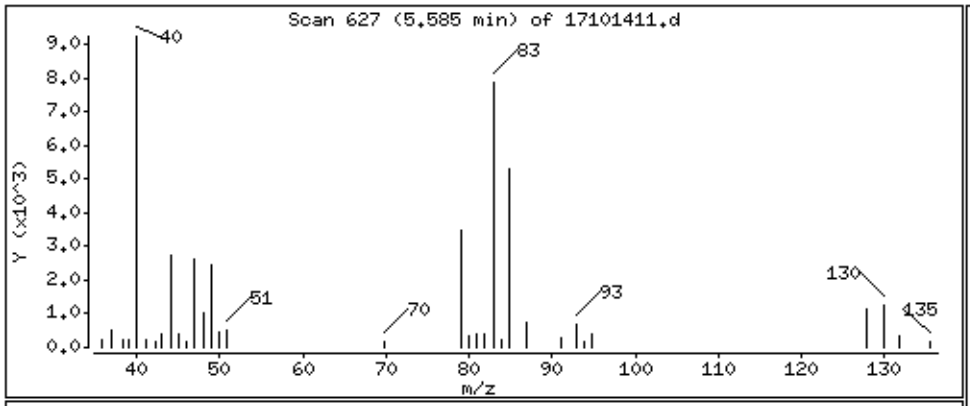
Operator: sn

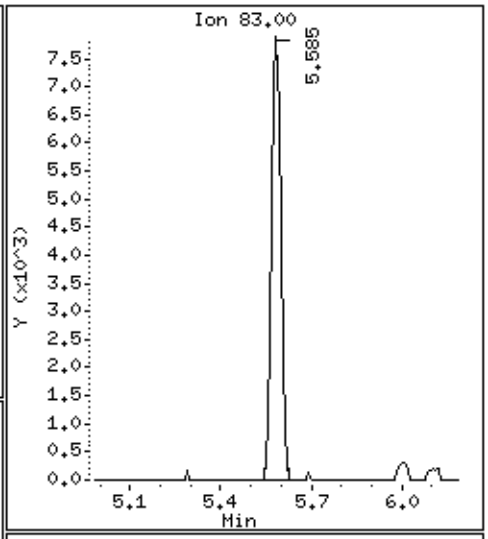
Column phase: RTX-624

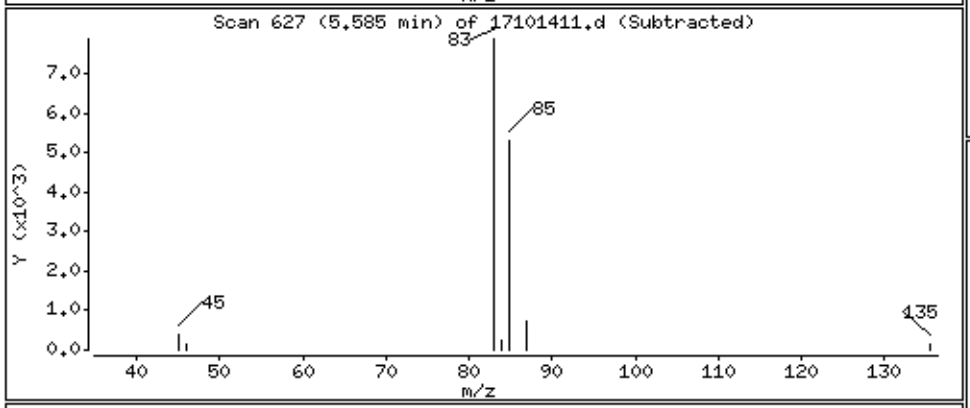
Column diameter: 0.25

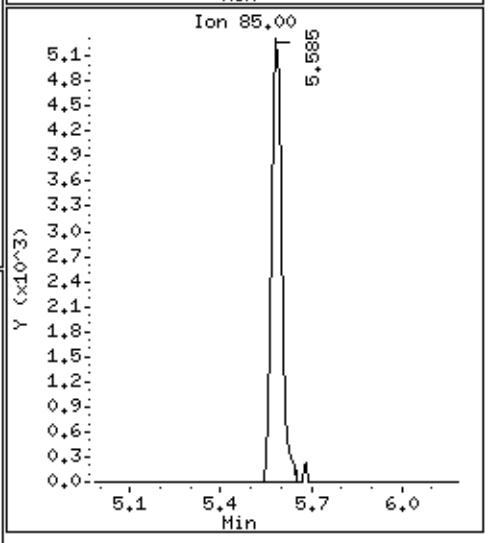
100 Chloroform

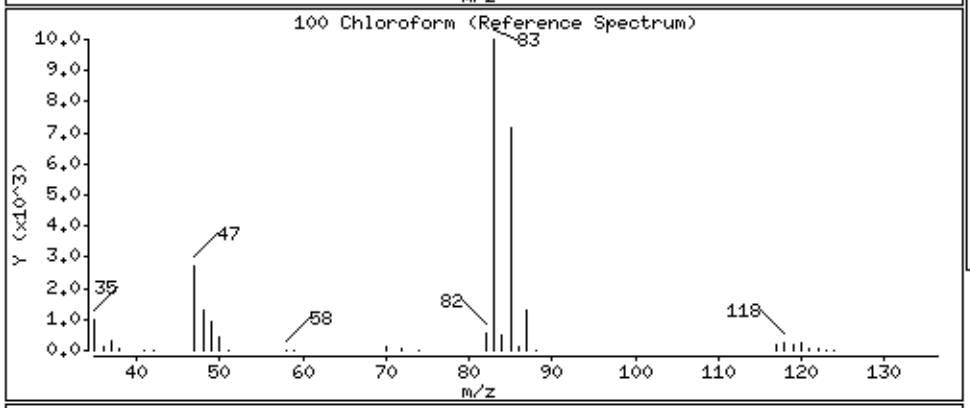
Concentration: 3.516 PPBV

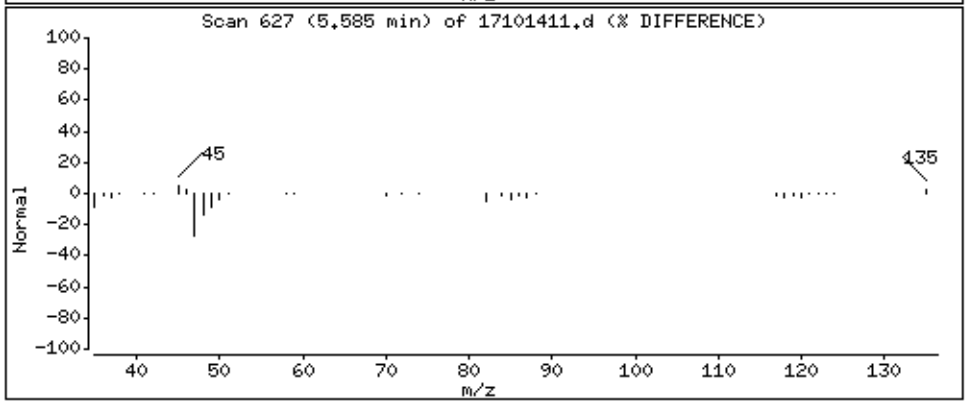












Data File: /chem/msd17.i/14oct15.b/17101411.d

Date : 14-OCT-2015 19:18

Client ID:

Instrument: msd17.i

Sample Info: 200ml 36508

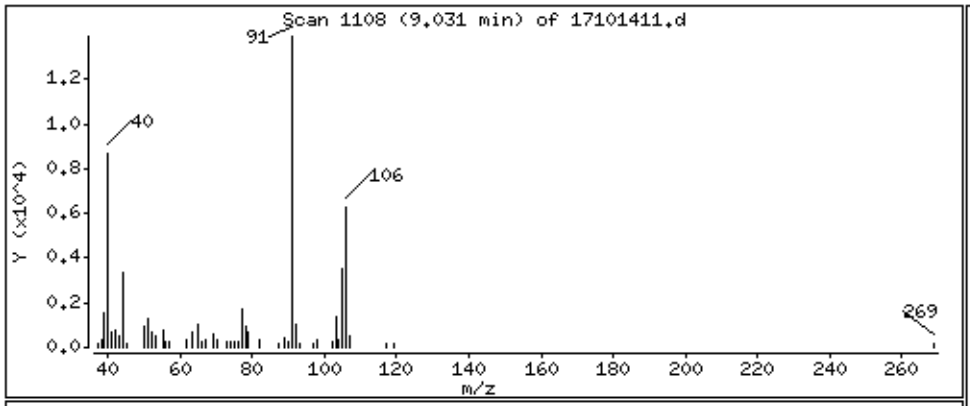
Operator: sn

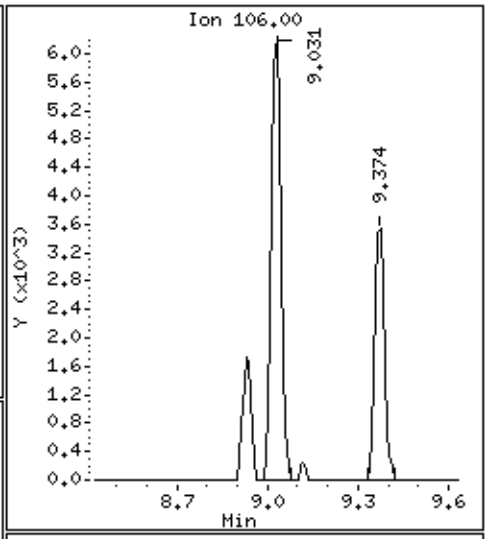
Column phase: RTX-624

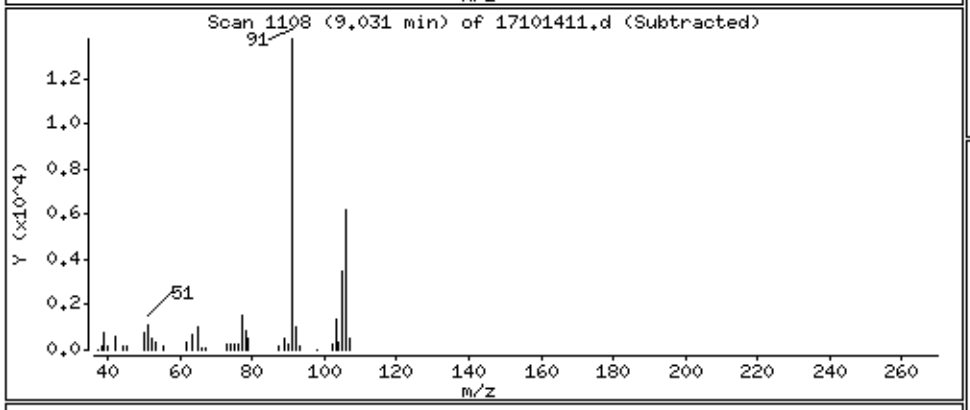
Column diameter: 0.25

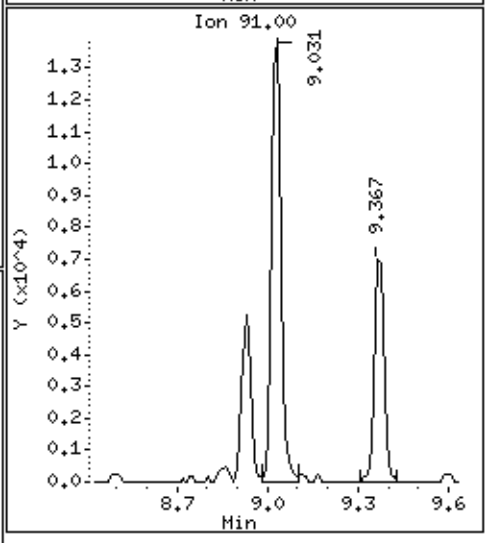
169 m,p-Xylene

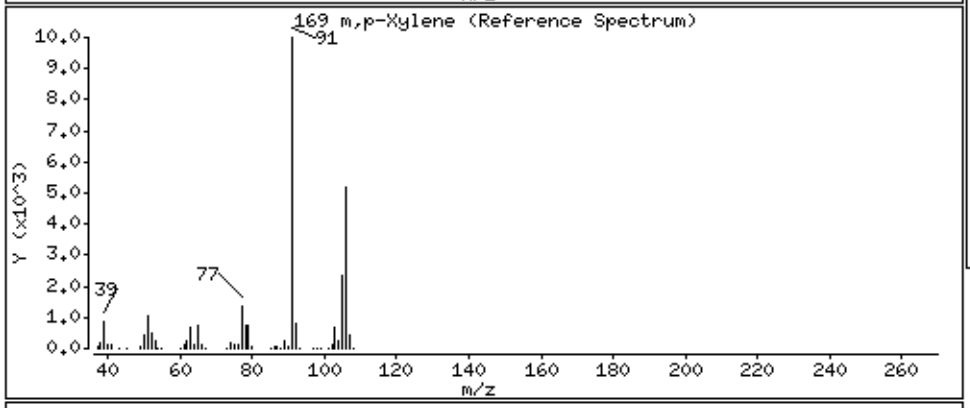
Concentration: 3.046 PPBV

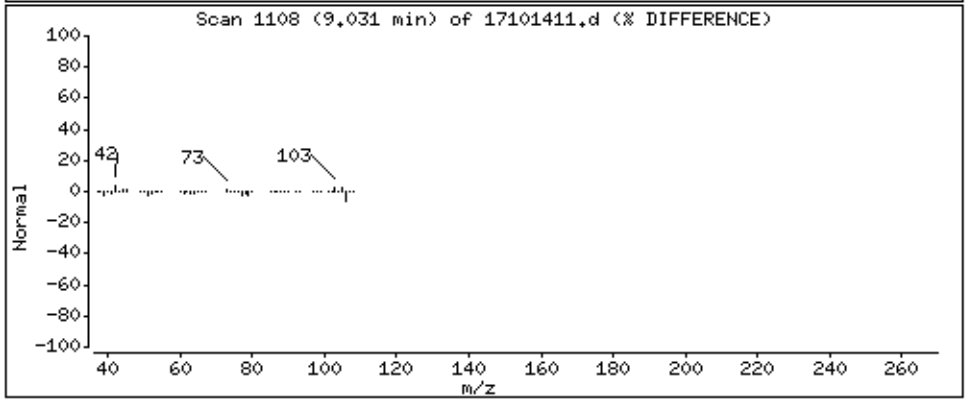












Data File: /chem/msd17.i/14oct15.b/17101411.d

Date : 14-OCT-2015 19:18

Client ID:

Instrument: msd17.i

Sample Info: 200ml 36508

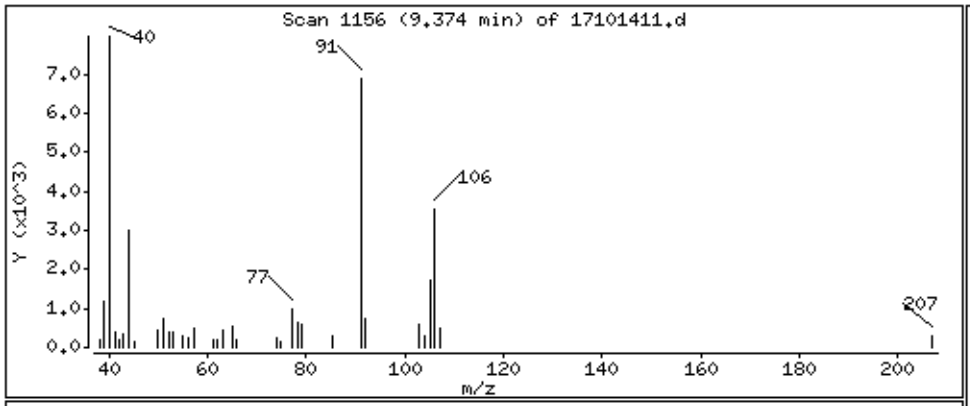
Operator: sn

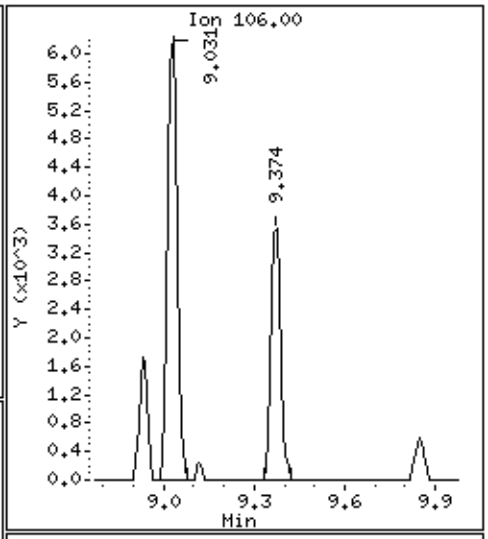
Column phase: RTX-624

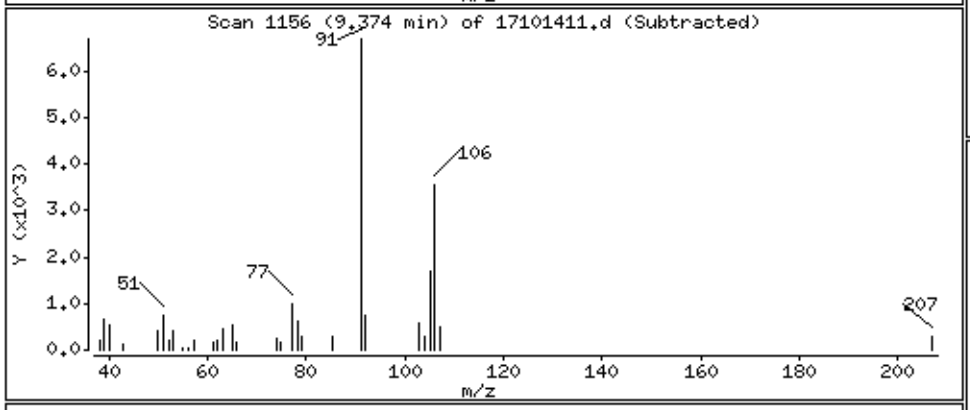
Column diameter: 0.25

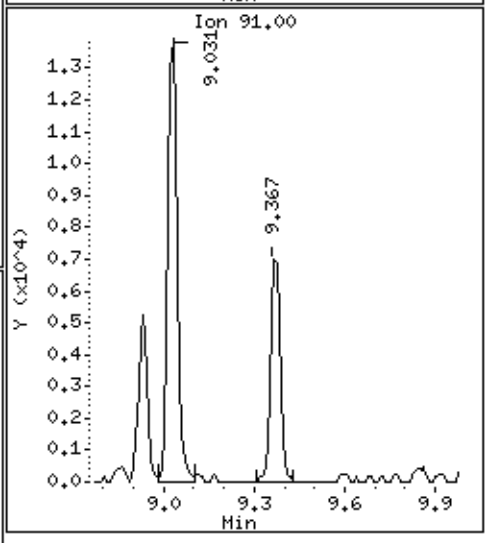
171 o-Xylene

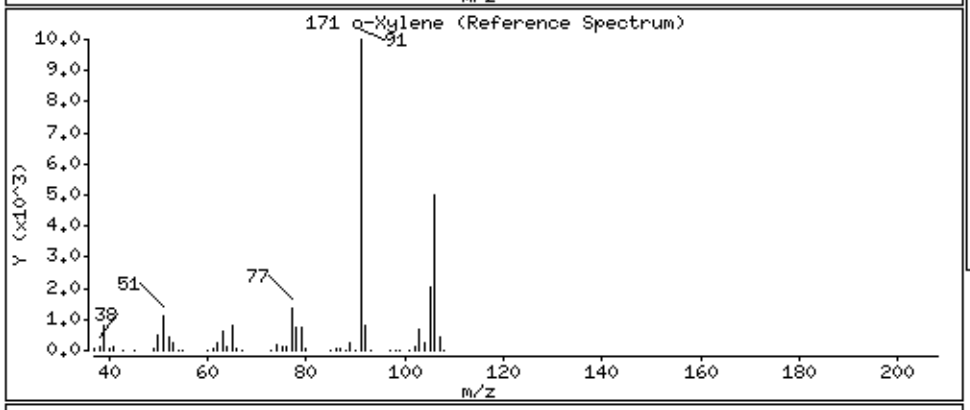
Concentration: 1.857 PPBV

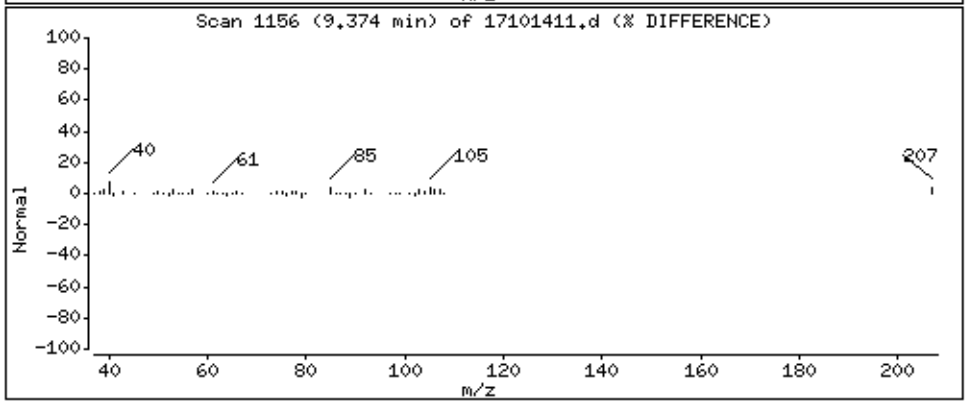












Data File: /chem/msd17.i/14oct15.b/17101411.d

Date : 14-OCT-2015 19:18

Client ID:

Instrument: msd17.i

Sample Info: 200ml 36508

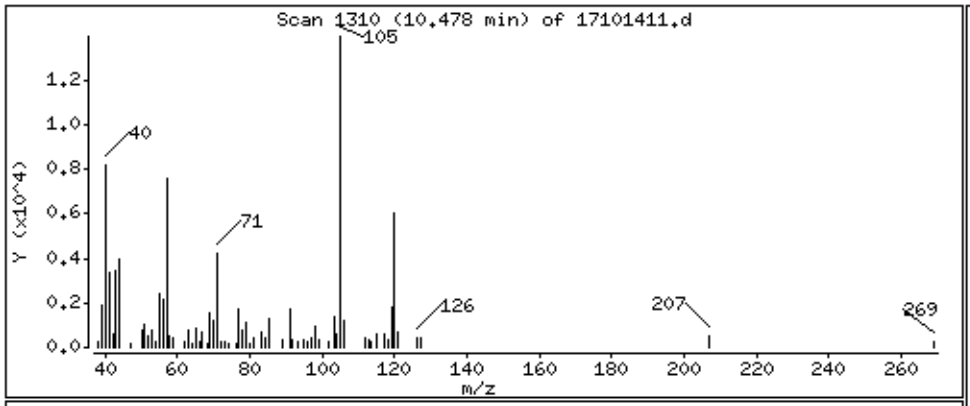
Operator: sn

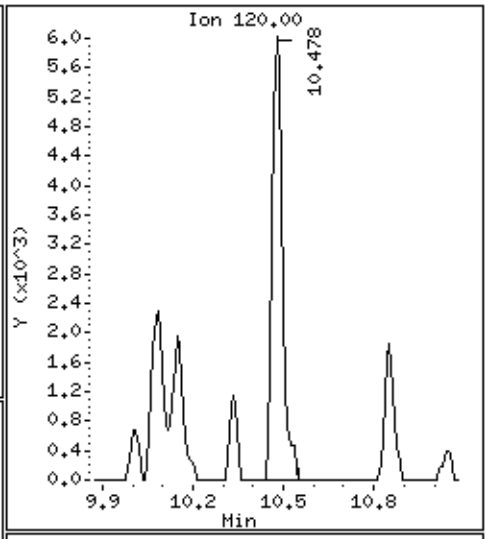
Column phase: RTX-624

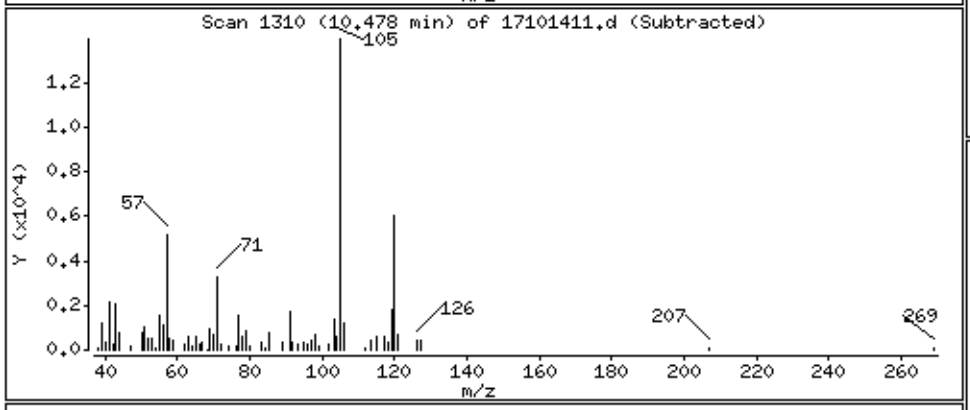
Column diameter: 0.25

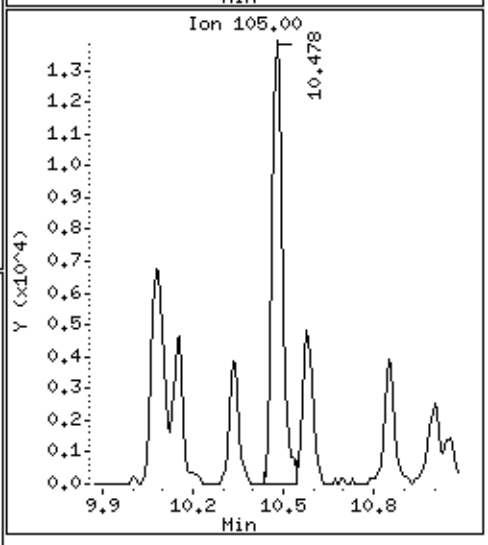
196 1,2,4-Trimethylbenzene

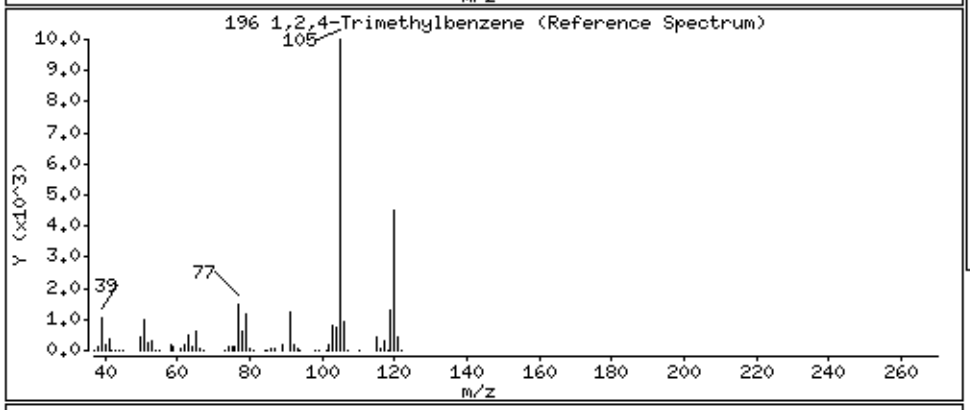
Concentration: 2.818 PPBV

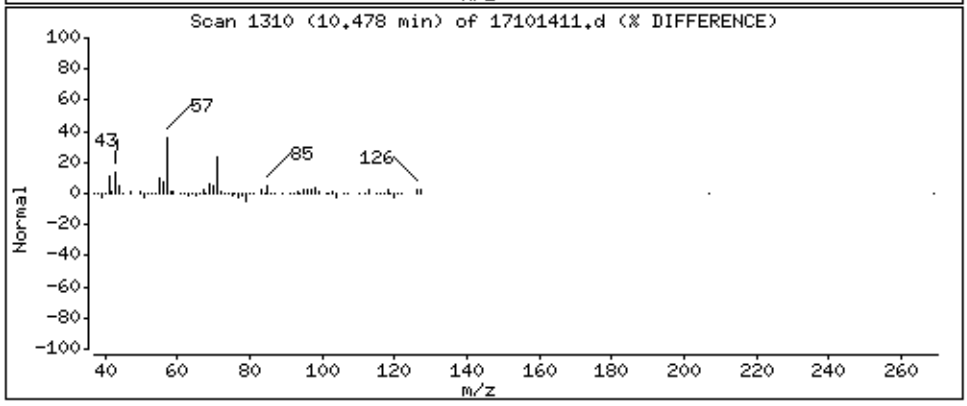












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Summary of Detected Compounds
EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SG-8 (100715)

Lab ID#: 1510233-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Trichloroethene	1.3	1.6	7.1	8.7

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Client Sample ID: SG-8 (100715)

Lab ID#: 1510233-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17101409**	**Date of Collection:**	**10/7/15 3:46:00 PM**
Dil. Factor:	**2.64**	**Date of Analysis:**	**10/14/15 06:19 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.3	Not Detected	3.4	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Methylene Chloride	13	Not Detected	46	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.2	Not Detected
Chloroform	1.3	Not Detected	6.4	Not Detected
Benzene	1.3	Not Detected	4.2	Not Detected
1,2-Dichloroethane	1.3	Not Detected	5.3	Not Detected
Trichloroethene	1.3	1.6	7.1	8.7
Toluene	1.3	Not Detected	5.0	Not Detected
1,1,2-Trichloroethane	1.3	Not Detected	7.2	Not Detected
Tetrachloroethene	1.3	Not Detected	9.0	Not Detected
Ethyl Benzene	1.3	Not Detected	5.7	Not Detected
m,p-Xylene	1.3	Not Detected	5.7	Not Detected
o-Xylene	1.3	Not Detected	5.7	Not Detected
1,2,4-Trimethylbenzene	1.3	Not Detected	6.5	Not Detected

Container Type: 1 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
Toluene-d8	107	70-130
1,2-Dichloroethane-d4	107	70-130
4-Bromofluorobenzene	88	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/14oct15.b/17101409.d
Lab Smp Id: 1510233-03A
Inj Date : 14-OCT-2015 18:19
Operator : sn Inst ID: msd17.i
Smp Info : 200ml 37363
Misc Info : 7.0 Hg->15 psi
Comment : STANDARD LEVEL GC/MS
Method : /var/chem/msd17.i/14oct15.b/175q0921c.m
Meth Date : 14-Oct-2015 19:48 snguyen Quant Type: ISTD
Cal Date : 24-SEP-2015 16:22 Cal File: 17092416.d
Als bottle: 1
Dil Factor: 2.64000
Integrator: HP RTE Compound Sublist: Arc20635.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	2.64000	Dilution Factor

				CONCENTRATIONS ON-COL	FINAL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.528	5.521 (1.000)	130	86427	25.0000		80.00- 120.00	100.00
5.528	5.521 (1.000)	128	64981			46.54- 106.54	75.19
5.521	5.521 (1.000)	49	101459			83.83- 143.83	117.39
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.409	6.409 (1.000)	114	317404	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	50274			0.00- 44.86	15.84
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.859	8.859 (1.000)	117	338384	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	190140			23.93- 83.93	56.19
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.058	6.058 (1.096)	65	124255	26.6805	26.680	80.00- 120.00	100.00
6.058	6.058 (1.096)	67	66679			25.51- 85.51	53.66

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.190)	98	350365	26.7728	26.773	80.00- 120.00	100.00
7.627	7.627 (1.190)	70	39075			0.00- 40.39	11.15
7.627	7.627 (1.190)	100	219632			33.97- 93.97	62.69
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.854	9.854 (1.112)	174	189336	21.9146	21.915	80.00- 120.00	100.00
9.847	9.854 (1.112)	95	224972			79.64- 139.64	118.82
9.854	9.854 (1.112)	176	179823			65.80- 125.80	94.98
125 Trichloroethene					CAS #: 79-01-6		
6.602	6.602 (1.030)	95	4642	0.61186	1.615	80.00- 120.00	100.00
6.602	6.602 (1.030)	130	4307			74.97- 134.97	92.77
6.602	6.602 (1.030)	97	2952			35.33- 95.33	63.59

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17101409.d
Lab Smp Id: 1510233-03A
Analysis Type: VOA
Quant Type: ISTD
Operator: sn
Method File: /var/chem/msd17.i/14oct15.b/175q0921c.m
Misc Info: 7.0 Hg->15 psi

Calibration Date: 14-OCT-2015
Calibration Time: 13:48
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	91736	55042	128430	86427	-5.79
123 1,4-Difluorobenze	354085	212451	495719	317404	-10.36
163 Chlorobenzene-d5	343866	206320	481412	338384	-1.59

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.53	0.13
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 14oct15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: 1510233-03A
Level: LOW Operator: sn
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: Arc20635.sub
Method File: /var/chem/msd17.i/14oct15.b/175q0921c.m
Misc Info: 7.0 Hg->15 psi

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	26.680	106.72	70-130
$ 146 Toluene-d8	25.000	26.773	107.09	70-130
$ 177 4-Bromofluorobenze	25.000	21.915	87.66	70-130

Data File: /chem/msd17.i/14oct15.b/17101409.d

Page 1

Date : 14-OCT-2015 18:19

Client ID:

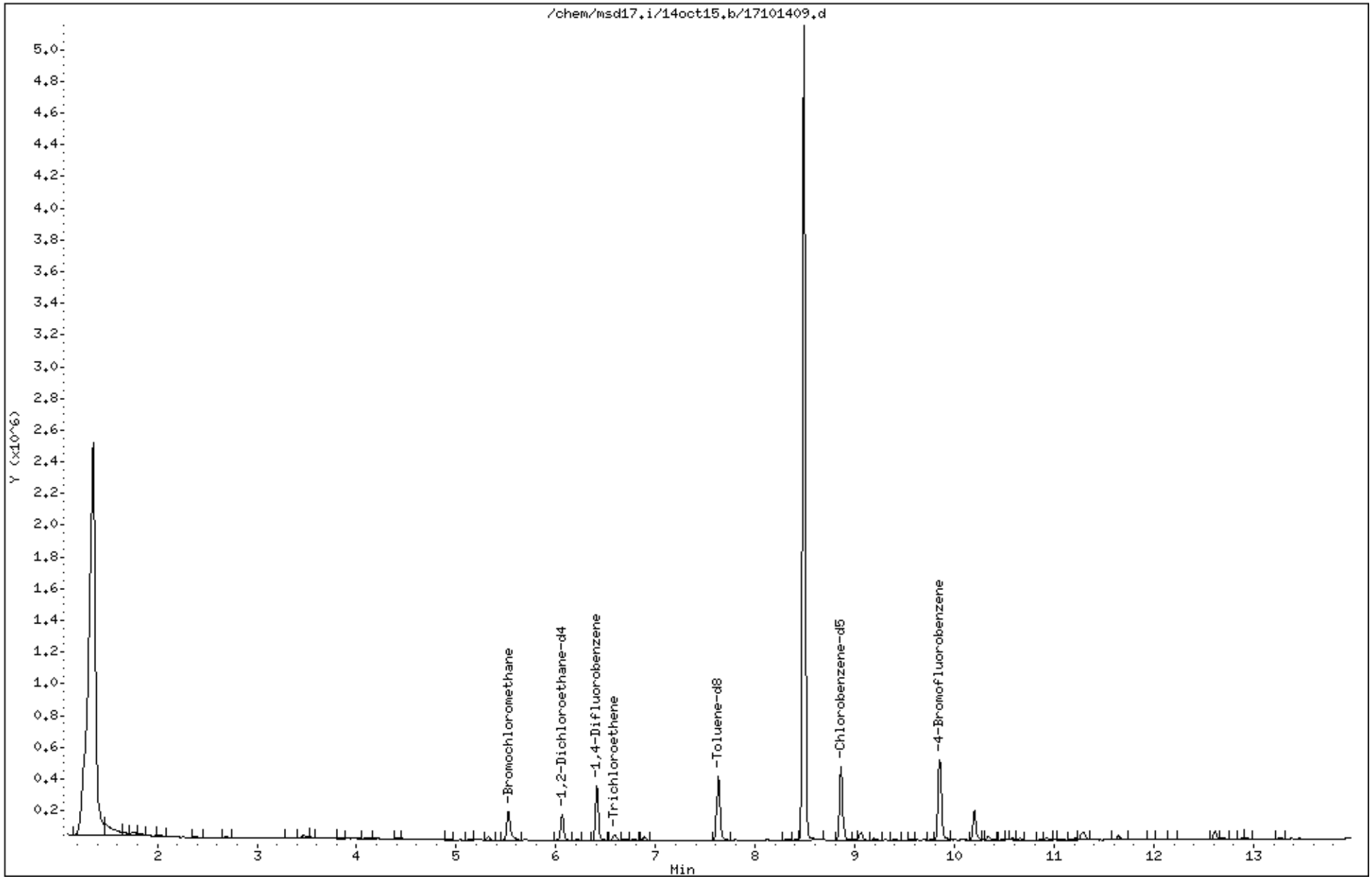
Instrument: msd17.i

Sample Info: 200ml 37363

Operator: sn

Column phase: RTX-624

Column diameter: 0.25



Data File: /chem/msd17.i/14oct15.b/17101409.d

Date : 14-OCT-2015 18:19

Client ID:

Instrument: msd17.i

Sample Info: 200ml 37363

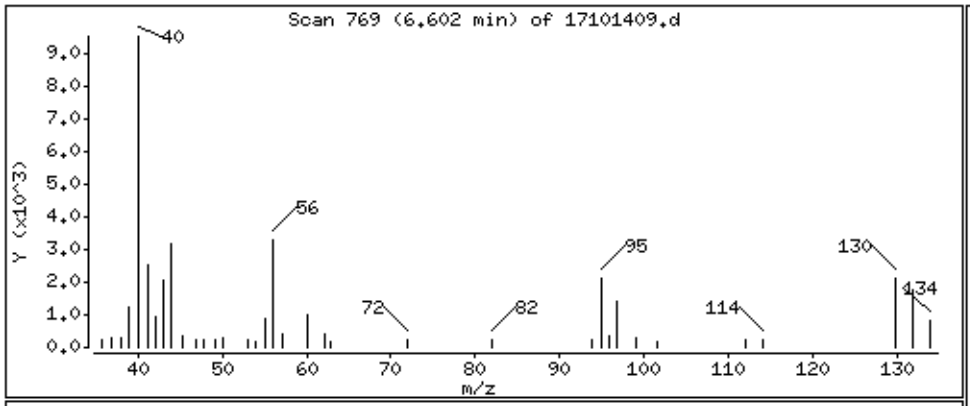
Operator: sn

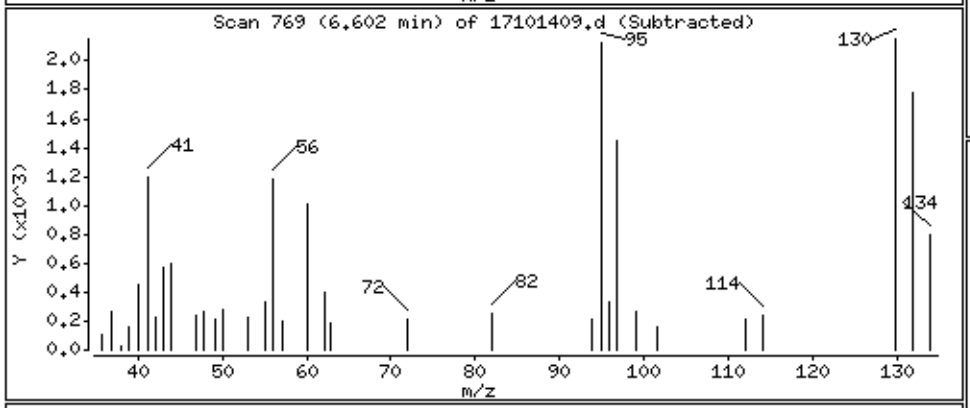
Column phase: RTX-624

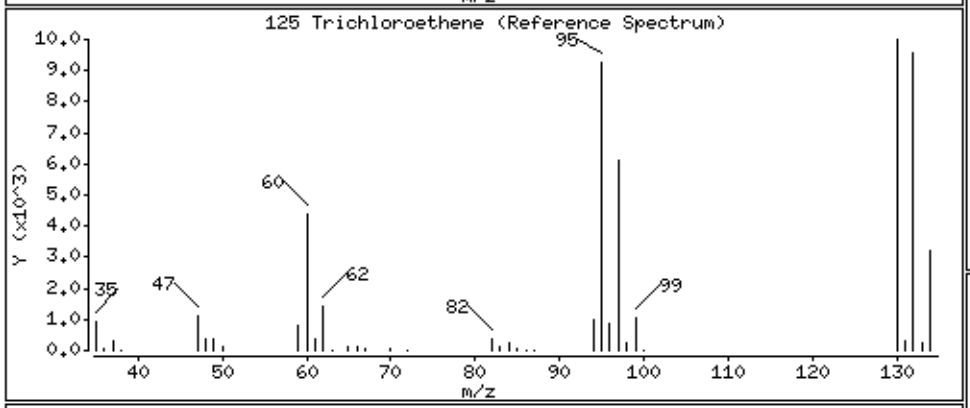
Column diameter: 0.25

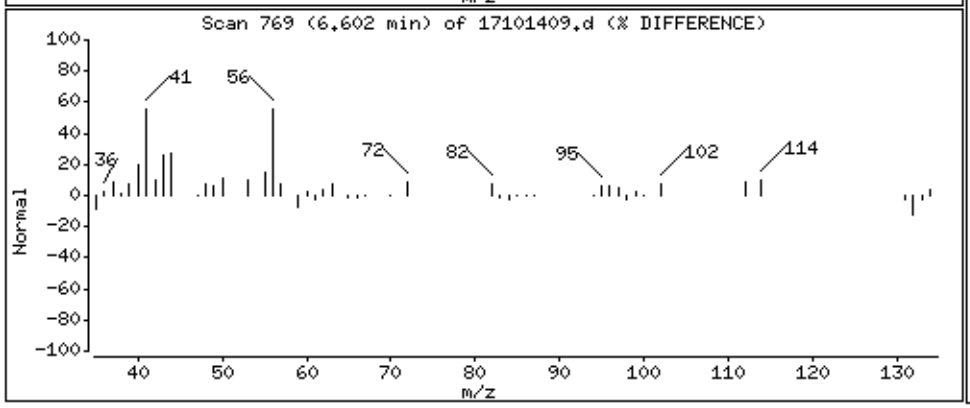
125 Trichloroethene

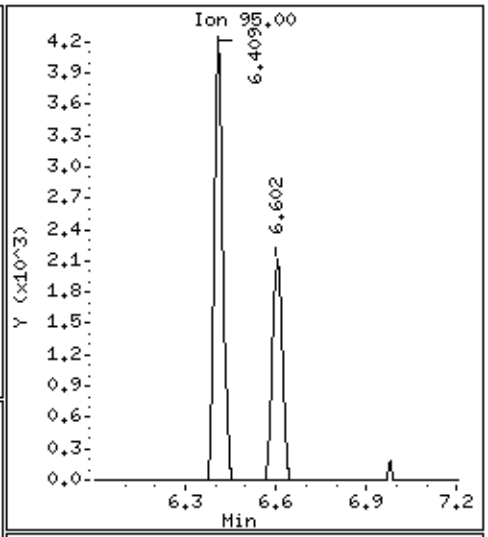
Concentration: 1.615 PPBV

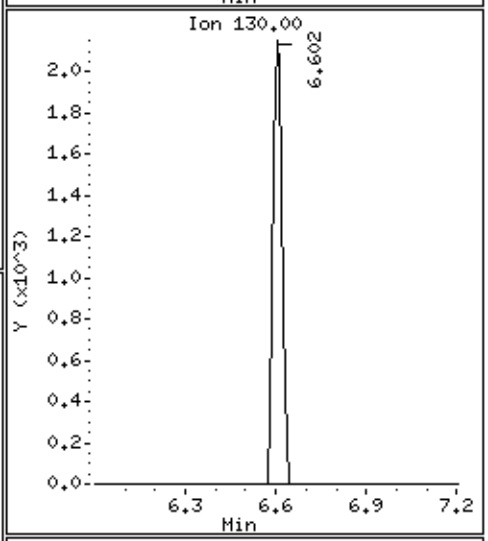


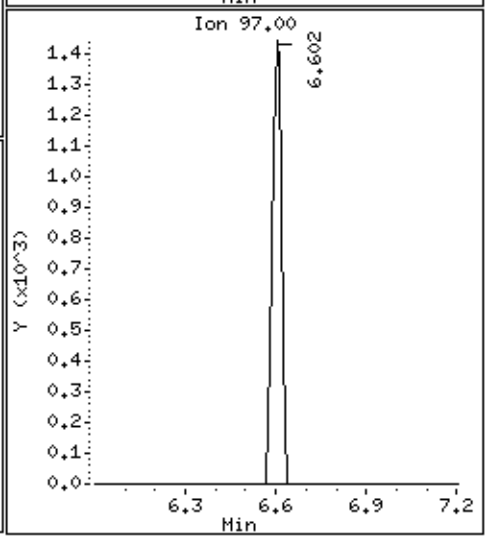












QC Results and Raw Data

eurofins | Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 1510233-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17101408**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/14/15 05:00 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	106	70-130
1,2-Dichloroethane-d4	102	70-130
4-Bromofluorobenzene	88	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /var/chem/msd17.i/14oct15.b/17101408.d
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Inj Date : 14-OCT-2015 17:00
Operator : sab Inst ID: msd17.i
Smp Info : 200ml #403
Misc Info : Humid
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/14oct15.b/175q0921c.m
Meth Date : 14-Oct-2015 15:31 sblack Quant Type: ISTD
Cal Date : 24-SEP-2015 16:22 Cal File: 17092416.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.528	5.521 (1.000)	130	90809	25.0000		80.00- 120.00	100.00
5.528	5.521 (1.000)	128	67812			46.54- 106.54	74.68
5.528	5.521 (1.000)	49	102640			83.83- 143.83	113.03
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.409	6.409 (1.000)	114	327367	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	48733			0.00- 44.86	14.89
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.859 (1.000)	117	326922	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	176108			23.93- 83.93	53.87
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.058	6.058 (1.096)	65	124596	25.4627	25.463	80.00- 120.00	100.00
6.058	6.058 (1.096)	67	65481			25.51- 85.51	52.56

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.190)	98	358729	26.5777	26.578	80.00- 120.00	100.00
7.627	7.627 (1.190)	70	39420			0.00- 40.39	10.99
7.627	7.627 (1.190)	100	222750			33.97- 93.97	62.09
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.854	9.854 (1.111)	174	184299	22.0795	22.080	80.00- 120.00	100.00
9.847	9.847 (1.111)	95	213820			79.64- 139.64	116.02
9.854	9.854 (1.111)	176	177886			65.80- 125.80	96.52

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17101408.d
Lab Smp Id: Lab Blank
Analysis Type: VOA
Quant Type: ISTD
Operator: sab
Method File: /chem/msd17.i/14oct15.b/175q0921c.m
Misc Info: Humid

Calibration Date: 14-OCT-2015
Calibration Time: 13:48
Client Smp ID: Lab Blank
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	91736	55042	128430	90809	-1.01
123 1,4-Difluorobenze	354085	212451	495719	327367	-7.55
163 Chlorobenzene-d5	343866	206320	481412	326922	-4.93

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.53	0.13
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.87	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Report Date: 14-Oct-2015 17:51

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 14oct15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: Lab Blank Client Smp ID: Lab Blank
Level: LOW Operator: sab
Data Type: MS DATA SampleType: SAMPLE
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msd17.i/14oct15.b/175q0921c.m
Misc Info: Humid

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.463	101.85	70-130
$ 146 Toluene-d8	25.000	26.578	106.31	70-130
$ 177 4-Bromofluorobenze	25.000	22.080	88.32	70-130

Data File: /chem/msd17.i/14oct15.b/17101408.d

Page 1

Date : 14-OCT-2015 17:00

Client ID: Lab Blank

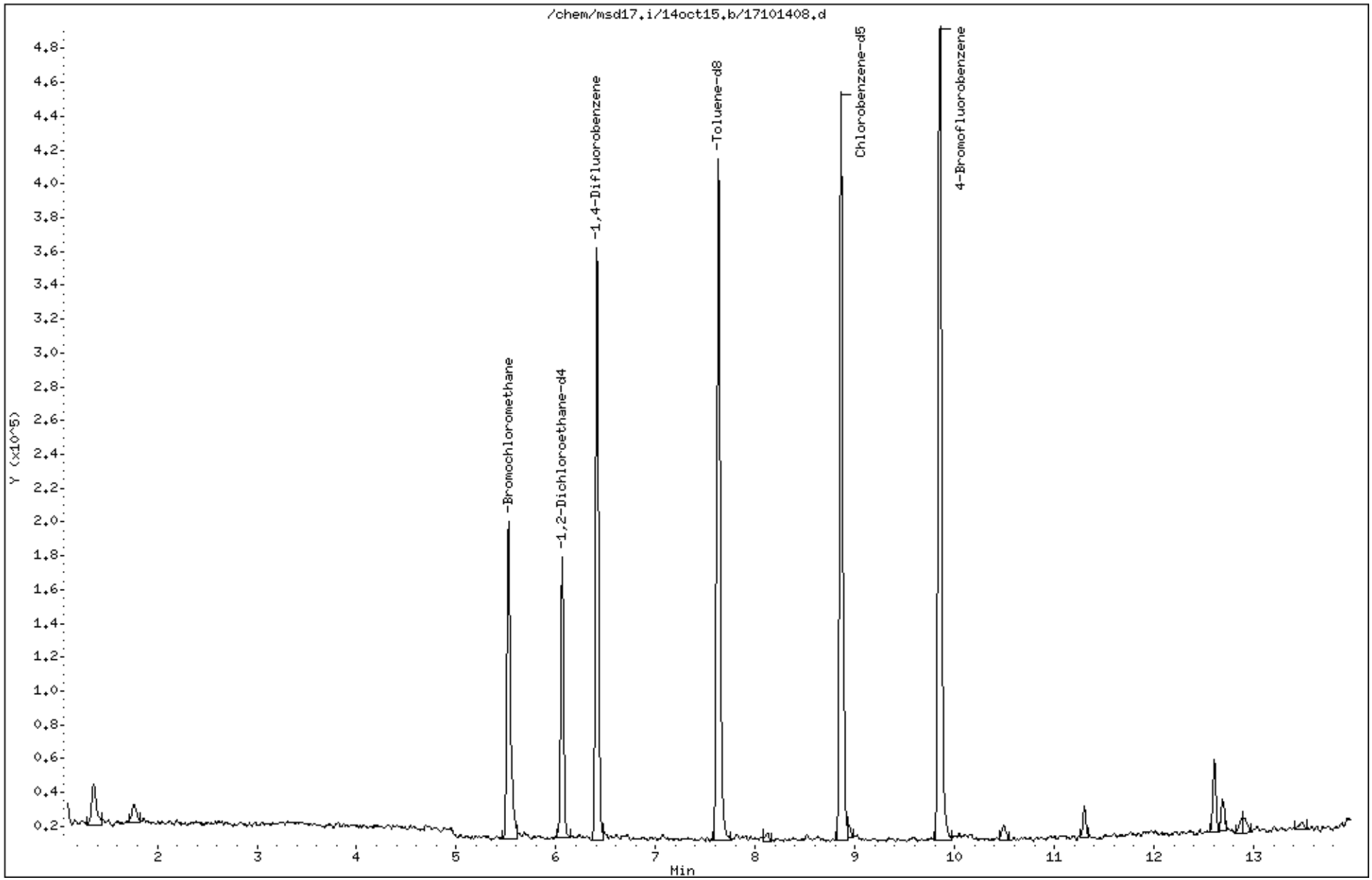
Instrument: msd17.i

Sample Info: 200ml #403

Operator: sab

Column phase: RTX-624

Column diameter: 0.25



LEVEL-IV VALIDATABLE

EPA METHOD TO-15 GC/MS FULL SCAN

SURROGATE RECOVERY FORM

Lab Name: AIR TOXICS LIMITED. SDG No.: 1510233

	CLIENT SAMPLE NO.	SURROGATE % RECOVERY								
		1,2-Dichloroethane-d4	#	Toluene-d8	#	4-Bromofluorobenzene	#		#	TOTAL OUT
01	SG-4 (100715)	99		107		91				0
02	SG-7 (100715)	105		105		89				0
03	SG-8 (100715)	107		107		88				0
04	Lab Blank	102		106		88				0
05	CCV	109		113		100				0
06	LCS	105		109		97				0
07	LCSD	101		110		99				0
08										0
09										0
10										0
11										0
12										0
13										0
14										0
15										0
16										0
17										0
18										0
19										0
20										0
21										0
22										0
23										0
24										0

Surrogate Recovery Limits

1,2-Dichloroethane-d4 70 - 130
Toluene-d8 70 - 130
4-Bromofluorobenzene 70 - 130

* Designates values outside of QC limits

LEVEL-IV VALIDATABLE

EPA Method TO-15 GC/MS Full Scan

INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: AIR TOXICS, LTD | SDG No: 1510233

Lab File ID: 17101403.d | Date Analyzed: 10/14/2015

Instrument ID: msd17.i | Time Analyzed: 01:48 PM

		Chlorobenzene-d5 Area	#	RT	#	1,4-Difluorobenzene Area	#	RT	#	Bromochloromethane Area	#	RT	#
	24-HOUR STD	343866		8.86		354085		6.41		91736		5.52	
	UPPER LIMIT	481412		09.19		495719		06.74		128430		05.85	
	LOWER LIMIT	206320		08.53		212451		06.08		55042		05.19	
	CLIENT SAMPLE NO												
01	SG-4 (100715)	357774		8.86		344536		6.41		95990		5.53	
02	SG-7 (100715)	348700		8.86		335458		6.41		86787		5.53	
03	SG-8 (100715)	338384		8.86		317404		6.41		86427		5.53	
04	Lab Blank	326922		8.87		327367		6.41		90809		5.53	
05	CCV	343866		8.86		354085		6.41		91736		5.52	
06	LCS	346953		8.86		365163		6.41		93042		5.52	
07	LCSD	356567		8.86		365629		6.41		98572		5.52	
08													
09													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													

'Area Upper Limit=+40% of internal standard area'

'Area Lower Limit=-40% of internal standard area'

RT Upper Limit=+0.33 minutes of internal standard RT

RT Lower Limit=-0.33 minutes of internal standard RT

* Designates values outside of QC limits

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.
Lab File ID: 17101405.d & 17101404.d
Lab Sample ID: &
Dilution: 1.00 & 1.00
Client Sample ID: LCS & LCSD
Date Analyzed: 10/14/15 & 10/14/15

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
79-00-5	1,1,2-Trichloroethane	103		100		3.0	
75-35-4	1,1-Dichloroethene	96		91		5.3	
95-63-6	1,2,4-Trimethylbenzene	105		105		0	
107-06-2	1,2-Dichloroethane	105		106		0.95	
71-43-2	Benzene	109		109		0	
67-66-3	Chloroform	102		96		6.1	
156-59-2	cis-1,2-Dichloroethene	108		102		5.7	
100-41-4	Ethyl Benzene	105		103		1.9	
108-38-3	m,p-Xylene	106		106		0	
75-09-2	Methylene Chloride	107		100		6.8	
95-47-6	o-Xylene	107		107		0	
127-18-4	Tetrachloroethene	93		92		1.1	
108-88-3	Toluene	109		110		0.91	
156-60-5	trans-1,2-Dichloroethene	91		86		5.6	
79-01-6	Trichloroethene	102		103		0.98	
75-01-4	Vinyl Chloride	104		100		3.9	

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 20:32
End Cal Date : 24-SEP-2015 17:21
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd17.i/24sep15.b/175q0921c.m
Cal Date : 25-Sep-2015 16:17 cbond
Curve Type : Average

Calibration File Names:
Level 1: /chem/msd17.i/24sep15.b/17092414.d
Level 2: /chem/msd17.i/21sep15a.b/17092118.d
Level 3: /chem/msd17.i/24sep15.b/17092411.d
Level 4: /chem/msd17.i/21sep15a.b/17092120.d
Level 5: /chem/msd17.i/24sep15.b/17092415.d
Level 6: /chem/msd17.i/24sep15.b/17092416.d
Level 7: /chem/msd17.i/24sep15.b/17092417.d
Level 8: /chem/msd17.i/24sep15.b/17092418.d

Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD	
	100.000 Level 7	200.000 Level 8							
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
2 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
4 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
5 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
6 Freon 143a	+++++	+++++	0.55909	+++++	+++++	0.57640			
	+++++	0.18468					0.44005	50.297	<-
7 Freon 134a	+++++	+++++	1.53904	+++++	+++++	1.29587			
	+++++	0.88703					1.24065	26.558	

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 20:32
End Cal Date : 24-SEP-2015 17:21
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd17.i/24sep15.b/175q0921c.m
Cal Date : 25-Sep-2015 16:17 cbond
Curve Type : Average

Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD	
	100.000 Level 7	200.000 Level 8							
8 Propane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
9 Propylene	+++++	+++++	1.03127	0.93595	1.14154	0.95898			
	0.93957	0.94418					0.99192	8.212	
10 1,1-Difluoroethane	+++++	+++++	0.87153	+++++	+++++	0.72989			
	+++++	0.43663					0.67935	32.650	<-
11 Freon 12	+++++	3.71159	4.29781	3.83703	4.60758	3.96699			
	3.84024	3.90498					4.02374	7.854	
12 Vinyl Fluoride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
13 Chlorodifluoromethane	+++++	+++++	0.43142	+++++	+++++	0.33468			
	+++++	0.24435					0.33682	27.776	
14 Ethylene Oxide	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
15 Freon 114	+++++	2.68602	3.08356	2.76101	3.32749	2.90444			
	2.81002	2.87240					2.92071	7.494	
16 Freon 142b	+++++	+++++	3.28285	+++++	+++++	2.85236			
	+++++	2.98897					3.04140	7.233	
17 Chloromethane	+++++	+++++	1.63697	1.33371	1.62806	1.33691			
	1.28622	1.22584					1.40795	12.683	

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 20:32
End Cal Date : 24-SEP-2015 17:21
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd17.i/24sep15.b/175q0921c.m
Cal Date : 25-Sep-2015 16:17 cbond
Curve Type : Average

Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD
	100.000 Level 7	200.000 Level 8						
18 Isobutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
19 Isobutylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
20 2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
21 trans-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
22 1-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
23 Butane	+++++	+++++	0.34646	0.32569	0.33041	0.28727		
	0.27907	0.28384					0.30879	9.319
24 cis-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
25 Vinyl Chloride	+++++	1.71304	1.72179	1.47666	1.77091	1.51077		
	1.47080	1.47516					1.59130	8.576
26 1,3-Butadiene	+++++	1.09569	1.16466	1.05605	1.24763	1.07256		
	1.04707	1.04492					1.10408	6.858
27 3-Methyl-1-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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Cal Date : 25-Sep-2015 16:17 cbond
Curve Type : Average

Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD
	100.000 Level 7	200.000 Level 8						
28 Methanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
29 Bromomethane	+++++	1.35490	1.26350	1.27408	1.74260	1.44330		
	1.39378	1.39420					1.40948	11.411
30 Chloroethane	+++++	+++++	0.85206	0.78951	0.91182	0.77400		
	0.74444	0.76826					0.80668	7.806
31 Isopentane	+++++	+++++	1.54281	1.51779	1.83373	1.51656		
	1.46782	1.50985					1.56476	8.563
32 Vinyl Bromide	+++++	+++++	1.62496	+++++	+++++	1.52266		
	+++++	1.60780					1.58514	3.456
33 2-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
34 Pentane	+++++	+++++	2.38092	+++++	+++++	2.38822		
	+++++	2.69232					2.48716	7.145
35 Freon 11	+++++	4.09936	4.24559	3.97489	4.72080	4.01921		
	3.93649	4.00660					4.14328	6.618
36 1-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
37 Dichlorofluoromethane	+++++	+++++	3.89716	+++++	+++++	3.32409		
	+++++	3.48467					3.56864	8.284

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Cal Date : 25-Sep-2015 16:17 cbond
Curve Type : Average

Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD
	100.000 Level 7	200.000 Level 8						
38 2,3-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
39 Isoprene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
40 2-Methyl-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
41 trans-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
42 Ethanol	+++++	+++++	0.76793	0.42950	0.60935	0.50823		
	0.50042	0.51312					0.55476	21.474
43 1,2-Dichloro-1-fluoroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
44 Ethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
45 cis-2-Pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
46 Acrolein	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
47 Freon 123a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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Cal Date : 25-Sep-2015 16:17 cbond
Curve Type : Average

Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD
	100.000 Level 7	200.000 Level 8						
48 Freon 123	+++++	+++++	4.15187	+++++	+++++	3.86544		
	+++++	3.90675					3.97469	3.895
49 Freon 113	+++++	3.09800	2.84199	2.75189	3.43449	2.88422		
	2.78895	2.86474					2.95204	8.123
50 1,1-Dichloroethene	+++++	1.15330	1.11586	1.01825	1.23141	1.03072		
	1.02505	1.04347					1.08829	7.474
51 2,2-Dimethylbutane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
52 Acetone	+++++	+++++	0.88740	0.71810	0.83285	0.72678		
	0.66657	0.67957					0.75188	11.776
53 Iodomethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
54 Bromoethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
55 4-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
56 Carbon Disulfide	+++++	+++++	5.29306	4.79251	5.74799	4.85478		
	4.70362	4.76232					5.02571	8.203
57 2-Propanol	+++++	+++++	2.41527	1.81466	2.76792	2.36878		
	2.30973	2.31811					2.33241	13.098

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Curve Type : Average

Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD
	100.000 Level 7	200.000 Level 8						
58 3-Chloropropene	+++++	+++++	0.87201	0.75701	0.92175	0.78432		
	0.76210	0.76431					0.81025	8.583
59 Cyclopentene	+++++	+++++	2.77646	+++++	+++++	2.13557		
	+++++	2.26073					2.39092	14.208
60 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
61 Methyl Acetate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
62 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
63 Acetonitrile	+++++	+++++	+++++	+++++	+++++	0.81151		
	+++++	0.86429					0.83790	4.454
64 Cyclopentane	+++++	+++++	0.94732	+++++	+++++	0.88001		
	+++++	1.01457					0.94730	7.103
65 1-Chloropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
66 Methylene Chloride	+++++	+++++	1.89074	1.75831	1.97048	1.65743		
	1.63588	1.66183					1.76244	7.900
67 2-Methyl-1-pentene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	RRF	% RSD
	100.000 Level 7	200.000 Level 8						
68 2,4-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
69 2,3-Dimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
70 tert-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
71 tert-Butyl alcohol	+++++	+++++	3.12004	1.84605	3.54258	2.97953		
	2.98476	3.10082					2.92896	19.440
72 Methyl tert-butyl ether	+++++	4.36191	4.69180	4.22289	5.34177	4.44626		
	4.35338	4.53873					4.56525	8.183
73 trans-1,2-Dichloroethene	+++++	0.85736	1.14288	1.06190	1.31024	1.07996		
	1.05059	1.08738					1.08433	12.353
74 Acrylonitrile	+++++	+++++	1.17791	+++++	+++++	1.04696		
	+++++	1.07659					1.10049	6.240
75 trans-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
76 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
77 cis-2-Hexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	RRF	% RSD	
	100.000 Level 7	200.000 Level 8							
78 Hexane	+++++	2.47940	2.54774	2.35369	2.90615	2.36334			
	2.28302	2.33005					2.46620	8.692	
79 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
80 sec-Butyl chloride	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
81 2,3,4-Trimethylpentane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
82 1,1-Dichloroethane	+++++	2.61214	2.96978	2.79820	3.46901	2.90966			
	2.86001	2.91594					2.93354	8.975	
83 Isopropyl ether	+++++	+++++	4.77776	4.31745	5.74409	4.65059			
	4.48532	4.64739					4.77043	10.540	
84 1-Propanol	+++++	+++++	0.42275	+++++	+++++	0.21815			
	+++++	0.23126					0.29072	39.394	<-
85 Chloroprene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
86 Vinyl Acetate	+++++	+++++	0.44222	0.37545	0.52692	0.43670			
	0.44635	0.45800					0.44761	10.833	
87 Butanal	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	

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	100.000 Level 7	200.000 Level 8						
88 Ethyl-tert-butyl ether	+++++	+++++	4.81835	4.41338	6.09666	4.87448		
	4.74626	4.92304					4.97869	11.584
89 Isobutyl chloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
90 2,2-Dichloropropane	+++++	+++++	2.84753	+++++	+++++	2.35020		
	+++++	2.41742					2.53838	10.630
91 cis-1,2-Dichloroethene	+++++	1.17417	1.24583	1.04654	1.32478	1.13129		
	1.11051	1.15238					1.16936	7.831
92 2-Butanone	+++++	+++++	0.89151	0.68627	0.94759	0.81294		
	0.80055	0.82158					0.82674	10.742
93 Methyl Acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
94 Ethyl Acetate	+++++	+++++	0.24989	+++++	+++++	0.19922		
	+++++	0.22422					0.22444	11.287
95 Methacrylonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
96 2-Chloropentane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
97 2-Butanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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	100.000 Level 7	200.000 Level 8						
99 Tetrahydrofuran	+++++	2.12001	1.65031	1.27461	1.74357	1.50362		
	1.46809	1.51322					1.61049	16.678
100 Chloroform	+++++	3.80175	3.62348	3.38114	4.10007	3.45819		
	3.33958	3.46383					3.59543	7.579
101 1-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
102 Cyclohexane	+++++	2.22520	2.22546	2.04539	2.58967	2.16645		
	2.15714	2.21923					2.23265	7.603
103 1,1,1-Trichloroethane	+++++	3.69823	3.65118	3.24811	4.14435	3.40494		
	3.33507	3.46788					3.56425	8.488
104 Chloroacetonitrile	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
105 n-Butylchloride	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
106 Carbon Tetrachloride	+++++	3.42024	3.66144	3.20340	4.23229	3.46175		
	3.41757	3.53192					3.56123	9.169
107 1,1-Dichloropropene	+++++	+++++	0.18617	+++++	+++++	0.16690		
	+++++	0.16471					0.17259	6.840
108 Thiophene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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	100.000 Level 7	200.000 Level 8						
109 2-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
110 3-Methylhexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
111 Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
113 2,2,4-Trimethylpentane	+++++	7.63188	7.37407	6.72559	9.04657	7.41932		
	7.14817	7.43774					7.54048	9.605
114 1-Methoxy-2-propanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
115 Isobutanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
116 Benzene	+++++	1.31293	1.17890	1.16671	1.51658	1.22299		
	1.21701	1.25001					1.26645	9.505
118 1-Heptene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
119 tert-Amyl methyl ether	+++++	+++++	1.16192	0.99518	1.47950	1.20270		
	1.15583	1.17404					1.19486	13.179
120 1,2-Dichloroethane	+++++	0.57441	0.52476	0.51133	0.63123	0.53851		
	0.54462	0.54772					0.55322	7.162

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	100.000 Level 7	200.000 Level 8						
121 Heptane	+++++	0.41813	0.40627	0.39283	0.53981	0.43534		
	0.43480	0.44117					0.43834	10.955
122 2,3-Dichloro-1-propene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
124 n-Butanol	+++++	+++++	0.54755	+++++	+++++	0.48214		
	+++++	0.49498					0.50822	6.819
125 Trichloroethene	+++++	0.65647	0.56102	0.52413	0.70096	0.57240		
	0.57914	0.58883					0.59756	10.119
126 Bromodichloroethene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
127 Methylcyclohexane	+++++	3.09675	2.96158	2.67903	3.74514	3.07389		
	2.93744	3.07339					3.08103	10.583
128 Ethyl acrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
129 2-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
130 3-Methylheptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
131 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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	100.000 Level 7	200.000 Level 8						
132 1,2-Dichloropropane	+++++	0.40754	0.42321	0.43929	0.55766	0.44806		
	0.44883	0.44896					0.45337	10.713
133 1-Bromo-2-Chloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
134 Methyl Methacrylate	+++++	+++++	0.54587	+++++	+++++	0.58089		
	+++++	0.60280					0.57652	4.981
135 Diethyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
136 1,4-Dioxane	+++++	+++++	0.26761	0.17590	0.33617	0.28286		
	0.28976	0.29361					0.27432	19.454
137 Dibromomethane	+++++	+++++	0.54343	+++++	+++++	0.63706		
	+++++	0.70005					0.62685	12.572
138 Bromodichloromethane	+++++	0.90275	0.90388	0.87377	1.10541	0.91332		
	0.92750	0.93919					0.93797	8.175
139 2-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
140 bis(chloromethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
141 1-Octene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 20:32
End Cal Date : 24-SEP-2015 17:21
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd17.i/24sep15.b/175q0921c.m
Cal Date : 25-Sep-2015 16:17 cbond
Curve Type : Average

Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD
	100.000 Level 7	200.000 Level 8						
142 Epichlorohydrin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
143 2-Chloroethyl Vinyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
144 cis-1,3-Dichloropropene	+++++	0.74032	0.75874	0.71240	0.95172	0.77536		
	0.78024	0.79656					0.78791	9.823
145 4-Methyl-2-pentanone	+++++	0.28334	0.29416	0.17252	0.39045	0.32937		
	0.32970	0.33541					0.30499	22.225
147 Toluene	+++++	1.61586	1.45352	1.42273	1.91757	1.55166		
	1.55247	1.60303					1.58812	10.205
148 Octane	+++++	+++++	0.33941	+++++	+++++	0.35003		
	+++++	0.35873					0.34939	2.769
149 Vinyl Cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
150 trans-1,3-Dichloropropene	+++++	0.76557	0.72216	0.68306	0.91925	0.79483		
	0.76985	0.78091					0.77652	9.490
151 Ethyl Methacrylate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
152 1-Chloro-2-Bromopropane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD	
	100.000 Level 7	200.000 Level 8							
153 1-Nitropropane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
154 Bromodichloroethane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
155 1,1,2-Trichloroethane	+++++	0.61769	0.56880	0.57429	0.72467	0.61366			
	0.58813	0.60105					0.61261	8.613	
156 Tetrachloroethene	+++++	0.91793	0.86632	0.82986	1.06913	0.88910			
	0.84981	0.87161					0.89911	8.900	
157 1,3-Dichloropropane	+++++	+++++	0.76266	+++++	+++++	0.68411			
	+++++	0.68454					0.71043	6.366	
158 2-Hexanone	+++++	+++++	0.43024	0.17196	0.55460	0.47586			
	0.47377	0.48747					0.43232	30.930	<-
159 Butyl Acetate	+++++	+++++	0.19366	+++++	+++++	0.14004			
	+++++	0.15430					0.16267	17.075	
160 Dibromochloromethane	+++++	1.17081	1.09976	0.99436	1.34382	1.13379			
	1.11469	1.14858					1.14369	9.169	
161 1,2-Dibromoethane (EDB)	+++++	0.94833	0.88889	0.89452	1.14842	0.97244			
	0.95730	0.96981					0.96853	8.915	
162 1-Nonene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	

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	100.000 Level 7	200.000 Level 8						
164 1-Chlorohexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
165 Chlorobenzene	+++++	1.32599	1.37652	1.26611	1.65197	1.40885		
	1.37338	1.41303					1.40226	8.654
166 Butyl Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
167 Ethyl Benzene	+++++	0.58458	0.63540	0.61104	0.82496	0.70757		
	0.69499	0.72208					0.68294	11.889
168 1,1,1,2-Tetrachloroethane	+++++	+++++	0.75880	+++++	+++++	0.72738		
	+++++	0.71342					0.73320	3.170
169 m,p-Xylene	+++++	0.74271	0.79583	0.72024	1.02276	0.88422		
	0.87239	0.89731					0.84792	12.276
170 Nonane	+++++	+++++	0.80540	+++++	+++++	0.91055		
	+++++	0.94302					0.88632	8.117
171 o-Xylene	+++++	0.67673	0.70458	0.69023	0.95790	0.82461		
	0.80974	0.84337					0.78674	12.987
172 Styrene	+++++	1.13581	1.15691	1.12737	1.64198	1.41734		
	1.42492	1.48941					1.34196	15.123
173 2-Heptanone	+++++	+++++	0.08817	+++++	+++++	0.05930		
	+++++	0.06115					0.06954	23.238

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	100.000 Level 7	200.000 Level 8						
174 Bromoform	+++++	1.03447	1.05576	0.99349	1.38571	1.19624		
	1.18488	1.23302					1.15479	11.850
175 Cumene	+++++	2.36035	2.21135	2.12603	3.01155	2.58167		
	2.59864	2.70250					2.51316	12.162
176 Cyclohexanone	+++++	+++++	0.65133	+++++	+++++	0.55436		
	+++++	0.56250					0.58940	9.127
178 1-Decene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
179 alpha-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
180 Bromobenzene	+++++	+++++	0.90443	+++++	+++++	0.80957		
	+++++	0.85101					0.85500	5.562
181 1,1,2,2-Tetrachloroethane	+++++	1.33413	1.28081	1.13317	1.54698	1.33545		
	1.29923	1.32776					1.32250	9.201
182 Propylbenzene	+++++	2.84701	2.72523	2.54375	3.54181	3.11531		
	3.09783	3.24871					3.01709	11.185
183 1,4-Dichloro-2-Butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
184 trans-1,4-Dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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	100.000 Level 7	200.000 Level 8						
185 1,2,3-Trichloropropane	+++++	+++++	0.41510	+++++	+++++	0.39964		
	+++++	0.40036					0.40503	2.155
186 3-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
187 Decane	+++++	+++++	0.93069	+++++	+++++	1.21527		
	+++++	1.26661					1.13752	15.908
188 4-Ethyltoluene	+++++	0.80116	0.70094	0.67383	0.92766	0.83689		
	0.79177	0.86089					0.79902	11.096
189 2-Chlorotoluene	+++++	+++++	0.66023	+++++	+++++	0.59949		
	+++++	0.65234					0.63735	5.182
190 1,3,5-Trimethylbenzene	+++++	0.88364	0.94535	0.87103	1.27258	1.09561		
	1.13010	1.15027					1.04980	14.486
191 4-Chlorotoluene	+++++	+++++	0.66513	+++++	+++++	0.61798		
	+++++	0.69098					0.65803	5.625
192 beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
193 Diisobutyl Ketone	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
194 alpha Methyl Styrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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	100.000 Level 7	200.000 Level 8						
195 tert-Butylbenzene	+++++	+++++	1.97024	+++++	+++++	1.90679		
	+++++	2.03461					1.97055	3.243
196 1,2,4-Trimethylbenzene	+++++	0.84087	0.84742	0.77545	1.09898	0.99323		
	0.99528	1.04586					0.94244	12.836
197 Pentachloroethane	+++++	+++++	0.49809	+++++	+++++	0.68455		
	+++++	0.74161					0.64142	19.856
198 Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
199 D-Limonene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
200 Benzaldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
201 Indan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
202 Indene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
203 sec-Butylbenzene	+++++	+++++	0.62084	+++++	+++++	0.59759		
	+++++	0.62187					0.61343	2.238
204 Isobutylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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	100.000 Level 7	200.000 Level 8						
205 2-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
206 bis(2-Chloroethyl) Ether	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
207 p-Cymene	+++++	+++++	2.60444	+++++	+++++	2.55549		
	+++++	2.63740					2.59911	1.586
208 1,3-Dichlorobenzene	+++++	1.42062	1.44525	1.28040	1.74872	1.54834		
	1.55784	1.61058					1.51596	9.913
209 1,4-Dichlorobenzene	+++++	1.28723	1.43177	1.29117	1.73352	1.56745		
	1.55784	1.62992					1.49984	11.316
210 1,2,3-Trimethylbenzene	+++++	+++++	1.00025	+++++	+++++	0.98293		
	+++++	1.04661					1.00993	3.260
211 1-Undecene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
212 alpha-Chlorotoluene	+++++	1.61363	1.49455	1.28822	2.08865	1.92071		
	1.96218	2.11620					1.78345	17.911
213 Butylbenzene	+++++	+++++	0.71110	+++++	+++++	0.69676		
	+++++	0.62613					0.67800	6.709
214 1,2-Dichlorobenzene	+++++	1.31692	1.36120	1.21373	1.64359	1.48043		
	1.47919	1.55649					1.43593	10.276

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	100.000 Level 7	200.000 Level 8						
215 Undecane	+++++	+++++	0.98931	+++++	+++++	1.31784		
	+++++	1.50351					1.27022	20.499
216 4-Ethyl-1,2-dimethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
217 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
218 1,3-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
219 1,4-Diethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
220 1,2,4,5-tetramethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
221 1,2-Dibromo-3-chloropropane	+++++	+++++	1.01087	+++++	+++++	0.89964		
	+++++	1.00633					0.97228	6.475
222 1-Dodecene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
223 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
224 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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	100.000 Level 7	200.000 Level 8						
225 Dodecane	+++++	+++++	0.77889	+++++	+++++	1.10157		
	+++++	1.49063					1.12370	31.716
226 1,2,4-Trichlorobenzene	+++++	+++++	1.17307	0.96135	1.27909	1.29747		
	1.34170	1.43067					1.24723	13.093
227 Hexachlorobutadiene	+++++	+++++	1.04908	0.87132	1.10501	1.07884		
	1.11840	1.20305					1.07095	10.335
228 Naphthalene	1.77954	+++++	+++++	+++++	1.22837	1.00421		
	1.00308	0.94113					1.19126	29.092
229 1,2,3-Trichlorobenzene	+++++	+++++	0.80929	+++++	+++++	0.63959		
	+++++	0.84879					0.76589	14.513
230 Tridecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
231 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
232 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
233 1,3,5-Triethylbenzene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
234 Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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	100.000 Level 7	200.000 Level 8						
235 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
236 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
M 237 1,2-Dichloroethene (Total)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
M 238 Chlorobutane (Total)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
M 239 Total Xylene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
M 240 3 and 4-Ethyltoluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
241 Total Volatile Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
242 TPH reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
243 TPH reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
244 TPH reference to Gasoline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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	100.000 Level 7	200.000 Level 8						
245 TPH reference MineralSpirits	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
246 TPH reference to Stoddard	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
247 TVOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
248 TVOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
249 TVOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
250 TVOC reference to Toluene-d8	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
251 NMOC reference to Hexane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
252 NMOC reference to Heptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
253 NMOC reference to Toluene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
254 C3 - C4 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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	100.000 Level 7	200.000 Level 8						
255 C4 - C5 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
256 C5 - C6 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
257 C6 - C7 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
258 C7 - C8 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
259 C8 - C9 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
260 C9 - C10 Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
261 C10+ Hydrocarbons	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
262 C5 - C6 Aliphatic ref C5 + C6	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
263 C6-C8 Aliphatic ref Heptane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
264 C8-C10 Aliphatic ref Decane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2015 20:32
End Cal Date : 24-SEP-2015 17:21
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd17.i/24sep15.b/175q0921c.m
Cal Date : 25-Sep-2015 16:17 cbond
Curve Type : Average

Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	___ RRF	% RSD
	100.000 Level 7	200.000 Level 8						
265 C10-C12 Aliphatic ref Dodecan	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
266 C8-C10 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
267 C8-C10 Aromatic ref 1,2,3-TMB	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
268 C10-C12 Aromatic	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
269 C10-C12 Aromatic 1,2,4,5-TMB	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
270 C10-C12 Aromatic Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
$ 112 Benzene-d6	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
$ 117 1,2-Dichloroethane-d4	+++++	1.27319	1.39125	1.36777	1.33656	1.36474		
	1.32719	1.36923					1.34713	2.898
$ 146 Toluene-d8	+++++	1.01159	1.01542	1.03062	1.02494	1.02933		
	1.04997	1.05341					1.03075	1.545
$ 177 4-Bromofluorobenzene	+++++	0.61716	0.61594	0.62132	0.63545	0.66080		
	0.64588	0.67161					0.63831	3.454

Calibration History

Method : /chem/msd17.i/24sep15.b/175q0921c.m
Start Cal Date: 21-SEP-2015 20:32
End Cal Date : 24-SEP-2015 17:21

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 10.00000		
24-SEP-2015 15:25	Naphcrv	/chem/msd17.i/24sep15.b/17092414.d
Cal Level: 2 , Cal Amount: 0.50000		
21-SEP-2015 20:32	AT12low	/chem/msd17.i/21sep15a.b/17092118.d
Cal Level: 3 , Cal Amount: 2.00000		
24-SEP-2015 13:15	AT1	/chem/msd17.i/24sep15.b/17092411.d
24-SEP-2015 12:00	Combo	/chem/msd17.i/24sep15.b/17092408.d
24-SEP-2015 10:29	123TCB	/chem/msd17.i/24sep15.b/17092405.d
21-SEP-2015 21:07	AT12mdlnoNaph	/chem/msd17.i/21sep15a.b/17092119.d
Cal Level: 4 , Cal Amount: 5.00000		
21-SEP-2015 21:52	AT12mdlnoNaph	/chem/msd17.i/21sep15a.b/17092120.d
Cal Level: 5 , Cal Amount: 20.00000		
24-SEP-2015 15:59	Naphcrv	/chem/msd17.i/24sep15.b/17092415.d
21-SEP-2015 22:31	AT12noNaph	/chem/msd17.i/21sep15a.b/17092121.d
Cal Level: 6 , Cal Amount: 50.00000		
24-SEP-2015 16:22	Naphcrv	/chem/msd17.i/24sep15.b/17092416.d
24-SEP-2015 13:50	AT1	/chem/msd17.i/24sep15.b/17092412.d
24-SEP-2015 12:23	Combo	/chem/msd17.i/24sep15.b/17092409.d
24-SEP-2015 11:04	123TCB	/chem/msd17.i/24sep15.b/17092406.d
21-SEP-2015 22:55	AT12noNaph	/chem/msd17.i/21sep15a.b/17092122.d
Cal Level: 7 , Cal Amount: 100.00000		

24-SEP-2015 16:58	Naphcrv	/chem/msd17.i/24sep15.b/17092417.d
21-SEP-2015 23:31	AT12noNaph	/chem/msd17.i/21sep15a.b/17092123.d

Cal Level: 8 , Cal Amount: 200.00000		
24-SEP-2015 17:21	Naphcrv	/chem/msd17.i/24sep15.b/17092418.d
24-SEP-2015 14:13	AT1	/chem/msd17.i/24sep15.b/17092413.d
24-SEP-2015 12:46	Combo	/chem/msd17.i/24sep15.b/17092410.d
24-SEP-2015 11:27	123TCB	/chem/msd17.i/24sep15.b/17092407.d
21-SEP-2015 23:54	AT12noNaph	/chem/msd17.i/21sep15a.b/17092124.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 50.000		
24-SEP-2015 08:49	AT12noNaph	/chem/msd17.i/24sep15.b/17092402c.d

Ccal Level: 6 , Ccal Amount: 50.000		
24-SEP-2015 16:22	NaphCCV	/chem/msd17.i/24sep15.b/17092416a.d

Ccal Level: 6 , Ccal Amount: 50.000		
24-SEP-2015 16:22	Naphcrv	/chem/msd17.i/24sep15.b/17092416.d

Eurofins Air Toxics Inc.

INITIAL CALIBRATION DATA

CB 9/25/15

Start Cal Date : 21-SEP-2015 20:32
End Cal Date : 24-SEP-2015 17:21
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem/msd17.i/25sep15.b/175q0921c.m
Cal Date : 25-Sep-2015 16:02 cbond
Curve Type : Average

Calibration File Names:
Level 1: /chem/msd17.i/24sep15.b/17092414.d
Level 2: /chem/msd17.i/21sep15a.b/17092118.d
Level 3: /chem/msd17.i/24sep15.b/17092411.d
Level 4: /chem/msd17.i/21sep15a.b/17092120.d
Level 5: /chem/msd17.i/24sep15.b/17092415.d
Level 6: /chem/msd17.i/24sep15.b/17092416.d
Level 7: /chem/msd17.i/24sep15.b/17092417.d
Level 8: /chem/msd17.i/24sep15.b/17092418.d

Please see Calibration History page(s) for all the calibration files.

Compound	10.000 Level 1	0.50000 Level 2	2.000 Level 3	5.000 Level 4	20.000 Level 5	50.000 Level 6	100.000 Level 7	200.000 Level 8	RRF	% RSD	
1 Dimethyl Ether	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
2 Freon 14	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
3 Acetaldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
4 Hexafluoropropene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
5 Freon 13	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	
6 Freon 143a	+++++	+++++	0.55909	+++++	+++++	0.57640	+++++	0.18468	0.44005	50.297	<-
7 Freon 134a	+++++	+++++	1.53904	+++++	+++++	1.29587	+++++	0.88703	1.24065	26.558	

Initial Calibration Narrative

175q0921C.m

A multi-point initial calibration was analyzed on MSD-17 on 09/21/15 for AT12 minus Naph.

ICAL: 1 out – 2-Hexanone @ 31% RSD

ICV: 0 out
File: 17092127, 100ml: 2736-188A (100ppbv->50ppbv)
17092505, 100ml: 2736-188A (10ppbv->5ppbv Naphthalene)
Naphthalene ICV canister expired 9/12/15 – CAR #F9A2A2185)

OK for AFCEE and DoD unless Naph required.

BFB TUNE FILE:

A) 17092117
B) 17092401
C) 17092501

MDL: The TO-15 MDL was analyzed 03/12/2015 and 03/17/2015.

A three point initial calibration was analyzed for **1,2,3 Trichlorbenzene** on 09/24/15 – **0 out**

A three point initial calibration was analyzed for **Combo Special** on 09/24/15 – **0 out**
Acetonitrile has a two point calibration at 50ppbv and 200ppbv. 2-Heptanone was miss-identified but not needed for samples; therefore it was disabled from calibration.

A three point initial calibration was analyzed for **AT1 Compounds** on 09/24/15 – **1 out: Freon 143a and NO ISOBUTANOL.**

A five point initial calibration was analyzed for **Naphthalene** on 09/24/15.

MSD17

BFB verification of 176/174 ratio:	(111461/116408) * 100 = 95.75%		
	2736-191	Exp. Date:	11/14/2015
BCM	116,527		
1,4-DFB	475,185		
CB-d5	418,099		

Method TO-15/TO-14			
SOP# 6			
Vacuum:	na		
Please check all standards			
Surrogate#	2736-191	Exp. Date:	11/14/2015
Surrogate#	NA	Exp. Date:	NA

Verified CCV vs ICAL mid-point (-40%): cb

Method: 175Q0921A.m

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	Amount	DF	Verify Load	Loaded By	Date Analyzed	Time Analyzed	Review Init	Comments
√	17092117	BFB Tune Check	2736-191	12	36ng	1.0ml	1.00	gh	gh	09/21/15	1945	gh	
√	17092118	I Cal Level #2	2736-257	1	0.5ppbv(2.0ppbv)	50ml	1.00	gh	gh	09/21/15	2032	mjs	exp. 11/20/15
√	17092119	I Cal Level #3	2736-257	1	2.0ppbv(2.0pbbv)	200ml	1.00	gh	gh	09/21/15	2107	mjs	exp. 11/20/15
√	17092120	I Cal Level #4	2737-258	3	5.0ppbv(5.0ppbv)	200ml	1.00	mjs	gh	09/21/15	2152	mjs	exp. 11/20/15
√	17092121	I Cal Level #5	2737-240	2	20ppbv(200ppbv)	20ml	1.00	mjs	gh	09/21/15	2231	mjs	exp. 11/20/15
√	17092122	I Cal Level #6	2737-240	2	50ppbv(200ppbv)	50ml	1.00	mjs	gh	09/21/15	2255	mjs	exp. 11/20/15; CCV
√	17092123	I Cal Level #7	2737-240	2	100ppbv(200ppbv)	100ml	1.00	mjs	gh	09/21/15	2331	mjs	exp. 11/20/15
√	17092124	I Cal Level #8	2737-240	2	200ppbv(200ppbv)	200ml	1.00	mjs	gh	09/21/15	2354	mjs	exp. 11/20/15
√	17092125	System Blank	33555	12	humid	200ml	1.00	mjs	gh	09/22/15	0031	mjs	
√	17092126	System Blank	33555	12	humid	200ml	1.00	mjs	gh	09/22/15	0055	mjs	
√	17092127	ICV	2736-188A	14	50ppbv(100ppbv)	100ml	1.00	cb	gh	09/22/15	0753	cb	exp 11/11/15

cb 9/22/15

MSD17

BFB verification of 176/174 ratio:	(101344/104328) * 100 = 97.14%	
	2736-191	Exp. Date: 11/14/2015
BCM	102,227	
1,4-DFB	417,792	
CB-d5	379,305	

Method TO-15/TO-14			
SOP# 6			
Vacuum:	na		
Please check all standards			
Surrogate#	2736-191	Exp. Date:	11/14/2015
Surrogate#	NA	Exp. Date:	NA

Verified CCV vs ICAL mid-point (-40%): cb

Method: 175Q09218.m

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	Amount	DF	Verify Load	Loaded By	Date Analyzed	Time Analyzed	Review Init	Comments
√	17092401	BFB Tune Check	2736-191	12	36ng	1.0ml	1.00	cb	cb	09/24/15	0806	cb	
√	17092402	CCV	2737-240	13	50ppbv(200ppbv)	50ml	1.00	cb	cb	09/24/15	0849	cb	exp. 11/20/15; 0 out
√	17092403	LCS	2736-188A	14	50ppbv(100ppbv)	100ml	1.00	cb	cb	09/24/15	0921	cb	exp 10/30/15; 0 out
√	17092404	LCSD	2736-188A	14	50ppbv(100ppbv)	100ml	1.00	cb	cb	09/24/15	0951	cb	exp 10/30/15;
√	17092405	ICAL Level 3	2736-111	1	2.0ppbv(2.0ppbv)	200ml	1.00	cb	cb	09/24/15	1029	cb	exp. 10/7/15; 1,2,3-TCB
√	17092406	ICAL Level 6	2736-107	2	50ppbv(200ppbv)	50ml	1.00	cb	cb	09/24/15	1104	cb	exp. 10/7/15; 1,2,3-TCB; CCV
√	17092407	ICAL Level 8	2736-107	2	200ppbv(200ppbv)	200ml	1.00	cb	cb	09/24/15	1127	cb	exp. 10/7/15; 1,2,3-TCB
√	17092408	ICAL Level 3	2736-223	3	2.0ppbv(5.0ppbv)	80ml	1.00	cb	cb	09/24/15	1200	cb	exp. 11/21/15; Combo
√	17092409	ICAL Level 6	2736-222	4	50ppbv(200ppbv)	50ml	1.00	cb	cb	09/24/15	1223	cb	exp. 11/21/15; Combo; CCV
√	17092410	ICAL Level 8	2736-222	4	200ppbv(200ppbv)	200ml	1.00	cb	cb	09/24/15	1246	cb	exp. 11/21/15; Combo
√	17092411	ICAL Level 3	2736-198	1	2.0ppbv(2.0ppbv)	200ml	1.00	cb	cb	09/24/15	1315	cb	exp. 11/21/15; AT-1
√	17092412	ICAL Level 6	2736-197	2	50ppbv(200ppbv)	50ml	1.00	cb	cb	09/24/15	1350	cb	exp. 11/21/15; AT-1; CCV
√	17092413	ICAL Level 8	2736-197	2	200ppbv(200ppbv)	200ml	1.00	cb	cb	09/24/15	1413	cb	exp. 11/21/15; AT-1
√	17092414	ICAL Level 1	2736-262	7	1.0ppbv(20ppbv)	10ml	1.00	gh	cb	09/24/15	1525	gh	exp 12/22/15; Naphthalene
√	17092415	ICAL Level 5	2736-262	7	2.0ppbv(20ppbv)	20ml	1.00	gh	cb	09/24/15	1559	gh	exp 12/22/15; Naphthalene
√	17092416	ICAL Level 6	2736-262	7	5.0ppbv(20ppbv)	50ml	1.00	gh	cb	09/24/15	1622	gh	exp 12/22/15; Naphthalene; CCV
√	17092417	ICAL Level 7	2736-262	7	10ppbv(20ppbv)	100ml	1.00	gh	cb	09/24/15	1658	gh	exp 12/22/15; Naphthalene
√	17092418	ICAL Level 8	2736-262	7	20ppbv(20ppbv)	200ml	1.00	gh	cb	09/24/15	1721	gh	exp 12/22/15; Naphthalene
√	17092419	System Blank	33555	12	humid	200ml	1.00	gh	gh	09/24/15	1746	gh	Naph<RL
√	17092420	System Blank	33555	12	humid	200ml	1.00	gh	gh	09/24/15	1813	gh	Naph<RL
X	17092421	ICV	2736-280	7	5.0ppbv(20ppbv)	50ml	1.00	gh	gh	09/24/15	1908	gh	exp 12/22/15; Naphthalene
√	17092422	Lab Blank	33555	12	humid	200ml	1.00	gh	gh	09/24/15	1955	gh	<RL
√	17092423	1509353-01A	1L Bag	1	QCF-GET-Air-1509222	200ml	1.00	gh	gh	09/24/15	2039	gh	
√	17092424	1509279B-08A	1L2711	1	4.1 Hg->14.9 psi	200ml	2.33	gh	gh	09/24/15	2206	gh	
√	17092425	1509279B-08AA	1L2711	1	4.1 Hg->14.9 psi	200ml	2.33	gh	gh	09/24/15	2229	cb	
√	17092426	1509344-01A	37799	2	5.5 Hg->15 psi	30ml	16.5	mjs	gh	09/24/15	2304	cb	
√	17092427	1509344-02A	35626	3	6.0 Hg->15 psi	200ml	2.52	mjs	gh	09/24/15	2328	cb	"E" flag Fr152a
√	17092428	1509344-03A	30823	4	6.0 Hg->15 psi	200ml	2.52	mjs	gh	09/25/15	0004	cb	"E" flag Fr152a
√	17092429	1509344-04A	20781	5	5.5 Hg->15 psi	20ml	24.7	mjs	gh	09/25/15	0027	cb	"E" flag Fr152a
√	17092430	1509344-05A	15755	6	4.5 Hg->15 psi	200ml	2.38	mjs	gh	09/25/15	0104	cb	Fr152a < 5X RL
√	17092431	1509346-01A	34470	7	6.5 Hg->5 psi	200ml	1.71	mjs	gh	09/25/15	0127	cb	
√	17092432	1509346-02A	33864	8	8.0 Hg->5 psi	200ml	1.83	mjs	gh	09/25/15	0204	cb	

Chad 9/25/15

MSD17

BFB verification of 176/174 ratio: (82816/86792) * 100 = 95.42%

	2736-191	Exp. Date:	11/14/2015
BCM	100,313		
1,4-DFB	396,584		
CB-d5	367,479		

Method TO-15/TO-14	
SOP# 6	
Vacuum:	na
Please check all standards	

Surrogate#	2736-191	Exp. Date:	11/14/2015
Surrogate#	NA	Exp. Date:	NA

Verified CCV vs ICAL mid-point (-40%): cb

Method: 175Q0921C.m

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	Amount	DF	Verify Load	Loaded By	Date Analyzed	Time Analyzed	Review Init	Comments
√	17092501	BFB Tune Check	2736-191	12	36ng	1.0ml	1.00	cb	cb	09/25/15	0906	cb	
X	17092502	Test Std	2736-280	1	5.0ppbv(20ppbv)	50ml	1.00	cb	cb	09/25/15	0938	cb	exp 12/22/15
X	17092503	CCVsp	2736-262	2	5.0ppbv(20ppbv)	50ml	1.00	cb	cb	09/25/15	1032	cb	exp 12/22/15; Naphthalene
√	17092504	CCV	2737-240	13	50ppbv(200ppbv)	50ml	1.00	cb	cb	09/25/15	1103	cb	exp. 11/20/15; 0 out
√	17092505	LCS	2736-188A	14	50ppbv(100ppbv)	100ml	1.00	cb	cb	09/25/15	1139	cb	exp 10/30/15; 0 out; Naph ICV
√	17092506	LCSD	2736-188A	14	50ppbv(100ppbv)	100ml	1.00	cb	cb	09/25/15	1202	cb	exp 10/30/15;
√	17092507	System Blank	33555	12	Humid	200ml	1.00	cb	cb	09/25/15	1239	cb	
√	17092508	CCVsp	2736-262	2	5.0ppbv(20ppbv)	50ml	1.00	cb	cb	09/25/15	1311	cb	exp 12/22/15; Naphthalene
	~~17092509~~	~~CCVsp~~	~~2736-107~~	~~4~~	~~50ppbv(200ppbv)~~	~~50ml~~	~~1.00~~			~~09/25/15~~			~~exp. 10/7/15; 1,2,3-TCB~~
	17092510	CCVsp	2736-197	5	50ppbv(200ppbv)	50ml	1.00			09/25/15			exp. 11/21/15; AT-1; CCV
	17092511	Lab Blank	33555	12	Humid	200ml	1.00			09/25/15			exp 10/30/15; 0 out

CB 9/25/15

9/25/15 CB 9/25/15

Modified EPA Methods TO-14A/TO-15
Internal Standard and Associated Target Compounds and Surrogates

Bromochloromethane
Target Compounds:
Freon 12
Freon 114
Chloromethane
Vinyl Chloride
1,3-Butadiene
Bromomethane
Chloroethane
Freon 11
Ethanol
Freon 113
1,1-Dichloroethene
Acetone
2-Propanol
Carbon Disulfide
3-Chloropropene
Methylene Chloride
Methyl tert-butyl ether
trans-1,2-Dichloroethene
Hexane
1,1-Dichloroethane
2-Butanone (Methyl Ethyl Ketone)
cis-1,2-Dichloroethene
Tetrahydrofuran
Chloroform
1,1,1-Trichloroethane
Cyclohexane
Carbon Tetrachloride
2,2,4-Trimethylpentane
Surrogates:
1,2-Dichloroethane-d4

1,4-Difluorobenzene
Target Compounds:
Benzene
1,2-Dichloroethane
Heptane
Trichloroethene
1,2-Dichloropropane
1,4-Dioxane
Bromodichloromethane
cis-1,3-Dichloropropene
4-Methyl-2-pentanone
Toluene
Surrogates:
Toluene-d8

Chlorobenzene-d5
Target Compounds:
trans-1,3-Dichloropropene
1,1,2-Trichloroethane
Tetrachloroethene
2-Hexanone
Dibromochloromethane
1,2-Dibromoethane (EDB)
Chlorobenzene
Ethyl Benzene
m,p-Xylene
o-Xylene
Styrene
Bromoform
Cumene
1,1,2,2-Tetrachloroethane
Propylbenzene
4-Ethyltoluene
1,3,5-Trimethylbenzene
1,2,4-Trimethylbenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
alpha-Chlorotoluene
1,2-Dichlorobenzene
1,2,4-Trichlorobenzene
Hexachlorobutadiene
Surrogates:
Bromofluorobenzene

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/21sep15a.b/17092127.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 22-SEP-2015 07:53
Operator : cb Inst ID: msd17.i
Smp Info : 100ml #2736-188A
Misc Info : 50ppbv(100ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/21sep15a.b/175q0921a.m
Meth Date : 25-Sep-2015 15:05 cbond Quant Type: ISTD
Cal Date : 21-SEP-2015 23:31 Cal File: 17092123.d
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12noNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.528	5.528 (1.000)	130	117099	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	90304			46.54- 106.54	77.12
5.528	5.528 (1.000)	49	135549			83.83- 143.83	115.76
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.416	6.416 (1.000)	114	477585	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	72690			0.00- 44.86	15.22
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	433695	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	235876			23.93- 83.93	54.39
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.065	6.065 (1.097)	65	162736	25.7905	25.790	80.00- 120.00	100.00
6.065	6.065 (1.097)	67	88133			25.51- 85.51	54.16

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.189)	98	493019	25.0379	25.038	80.00- 120.00	100.00
7.627	7.627 (1.189)	70	52130			0.00- 40.39	10.57
7.627	7.627 (1.189)	100	314392			33.97- 93.97	63.77
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.847	9.854 (1.111)	174	276694	24.9877	24.988	80.00- 120.00	100.00
9.847	9.847 (1.111)	95	315562			79.64- 139.64	114.05
9.854	9.847 (1.111)	176	274854			65.80- 125.80	99.34
9 Propylene					CAS #: 115-07-1		
1.517	1.517 (0.274)	41	200334	43.1188	43.119	80.00- 120.00	100.00
1.517	1.517 (0.274)	42	133737			37.10- 97.10	66.76
1.517	1.517 (0.274)	39	148421			44.98- 104.98	74.09
11 Freon 12					CAS #: 75-71-8		
1.552	1.552 (0.281)	85	837362	44.4293	44.429	80.00- 120.00	100.00
1.552	1.552 (0.281)	87	272986			2.33- 62.33	32.60
15 Freon 114					CAS #: 76-14-2		
1.674	1.674 (0.303)	135	631026	46.1261	46.126	80.00- 120.00	100.00
1.674	1.674 (0.303)	137	202583			2.02- 62.02	32.10
17 Chloromethane					CAS #: 74-87-3		
1.760	1.760 (0.318)	50	283842	43.0404	43.040	80.00- 120.00	100.00
1.760	1.760 (0.318)	52	94179			2.35- 62.35	33.18
23 Butane					CAS #: 106-97-8		
1.839	1.839 (0.333)	58	64574	44.6460	44.646	80.00- 120.00	100.00
1.839	1.839 (0.333)	43	426359			657.81- 717.81	660.26
25 Vinyl Chloride					CAS #: 75-01-4		
1.875	1.875 (0.339)	62	323903	43.4559	43.456	80.00- 120.00	100.00
1.875	1.875 (0.339)	64	103909			2.69- 62.69	32.08
26 1,3-Butadiene					CAS #: 106-99-0		
1.903	1.903 (0.344)	54	226974	43.8896	43.890	80.00- 120.00	100.00
1.903	1.903 (0.344)	39	211655			63.95- 123.95	93.25
29 Bromomethane					CAS #: 74-83-9		
2.261	2.262 (0.409)	94	301222	45.6262	45.626	80.00- 120.00	100.00
2.261	2.262 (0.409)	96	285940			63.69- 123.69	94.93
30 Chloroethane					CAS #: 75-00-3		
2.383	2.383 (0.431)	64	167563	44.3469	44.347	80.00- 120.00	100.00
2.383	2.376 (0.431)	66	52911			1.86- 61.86	31.58

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.383	2.383 (0.431)	49	42717			0.00- 55.51	25.49
31 Isopentane					CAS #: 78-78-4		
2.405	2.405 (0.435)	43	323388	44.1228	44.123	80.00- 120.00	100.00
2.405	2.405 (0.435)	57	247928			44.35- 104.35	76.67
35 Freon 11					CAS #: 75-69-4		
2.634	2.634 (0.476)	101	862741	44.4553	44.455	80.00- 120.00	100.00
2.634	2.634 (0.476)	103	557173			35.20- 95.20	64.58
42 Ethanol					CAS #: 64-17-5		
2.992	2.992 (0.541)	45	116754	44.9319	44.932	80.00- 120.00	100.00
2.992	2.992 (0.541)	43	25976			0.00- 50.36	22.25
2.992	2.992 (0.541)	46	45574			10.31- 70.31	39.03
49 Freon 113					CAS #: 76-13-1		
3.286	3.286 (0.594)	151	583979	42.2340	42.234	80.00- 120.00	100.00
3.286	3.286 (0.594)	153	370580			33.72- 93.72	63.46
3.286	3.286 (0.594)	101	724400			95.23- 155.23	124.05
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.314	3.315 (0.600)	98	216453	42.4623	42.462	80.00- 120.00	100.00
3.314	3.315 (0.600)	96	337024			130.14- 190.14	155.70
3.314	3.315 (0.600)	61	533233			218.16- 278.16	246.35
52 Acetone					CAS #: 67-64-1		
3.479	3.479 (0.629)	58	151072	42.8966	42.897	80.00- 120.00	100.00
3.479	3.479 (0.629)	43	454019			266.49- 326.49	300.53
56 Carbon Disulfide					CAS #: 75-15-0		
3.551	3.551 (0.642)	76	901925	38.3142	38.314	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.651	3.651 (0.660)	45	533905	48.8704	48.870	80.00- 120.00	100.00
3.651	3.651 (0.660)	43	109511			0.00- 50.02	20.51
3.651	3.651 (0.660)	59	22091			0.00- 34.32	4.14
58 3-Chloropropene					CAS #: 107-05-1		
3.794	3.794 (0.686)	76	159009	41.8977	41.898	80.00- 120.00	100.00
3.794	3.794 (0.686)	41	345366			185.01- 245.01	217.20
66 Methylene Chloride					CAS #: 75-09-2		
3.981	3.981 (0.720)	49	357398	43.2936	43.294	80.00- 120.00	100.00
3.981	3.981 (0.720)	84	304259			59.02- 119.02	85.13
3.981	3.981 (0.720)	51	111491			1.78- 61.78	31.20

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.196	4.196 (0.759)	73	906556	42.3952	42.395	80.00- 120.00	100.00
4.196	4.196 (0.759)	57	198602			0.00- 51.46	21.91
4.196	4.196 (0.759)	41	175874			0.00- 49.34	19.40
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.217	4.224 (0.763)	98	197171	38.8212	38.821	80.00- 120.00	100.00
4.217	4.217 (0.763)	61	419568			184.16- 244.16	212.79
4.217	4.217 (0.763)	96	303356			127.84- 187.84	153.85
78 Hexane					CAS #: 110-54-3		
4.425	4.432 (0.800)	57	491441	42.5432	42.543	80.00- 120.00	100.00
4.425	4.432 (0.800)	43	278895			27.64- 87.64	56.75
4.432	4.432 (0.802)	86	85305			0.00- 46.92	17.36
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.711	4.711 (0.852)	63	608910	44.3148	44.315	80.00- 120.00	100.00
4.711	4.711 (0.852)	65	192162			2.04- 62.04	31.56
83 Isopropyl ether					CAS #: 108-20-3		
4.196	4.697 (0.759)	45	44338	1.98429	1.984	80.00- 120.00	100.00(a)
4.425	4.704 (0.800)	87	5762			1.31- 61.31	13.00
4.217	4.704 (0.763)	59	17519			0.00- 42.69	39.51
86 Vinyl Acetate					CAS #: 108-05-4		
4.754	4.754 (0.860)	86	88522	42.2222	42.222	80.00- 120.00	100.00
4.754	4.754 (0.860)	43	782091			891.41- 951.41	883.50
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.299	5.299 (0.959)	98	261223	47.6927	47.693	80.00- 120.00	100.00
5.299	5.299 (0.959)	96	404195			124.38- 184.38	154.73
5.299	5.299 (0.959)	61	493111			162.07- 222.07	188.77
92 2-Butanone					CAS #: 78-93-3		
5.327	5.327 (0.964)	72	166228	42.9262	42.926	80.00- 120.00	100.00
5.327	5.327 (0.964)	43	570388			306.33- 366.33	343.14
5.327	5.327 (0.964)	57	50801			0.00- 59.26	30.56
99 Tetrahydrofuran					CAS #: 109-99-9		
5.528	5.528 (1.000)	42	308288	40.8682	40.868	80.00- 120.00	100.00
5.528	5.528 (1.000)	71	148429			17.72- 77.72	48.15
5.528	5.528 (1.000)	72	155984			20.99- 80.99	50.60
100 Chloroform					CAS #: 67-66-3		
5.592	5.592 (1.012)	83	705982	41.9208	41.921	80.00- 120.00	100.00
5.592	5.592 (1.012)	85	459464			34.67- 94.67	65.08

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
102 Cyclohexane					CAS #: 110-82-7		
5.693	5.693 (1.030)	84	453050	43.3224	43.322	80.00- 120.00	100.00
5.685	5.686 (1.028)	56	479803			77.09- 137.09	105.91
5.685	5.686 (1.028)	41	252650			25.87- 85.87	55.77
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.707	5.714 (1.032)	97	707299	42.3664	42.366	80.00- 120.00	100.00
5.707	5.714 (1.032)	99	447563			34.33- 94.33	63.28
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.822	5.822 (1.053)	119	716988	42.9832	42.983	80.00- 120.00	100.00
5.822	5.822 (1.053)	117	738799			74.90- 134.90	103.04
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.088)	57	1539362	43.5842	43.584	80.00- 120.00	100.00
6.015	6.015 (1.088)	56	489670			1.80- 61.80	31.81
6.015	6.015 (1.088)	41	395331			0.00- 55.83	25.68
116 Benzene					CAS #: 71-43-2		
6.044	6.044 (0.942)	78	1023786	42.3166	42.317	80.00- 120.00	100.00
6.044	6.044 (0.942)	77	251879			0.00- 54.08	24.60
119 tert-Amyl methyl ether					CAS #: 994-05-8		
5.592	6.108 (1.012)	87	75516	13.4930	13.493	80.00- 120.00	100.00
5.592	6.108 (1.012)	73	359			376.57- 436.57	0.48
5.549	6.108 (1.004)	55	321			64.52- 124.52	0.43
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.130	6.130 (0.955)	62	452618	42.8272	42.827	80.00- 120.00	100.00
6.130	6.137 (0.955)	64	148720			2.16- 62.16	32.86
121 Heptane					CAS #: 142-82-5		
6.187	6.187 (0.964)	71	361521	43.1733	43.173	80.00- 120.00	100.00
6.187	6.187 (0.964)	43	508187			110.94- 170.94	140.57
6.187	6.187 (0.964)	57	307069			53.72- 113.72	84.94
125 Trichloroethene					CAS #: 79-01-6		
6.609	6.610 (1.030)	95	537939	47.1236	47.124	80.00- 120.00	100.00
6.609	6.610 (1.030)	130	555767			74.97- 134.97	103.31
6.609	6.610 (1.030)	97	340509			35.33- 95.33	63.30
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.212)	83	619735	42.9434	42.943	80.00- 120.00	100.00
6.703	6.703 (1.212)	98	288945			16.41- 76.41	46.62
6.703	6.703 (1.212)	55	443991			40.41- 100.41	71.64

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.846	6.846 (1.067)	63	379307	43.7956	43.796	80.00- 120.00	100.00
6.846	6.846 (1.067)	62	263009			38.78- 98.78	69.34
6.846	6.846 (1.067)	41	188940			20.16- 80.16	49.81
136 1,4-Dioxane					CAS #: 123-91-1		
6.939	6.939 (1.081)	88	239471	45.6968	45.697	80.00- 120.00	100.00
6.939	6.939 (1.081)	58	153659			31.02- 91.02	64.17
6.939	6.939 (1.081)	57	51796			0.00- 51.33	21.63
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.103)	83	783898	43.7481	43.748	80.00- 120.00	100.00
7.075	7.075 (1.103)	85	499696			34.16- 94.16	63.75
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.448	7.448 (1.161)	75	613446	40.7560	40.756	80.00- 120.00	100.00
7.448	7.448 (1.161)	77	192638			1.57- 61.57	31.40
7.448	7.448 (1.161)	39	268130			13.98- 73.98	43.71
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.555	7.555 (1.178)	58	285197	48.9490	48.949	80.00- 120.00	100.00
7.555	7.555 (1.178)	43	675251			205.93- 265.93	236.77
7.555	7.555 (1.178)	85	139044			18.04- 78.04	48.75
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.198)	91	1292916	42.6164	42.616	80.00- 120.00	100.00
7.684	7.684 (1.198)	92	719487			27.24- 87.24	55.65
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.927	7.928 (0.894)	75	584019	43.3541	43.354	80.00- 120.00	100.00
7.927	7.928 (0.894)	77	184555			1.57- 61.57	31.60
7.927	7.928 (0.894)	39	249051			13.98- 73.98	42.64
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.085	8.085 (0.912)	97	444447	41.8205	41.820	80.00- 120.00	100.00
8.085	8.085 (0.912)	99	277548			31.05- 91.05	62.45
8.085	8.085 (0.912)	83	399958			58.29- 118.29	89.99
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.916)	166	641059	41.1000	41.100	80.00- 120.00	100.00
8.121	8.121 (0.916)	129	467343			42.46- 102.46	72.90
8.121	8.121 (0.916)	131	449618			40.24- 100.24	70.14
158 2-Hexanone					CAS #: 591-78-6		
8.243	8.243 (0.930)	58	381328	50.8456	50.846	80.00- 120.00	100.00
8.243	8.243 (0.930)	43	654353			205.93- 265.93	171.60

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
158 2-Hexanone (continued)							
8.250	8.250 (0.931)	100	89764			11.40- 71.40	23.54
160 Dibromochloromethane					CAS #: 124-48-1		
8.393	8.393 (0.947)	129	837290	42.2012	42.201	80.00- 120.00	100.00
8.393	8.393 (0.947)	127	650174			47.28- 107.28	77.65
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.508	8.508 (0.960)	107	723126	43.0385	43.038	80.00- 120.00	100.00
8.508	8.508 (0.960)	109	679702			66.45- 126.45	93.99
165 Chlorobenzene					CAS #: 108-90-7		
8.887	8.887 (1.002)	112	1034100	42.5098	42.510	80.00- 120.00	100.00
8.887	8.887 (1.002)	114	323071			2.06- 62.06	31.24
8.887	8.887 (1.002)	77	587990			26.47- 86.47	56.86
167 Ethyl Benzene					CAS #: 100-41-4		
8.930	8.930 (1.007)	106	520954	43.9713	43.971	80.00- 120.00	100.00
8.930	8.930 (1.007)	91	1633835			289.94- 349.94	313.62
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	637906	43.3666	43.367	80.00- 120.00	100.00
9.031	9.031 (1.019)	91	1269372			167.83- 227.83	198.99
171 o-Xylene					CAS #: 95-47-6		
9.374	9.374 (1.057)	106	610899	44.7606	44.761	80.00- 120.00	100.00
9.374	9.374 (1.057)	91	1275877			181.11- 241.11	208.85
172 Styrene					CAS #: 100-42-5		
9.396	9.396 (1.060)	104	994442	42.7163	42.716	80.00- 120.00	100.00
9.389	9.389 (1.059)	78	472188			17.79- 77.79	47.48
174 Bromoform					CAS #: 75-25-2		
9.596	9.597 (1.082)	173	870620	43.4590	43.459	80.00- 120.00	100.00
9.596	9.597 (1.082)	171	449280			21.45- 81.45	51.60
175 Cumene					CAS #: 98-82-8		
9.661	9.661 (1.090)	105	1872755	42.9553	42.955	80.00- 120.00	100.00
9.661	9.661 (1.090)	120	508135			0.00- 57.47	27.13
9.661	9.661 (1.090)	51	165942			0.00- 38.62	8.86
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.976	9.976 (1.125)	83	886187	38.6264	38.626	80.00- 120.00	100.00
9.976	9.976 (1.125)	85	576722			34.77- 94.77	65.08
182 Propylbenzene					CAS #: 103-65-1		
10.005	10.005 (1.128)	91	2293506	43.8195	43.819	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
182 Propylbenzene (continued)							
10.005	10.005 (1.128)	120	543096			0.00- 53.65	23.68
10.005	10.005 (1.128)	105	84910			0.00- 33.57	3.70
188 4-Ethyltoluene					CAS #: 622-96-8		
10.098	10.098 (1.139)	120	606041	43.7219	43.722	80.00- 120.00	100.00
10.098	10.098 (1.139)	105	1953324			292.89- 352.89	322.31
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.148	10.148 (1.145)	120	796015	43.7090	43.709	80.00- 120.00	100.00
10.148	10.148 (1.145)	105	1623593			175.25- 235.25	203.97
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.477	10.478 (1.182)	120	722869	44.2142	44.214	80.00- 120.00	100.00
10.477	10.478 (1.182)	105	1552163			183.76- 243.76	214.72
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.771	10.771 (1.215)	146	1158485	44.0511	44.051	80.00- 120.00	100.00
10.771	10.771 (1.215)	148	730536			33.69- 93.69	63.06
10.771	10.771 (1.215)	111	443463			8.12- 68.12	38.28
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.850	10.850 (1.224)	146	1145930	44.0421	44.042	80.00- 120.00	100.00
10.850	10.850 (1.224)	148	738376			33.86- 93.86	64.43
10.850	10.850 (1.224)	111	428586			6.71- 66.71	37.40
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.965	10.965 (1.237)	91	1477552	47.7571	47.757	80.00- 120.00	100.00
10.972	10.965 (1.238)	126	325212			0.00- 51.95	22.01
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.179	11.180 (1.261)	146	1089900	43.7530	43.753	80.00- 120.00	100.00
11.179	11.180 (1.261)	148	699772			33.90- 93.90	64.21
11.179	11.180 (1.261)	111	432545			8.86- 68.86	39.69
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.605	12.598 (1.422)	180	1061763	49.0725	49.072	80.00- 120.00	100.00
12.605	12.598 (1.422)	182	1010506			65.21- 125.21	95.17
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.691	12.691 (1.431)	225	840790	45.2558	45.256	80.00- 120.00	100.00
12.691	12.691 (1.431)	223	524797			33.22- 93.22	62.42

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092127.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/21sep15a.b/175q0921a.m
Misc Info: 50ppbv(100ppbv)

Calibration Date: 21-SEP-2015
Calibration Time: 22:55
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	116527	69916	163138	117099	0.49
123 1,4-Difluorobenze	475185	285111	665259	477585	0.51
163 Chlorobenzene-d5	418099	250859	585339	433695	3.73

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 21sep15a
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: ICV Client Smp ID: ICV
Level: LOW Operator: cb
Data Type: MS DATA SampleType: LCS
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: AT12noNaph.sub
Method File: /chem/msd17.i/21sep15a.b/175q0921a.m
Misc Info: 50ppbv(100ppbv)

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9	Propylene	50.000	43.119	86.24	70-130
11	Freon 12	50.000	44.429	88.86	70-130
15	Freon 114	50.000	46.126	92.25	70-130
17	Chloromethane	50.000	43.040	86.08	70-130
23	Butane	50.000	44.646	89.29	70-130
25	Vinyl Chloride	50.000	43.456	86.91	70-130
26	1,3-Butadiene	50.000	43.890	87.78	70-130
29	Bromomethane	50.000	45.626	91.25	70-130
30	Chloroethane	50.000	44.347	88.69	70-130
31	Isopentane	50.000	44.123	88.25	70-130
35	Freon 11	50.000	44.455	88.91	70-130
42	Ethanol	50.000	44.932	89.86	70-130
49	Freon 113	50.000	42.234	84.47	70-130
50	1,1-Dichloroethene	50.000	42.462	84.92	70-130
52	Acetone	50.000	42.897	85.79	70-130
56	Carbon Disulfide	50.000	38.314	76.63	70-130
57	2-Propanol	50.000	48.870	97.74	70-130
58	3-Chloropropene	50.000	41.898	83.80	70-130
66	Methylene Chloride	50.000	43.294	86.59	70-130
72	Methyl tert-butyl	50.000	42.395	84.79	70-130
73	trans-1,2-Dichloro	50.000	38.821	77.64	70-130
78	Hexane	50.000	42.543	85.09	70-130
82	1,1-Dichloroethane	50.000	44.315	88.63	70-130
86	Vinyl Acetate	50.000	42.222	84.44	70-130
91	cis-1,2-Dichloroet	50.000	47.693	95.39	70-130
92	2-Butanone	50.000	42.926	85.85	70-130
99	Tetrahydrofuran	50.000	40.868	81.74	70-130
100	Chloroform	50.000	41.921	83.84	70-130
103	1,1,1-Trichloroeth	50.000	42.366	84.73	70-130
106	Carbon Tetrachlori	50.000	42.983	85.97	70-130
102	Cyclohexane	50.000	43.322	86.64	70-130
113	2,2,4-Trimethylpen	50.000	43.584	87.17	70-130
116	Benzene	50.000	42.317	84.63	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	50.000	42.827	85.65	70-130
121 Heptane	50.000	43.173	86.35	70-130
125 Trichloroethene	50.000	47.124	94.25	70-130
127 Methylcyclohexane	50.000	42.943	85.89	70-130
132 1,2-Dichloropropan	50.000	43.796	87.59	70-130
136 1,4-Dioxane	50.000	45.697	91.39	70-130
138 Bromodichlorometha	50.000	43.748	87.50	70-130
144 cis-1,3-Dichloropr	50.000	40.756	81.51	70-130
145 4-Methyl-2-pentano	50.000	48.949	97.90	70-130
147 Toluene	50.000	42.616	85.23	70-130
150 trans-1,3-Dichloro	50.000	43.354	86.71	70-130
155 1,1,2-Trichloroeth	50.000	41.820	83.64	70-130
156 Tetrachloroethene	50.000	41.100	82.20	70-130
158 2-Hexanone	50.000	50.846	101.69	70-130
160 Dibromochlorometha	50.000	42.201	84.40	70-130
161 1,2-Dibromoethane	50.000	43.038	86.08	70-130
165 Chlorobenzene	50.000	42.510	85.02	70-130
167 Ethyl Benzene	50.000	43.971	87.94	70-130
169 m,p-Xylene	50.000	43.367	86.73	70-130
171 o-Xylene	50.000	44.761	89.52	70-130
172 Styrene	50.000	42.716	85.43	70-130
174 Bromoform	50.000	43.459	86.92	70-130
175 Cumene	50.000	42.955	85.91	70-130
181 1,1,2,2-Tetrachlor	50.000	38.626	77.25	70-130
182 Propylbenzene	50.000	43.819	87.64	70-130
188 4-Ethyltoluene	50.000	43.722	87.44	70-130
190 1,3,5-Trimethylben	50.000	43.709	87.42	70-130
196 1,2,4-Trimethylben	50.000	44.214	88.43	70-130
208 1,3-Dichlorobenzen	50.000	44.051	88.10	70-130
209 1,4-Dichlorobenzen	50.000	44.042	88.08	70-130
212 alpha-Chlorotoluen	50.000	47.757	95.51	70-130
214 1,2-Dichlorobenzen	50.000	43.753	87.51	70-130
226 1,2,4-Trichloroben	50.000	49.072	98.14	70-130
227 Hexachlorobutadien	50.000	45.256	90.51	70-130
228 Naphthalene	5.000	0.000	*	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.790	103.16	70-130
$ 146 Toluene-d8	25.000	25.038	100.15	70-130
$ 177 4-Bromofluorobenze	25.000	24.988	99.95	70-130

Data File: /chem/msd17.i/21sep15a.b/17092127.d

Date : 22-SEP-2015 07:53

Client ID: ICV

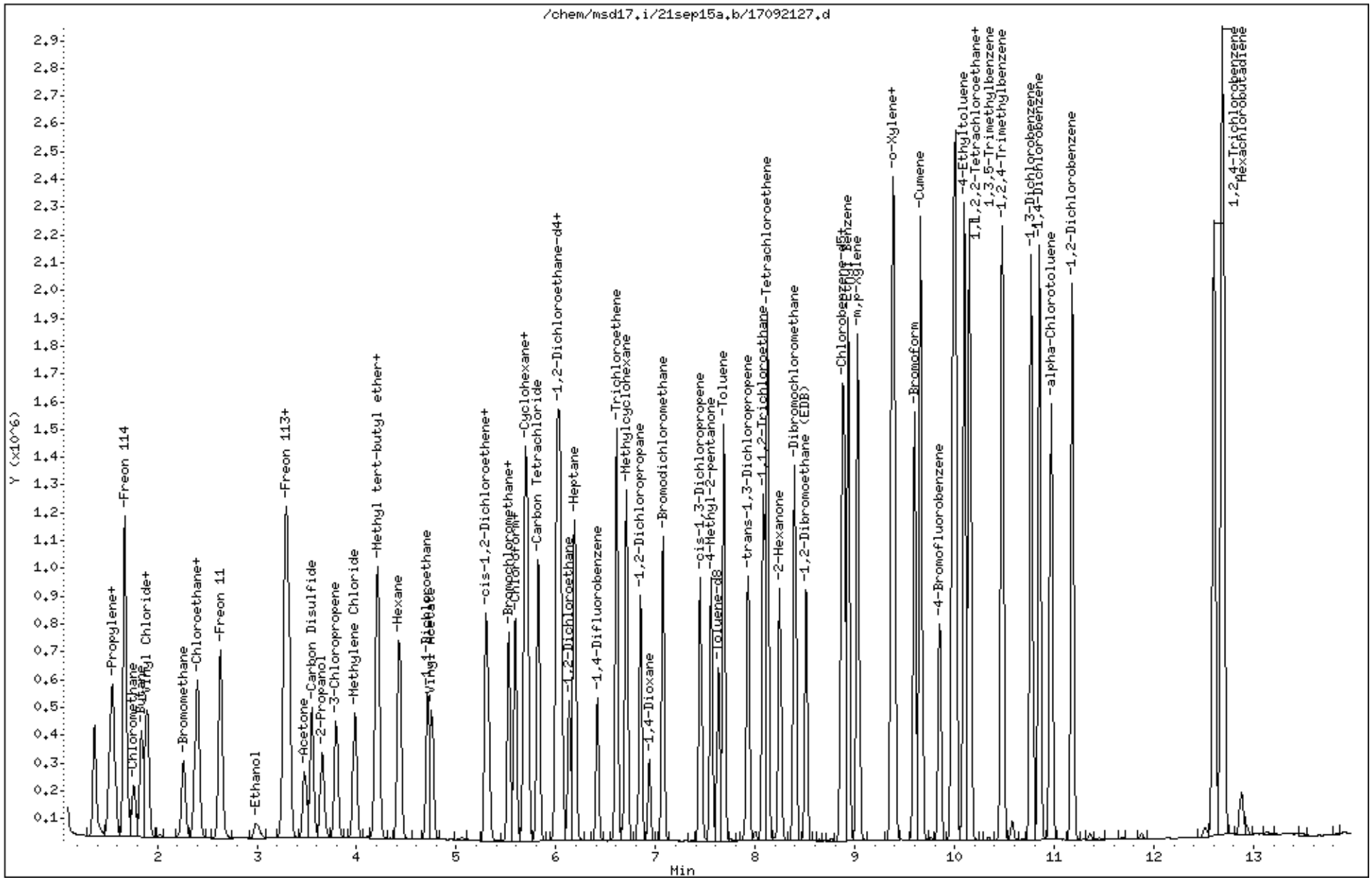
Instrument: msd17.i

Sample Info: 100ml #2736-188A

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/25sep15.b/17092505a.d
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 25-SEP-2015 11:39
Operator : cb Inst ID: msd17.i
Smp Info : 100ml #2736-188A
Misc Info : 50ppbv (100ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/25sep15.b/175q0921c.m
Meth Date : 25-Sep-2015 16:23 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 16:22 Cal File: 17092416.d
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NaphCCV.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.521	5.521 (1.000)	130	98181	25.0000		80.00- 120.00	100.00
5.521	5.521 (1.000)	128	77671			46.54- 106.54	79.11
5.521	5.521 (1.000)	49	111263			83.83- 143.83	113.32
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.409	6.409 (1.000)	114	411644	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	63636			0.00- 44.86	15.46
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.844	8.866 (1.000)	117	375610	25.0000		80.00- 120.00	100.00
8.844	8.866 (1.000)	82	202168			23.93- 83.93	53.82
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.058	6.058 (1.097)	65	133413	25.2174	25.217	80.00- 120.00	100.00
6.058	6.058 (1.097)	67	75413			25.51- 85.51	56.53

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.190)	98	431738	25.4380	25.438	80.00- 120.00	100.00
7.627	7.627 (1.190)	70	45787			0.00- 40.39	10.61
7.627	7.627 (1.190)	100	278465			33.97- 93.97	64.50
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.811	9.854 (1.109)	174	233597	24.3580	24.358	80.00- 120.00	100.00
9.811	9.854 (1.109)	95	266439			79.64- 139.64	114.06
9.811	9.854 (1.109)	176	230564			65.80- 125.80	98.70
228 Naphthalene					CAS #: 91-20-3		
12.806	12.877 (1.448)	128	122535	6.84628	6.846	0.00- 30.00	100.00
12.806	12.877 (1.448)	127	15460			0.00- 30.00	12.62

Report Date: 25-Sep-2015 16:23

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092505a.d
Lab Smp Id: ICV
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/25sep15.b/175q0921c.m
Misc Info: 50ppbv (100ppbv)

Calibration Date: 25-SEP-2015
Calibration Time: 11:03
Client Smp ID: ICV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	100313	60188	140438	98181	-2.13
123 1,4-Difluorobenze	396584	237950	555218	411644	3.80
163 Chlorobenzene-d5	367479	220487	514471	375610	2.21

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.52	0.00
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.84	-0.24

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 25sep15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: ICV Client Smp ID: ICV
Level: LOW Operator: cb
Data Type: MS DATA SampleType: LCS
SpikeList File: Naph.spk Quant Type: ISTD
Sublist File: NaphCCV.sub
Method File: /chem/msd17.i/25sep15.b/175q0921c.m
Misc Info: 50ppbv (100ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
228 Naphthalene	5.000	6.846	136.93	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.217	100.87	70-130
$ 146 Toluene-d8	25.000	25.438	101.75	70-130
$ 177 4-Bromofluorobenze	25.000	24.358	97.43	70-130

Data File: /chem/msd17.i/25sep15.b/17092505a.d

Page 1

Date : 25-SEP-2015 11:39

Client ID: ICV

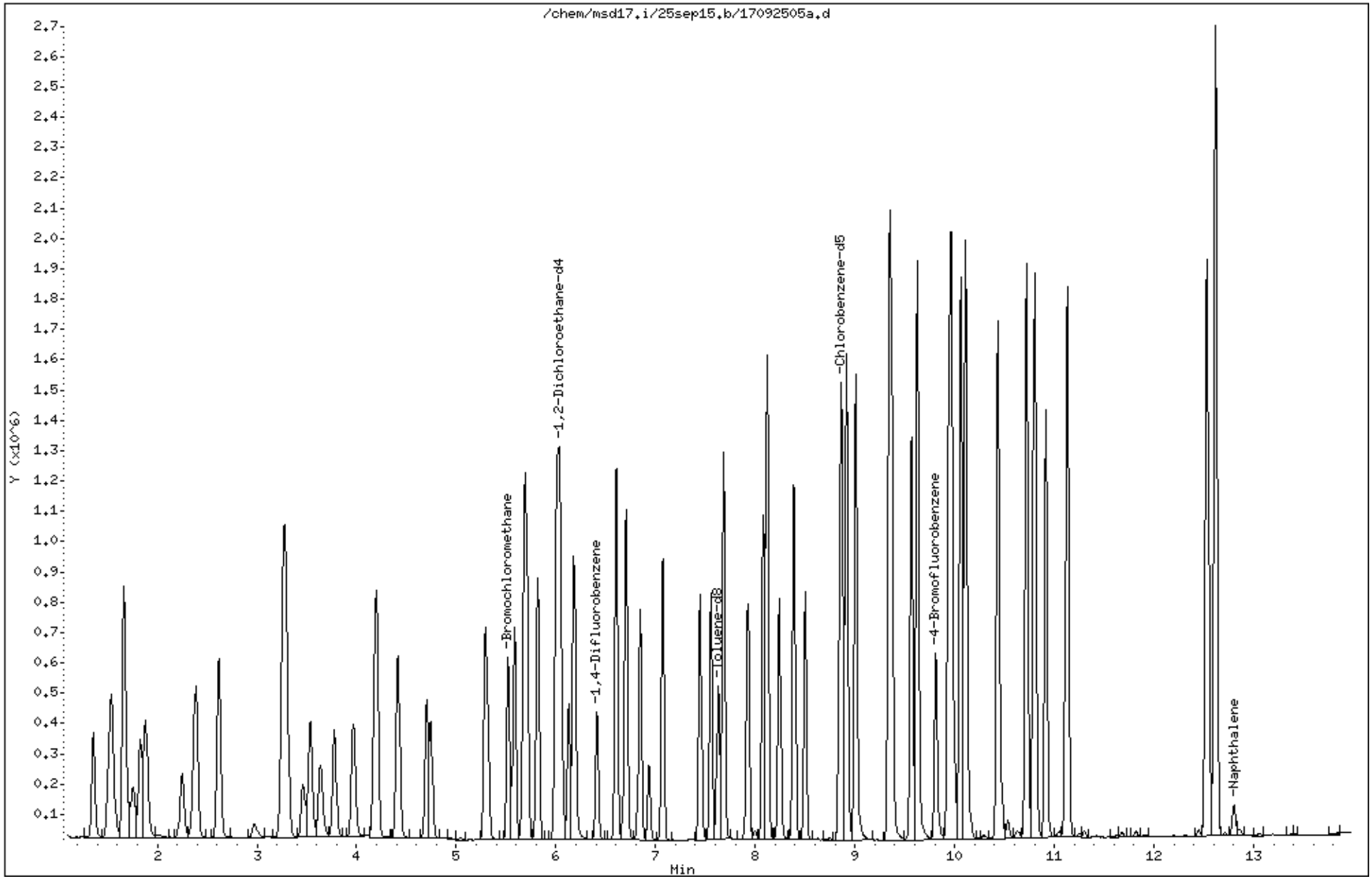
Instrument: msd17.i

Sample Info: 100ml #2736-188A

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092414.d
Lab Smp Id: ICAL Level 1
Inj Date : 24-SEP-2015 15:25
Operator : cb Inst ID: msd17.i
Smp Info : 10ml 2736-262
Misc Info : 1.0ppbv(20ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921c.m
Meth Date : 25-Sep-2015 15:58 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 15:25 Cal File: 17092414.d
Als bottle: 7 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Naphcrv.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.521	5.521 (1.000)	130	108101	25.0000		80.00- 120.00	100.00
5.521	5.521 (1.000)	128	81728			46.54- 106.54	75.60
5.521	5.521 (1.000)	49	116938			83.83- 143.83	108.17
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.409	6.409 (1.000)	114	431642	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	64297			0.00- 44.86	14.90
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	398600	25.0000		80.00- 120.00	100.00
8.866	8.866 (1.000)	82	214942			23.93- 83.93	53.92
228 Naphthalene					CAS #: 91-20-3		
12.877	12.877 (1.452)	128	28373	1.00000	1.000	0.00- 30.00	100.00(a)
12.877	12.877 (1.452)	127	4399			0.00- 30.00	15.50

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092414.d
Lab Smp Id: ICAL Level 1
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921c.m
Misc Info: 1.0ppbv(20ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 08:49
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	102227	61336	143118	108101	5.75
123 1,4-Difluorobenze	417792	250675	584909	431642	3.32
163 Chlorobenzene-d5	379305	227583	531027	398600	5.09

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.52	-0.13
123 1,4-Difluorobenze	6.42	6.09	6.75	6.41	-0.11
163 Chlorobenzene-d5	8.86	8.53	9.19	8.87	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092414.d

Page 1

Date : 24-SEP-2015 15:25

Client ID:

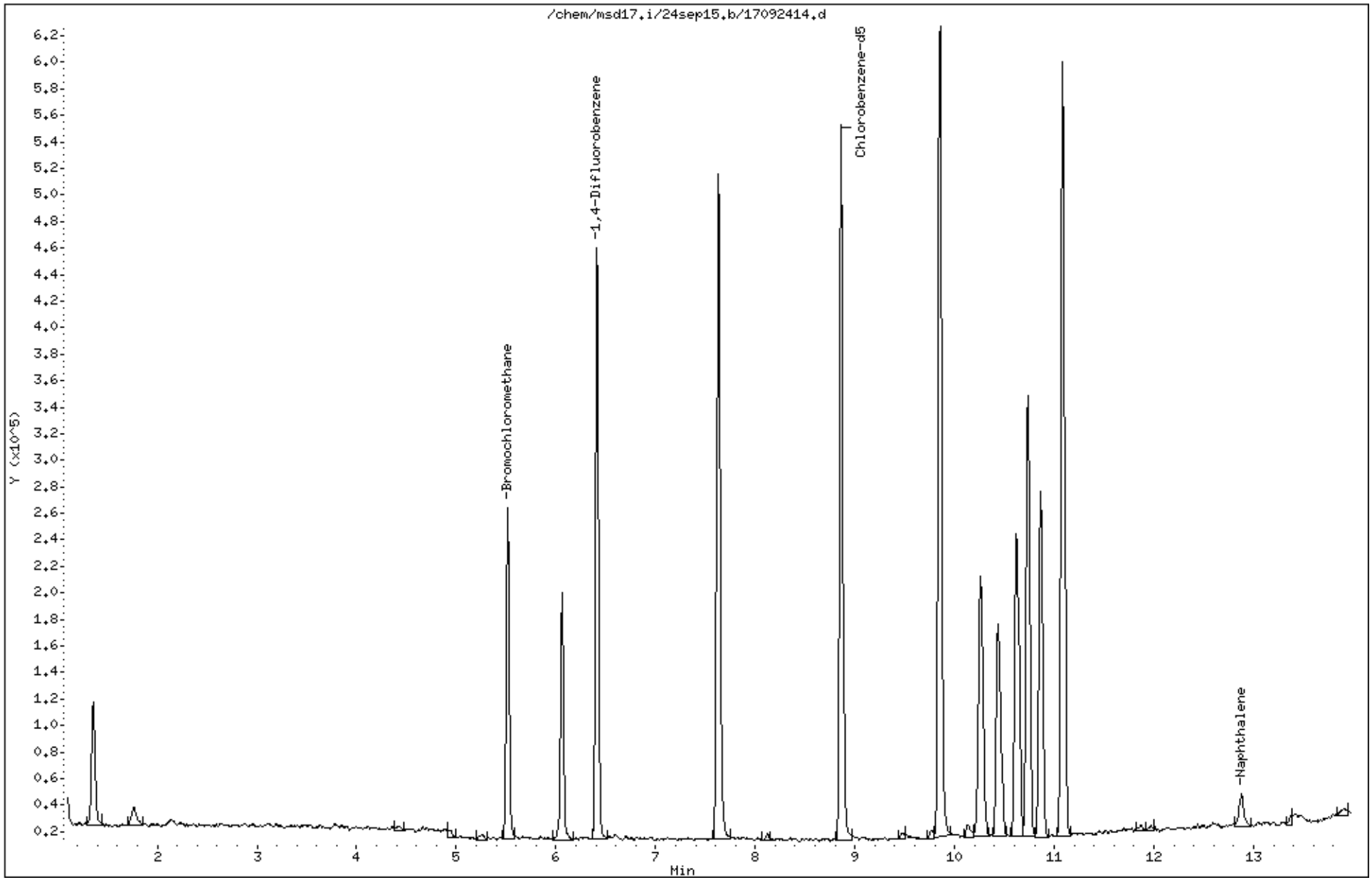
Instrument: msd17.i

Sample Info: 10ml 2736-262

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/21sep15a.b/17092118.d
Lab Smp Id: ICAL Level #2
Inj Date : 21-SEP-2015 20:32
Operator : gh Inst ID: msd17.i
Smp Info : 50ml 2736-257
Misc Info : 0.5ppbv(2.0ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/21sep15a.b/175q0921a.m
Meth Date : 25-Sep-2015 15:15 cbond Quant Type: ISTD
Cal Date : 21-SEP-2015 20:32 Cal File: 17092118.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12low.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.528	5.528 (1.000)	130	119787	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	88762			46.54- 106.54	74.10
5.528	5.528 (1.000)	49	129732			83.83- 143.83	108.30
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.416	6.416 (1.000)	114	472226	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	73687			0.00- 44.86	15.60
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	424323	25.0000		80.00- 120.00	100.00
8.866	8.866 (1.000)	82	219044			23.93- 83.93	51.62
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.065	6.065 (1.097)	65	152512	25.0000	23.628	80.00- 120.00	100.00
6.065	6.065 (1.097)	67	80491			25.51- 85.51	52.78

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.189)	98	477701	25.0000	24.535	80.00- 120.00	100.00
7.627	7.627 (1.189)	70	50338			0.00- 40.39	10.54
7.634	7.634 (1.190)	100	301382			33.97- 93.97	63.09
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.854	9.854 (1.111)	174	261875	25.0000	24.172	80.00- 120.00	100.00
9.847	9.847 (1.111)	95	294044			79.64- 139.64	112.28
9.854	9.854 (1.111)	176	251513			65.80- 125.80	96.04
11 Freon 12					CAS #: 75-71-8		
1.552	1.552 (0.281)	85	8892	0.50000	0.4612	80.00- 120.00	100.00(a)
1.552	1.552 (0.281)	87	2857			2.33- 62.33	32.13
15 Freon 114					CAS #: 76-14-2		
1.667	1.667 (0.302)	135	6435	0.50000	0.4598	80.00- 120.00	100.00(a)
1.667	1.667 (0.302)	137	1947			2.02- 62.02	30.26
25 Vinyl Chloride					CAS #: 75-01-4		
1.868	1.868 (0.338)	62	4104	0.50000	0.5382	80.00- 120.00	100.00
1.860	1.860 (0.337)	64	690			2.69- 62.69	16.81
26 1,3-Butadiene					CAS #: 106-99-0		
1.903	1.903 (0.344)	54	2625	0.50000	0.4962	80.00- 120.00	100.00(a)
1.911	1.911 (0.346)	39	4020			63.95- 123.95	153.14
29 Bromomethane					CAS #: 74-83-9		
2.262	2.262 (0.409)	94	3246	0.50000	0.4806	80.00- 120.00	100.00(a)
2.254	2.254 (0.408)	96	3167			63.69- 123.69	97.57
35 Freon 11					CAS #: 75-69-4		
2.627	2.627 (0.475)	101	9821	0.50000	0.4947	80.00- 120.00	100.00(a)
2.634	2.634 (0.476)	103	5808			35.20- 95.20	59.14
49 Freon 113					CAS #: 76-13-1		
3.279	3.279 (0.593)	151	7422	0.50000	0.5247	80.00- 120.00	100.00
3.286	3.286 (0.594)	153	4714			33.72- 93.72	63.51
3.286	3.286 (0.594)	101	8563			95.23- 155.23	115.37
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.314	3.314 (0.600)	98	2763	0.50000	0.5299	80.00- 120.00	100.00
3.314	3.314 (0.600)	96	4144			130.14- 190.14	149.98
3.314	3.314 (0.600)	61	6402			218.16- 278.16	231.70
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.203	4.203 (0.760)	73	10450	0.50000	0.4777	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether (continued)							
4.196	4.196 (0.759)	57	3177			0.00- 51.46	30.40
4.203	4.203 (0.760)	41	1696			0.00- 49.34	16.23
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.217	4.217 (0.763)	98	2054	0.50000	0.3953	80.00- 120.00	100.00(a)
4.217	4.217 (0.763)	61	5244			184.16- 244.16	255.31
4.217	4.217 (0.763)	96	3905			127.84- 187.84	190.12
78 Hexane					CAS #: 110-54-3		
4.432	4.432 (0.802)	57	5940	0.50000	0.5027	80.00- 120.00	100.00
4.432	4.432 (0.802)	43	3662			27.64- 87.64	61.65
4.432	4.432 (0.802)	86	1349			0.00- 46.92	22.71
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.711	4.711 (0.852)	63	6258	0.50000	0.4452	80.00- 120.00	100.00(a)
4.718	4.718 (0.854)	65	2683			2.04- 62.04	42.87
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.299	5.299 (0.959)	98	2813	0.50000	0.5020	80.00- 120.00	100.00
5.299	5.299 (0.959)	96	4603			124.38- 184.38	163.63
5.299	5.299 (0.959)	61	5539			162.07- 222.07	196.91
99 Tetrahydrofuran					CAS #: 109-99-9		
5.535	5.535 (1.001)	42	5079	0.50000	0.6582	80.00- 120.00	100.00
5.535	5.535 (1.001)	71	1481			17.72- 77.72	29.16
5.542	5.542 (1.003)	72	1651			20.99- 80.99	32.51
100 Chloroform					CAS #: 67-66-3		
5.592	5.592 (1.012)	83	9108	0.50000	0.5287	80.00- 120.00	100.00
5.585	5.585 (1.010)	85	5415			34.67- 94.67	59.45
102 Cyclohexane					CAS #: 110-82-7		
5.685	5.685 (1.028)	84	5331	0.50000	0.4983	80.00- 120.00	100.00(a)
5.685	5.685 (1.028)	56	5933			77.09- 137.09	111.29
5.678	5.678 (1.027)	41	3245			25.87- 85.87	60.87
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.707	5.707 (1.032)	97	8860	0.50000	0.5188	80.00- 120.00	100.00
5.707	5.707 (1.032)	99	6271			34.33- 94.33	70.78
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.822	5.822 (1.053)	119	8194	0.50000	0.4802	80.00- 120.00	100.00(a)
5.822	5.822 (1.053)	117	8846			74.90- 134.90	107.96
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.088)	57	18284	0.50000	0.5061	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
113 2,2,4-Trimethylpentane (continued)							
6.015	6.015 (1.088)	56	5768			1.80- 61.80	31.55
6.008	6.008 (1.087)	41	4530			0.00- 55.83	24.78
116 Benzene					CAS #: 71-43-2		
6.044	6.044 (0.942)	78	12400	0.50000	0.5184	80.00- 120.00	100.00
6.044	6.044 (0.942)	77	4008			0.00- 54.08	32.32
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.137	6.137 (0.956)	62	5425	0.50000	0.5191	80.00- 120.00	100.00
6.137	6.137 (0.956)	64	1766			2.16- 62.16	32.55
121 Heptane					CAS #: 142-82-5		
6.187	6.187 (0.964)	71	3949	0.50000	0.4769	80.00- 120.00	100.00(a)
6.187	6.187 (0.964)	43	5696			110.94- 170.94	144.24
6.187	6.187 (0.964)	57	3818			53.72- 113.72	96.68
125 Trichloroethene					CAS #: 79-01-6		
6.609	6.609 (1.030)	95	6200	0.50000	0.5493	80.00- 120.00	100.00
6.609	6.609 (1.030)	130	6453			74.97- 134.97	104.08
6.609	6.609 (1.030)	97	3981			35.33- 95.33	64.21
127 Methylcyclohexane					CAS #: 108-87-2		
6.710	6.710 (1.214)	83	7419	0.50000	0.5026	80.00- 120.00	100.00(a)
6.703	6.703 (1.212)	98	3677			16.41- 76.41	49.56
6.710	6.710 (1.214)	55	6217			40.41- 100.41	83.80
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.846	6.846 (1.067)	63	3849	0.50000	0.4494	80.00- 120.00	100.00(a)
6.846	6.846 (1.067)	62	2762			38.78- 98.78	71.76
6.846	6.846 (1.067)	41	2761			20.16- 80.16	71.73
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.103)	83	8526	0.50000	0.4812	80.00- 120.00	100.00(a)
7.075	7.075 (1.103)	85	5297			34.16- 94.16	62.13
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.448	7.448 (1.161)	75	6992	0.50000	0.4698	80.00- 120.00	100.00(a)
7.448	7.448 (1.161)	77	2679			1.57- 61.57	38.32
7.448	7.448 (1.161)	39	4656			13.98- 73.98	66.59
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.562	7.562 (1.179)	58	2676	0.50000	0.4645	80.00- 120.00	100.00(a)
7.562	7.562 (1.179)	43	6785			205.93- 265.93	253.55
7.562	7.562 (1.179)	85	1492			18.04- 78.04	55.75

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.198)	91	15261	0.50000	0.5087	80.00- 120.00	100.00
7.684	7.684 (1.198)	92	7978			27.24- 87.24	52.28
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.927	7.927 (0.894)	75	6497	0.50000	0.4930	80.00- 120.00	100.00(a)
7.927	7.927 (0.894)	77	2969			1.57- 61.57	45.70
7.927	7.927 (0.894)	39	3110			13.98- 73.98	47.87
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.085	8.085 (0.912)	97	5242	0.50000	0.5041	80.00- 120.00	100.00
8.085	8.085 (0.912)	99	3059			31.05- 91.05	58.36
8.085	8.085 (0.912)	83	4662			58.29- 118.29	88.94
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.916)	166	7790	0.50000	0.5105	80.00- 120.00	100.00
8.121	8.121 (0.916)	129	6452			42.46- 102.46	82.82
8.121	8.121 (0.916)	131	5470			40.24- 100.24	70.22
160 Dibromochloromethane					CAS #: 124-48-1		
8.400	8.400 (0.947)	129	9936	0.50000	0.5118	80.00- 120.00	100.00
8.400	8.400 (0.947)	127	7557			47.28- 107.28	76.06
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.515	8.515 (0.960)	107	8048	0.50000	0.4896	80.00- 120.00	100.00(a)
8.515	8.515 (0.960)	109	6912			66.45- 126.45	85.88
165 Chlorobenzene					CAS #: 108-90-7		
8.887	8.887 (1.002)	112	11253	0.50000	0.4728	80.00- 120.00	100.00(a)
8.887	8.887 (1.002)	114	3039			2.06- 62.06	27.01
8.880	8.880 (1.002)	77	10779			26.47- 86.47	95.79
167 Ethyl Benzene					CAS #: 100-41-4		
8.937	8.937 (1.008)	106	4961	0.50000	0.4280	80.00- 120.00	100.00(a)
8.937	8.937 (1.008)	91	17386			289.94- 349.94	350.45
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	6303	0.50000	0.4380	80.00- 120.00	100.00(a)
9.031	9.031 (1.019)	91	14105			167.83- 227.83	223.78
171 o-Xylene					CAS #: 95-47-6		
9.374	9.374 (1.057)	106	5743	0.50000	0.4301	80.00- 120.00	100.00(a)
9.374	9.374 (1.057)	91	14288			181.11- 241.11	248.79
172 Styrene					CAS #: 100-42-5		
9.396	9.396 (1.060)	104	9639	0.50000	0.4232	80.00- 120.00	100.00(a)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
172 Styrene (continued)							
9.389	9.389 (1.059)	78	5557			17.79- 77.79	57.65
174 Bromoform					CAS #: 75-25-2		
9.596	9.596 (1.082)	173	8779	0.50000	0.4479	80.00- 120.00	100.00(a)
9.596	9.596 (1.082)	171	4604			21.45- 81.45	52.44
175 Cumene					CAS #: 98-82-8		
9.661	9.661 (1.090)	105	20031	0.50000	0.4696	80.00- 120.00	100.00(a)
9.661	9.661 (1.090)	120	5207			0.00- 57.47	25.99
9.661	9.661 (1.090)	51	2211			0.00- 38.62	11.04
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.976	9.976 (1.125)	83	11322	0.50000	0.5044	80.00- 120.00	100.00
9.983	9.983 (1.126)	85	7070			34.77- 94.77	62.44
182 Propylbenzene					CAS #: 103-65-1		
10.005	10.005 (1.128)	91	24161	0.50000	0.4718	80.00- 120.00	100.00(a)
10.005	10.005 (1.128)	120	5582			0.00- 53.65	23.10
10.005	10.005 (1.128)	105	1053			0.00- 33.57	4.36
188 4-Ethyltoluene					CAS #: 622-96-8		
10.098	10.098 (1.139)	120	6799	0.50000	0.5013	80.00- 120.00	100.00
10.098	10.098 (1.139)	105	20088			292.89- 352.89	295.46
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.148	10.148 (1.145)	120	7499	0.50000	0.4209	80.00- 120.00	100.00(a)
10.148	10.148 (1.145)	105	16680			175.25- 235.25	222.43
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.478	10.478 (1.182)	120	7136	0.50000	0.4461	80.00- 120.00	100.00(a)
10.478	10.478 (1.182)	105	15017			183.76- 243.76	210.44
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.771	10.771 (1.215)	146	12056	0.50000	0.4686	80.00- 120.00	100.00(a)
10.771	10.771 (1.215)	148	8744			33.69- 93.69	72.53
10.771	10.771 (1.215)	111	4509			8.12- 68.12	37.40
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.850	10.850 (1.224)	146	10924	0.50000	0.4291	80.00- 120.00	100.00(a)
10.850	10.850 (1.224)	148	8011			33.86- 93.86	73.33
10.850	10.850 (1.224)	111	5087			6.71- 66.71	46.57
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.965	10.965 (1.237)	91	13694	0.50000	0.4524	80.00- 120.00	100.00(a)
10.972	10.972 (1.238)	126	3257			0.00- 51.95	23.78

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.180	11.180 (1.261)	146	11176	0.50000	0.4586	80.00- 120.00	100.00(a)
11.180	11.180 (1.261)	148	6958			33.90- 93.90	62.26
11.180	11.180 (1.261)	111	4814			8.86- 68.86	43.07

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092118.d
Lab Smp Id: ICAL Level #2
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msd17.i/21sep15a.b/175q0921a.m
Misc Info: 0.5ppbv(2.0ppbv)

Calibration Date: 21-SEP-2015
Calibration Time: 22:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	116527	69916	163138	119787	2.80
123 1,4-Difluorobenze	475185	285111	665259	472226	-0.62
163 Chlorobenzene-d5	418099	250859	585339	424323	1.49

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/21sep15a.b/17092118.d

Date : 21-SEP-2015 20:32

Client ID:

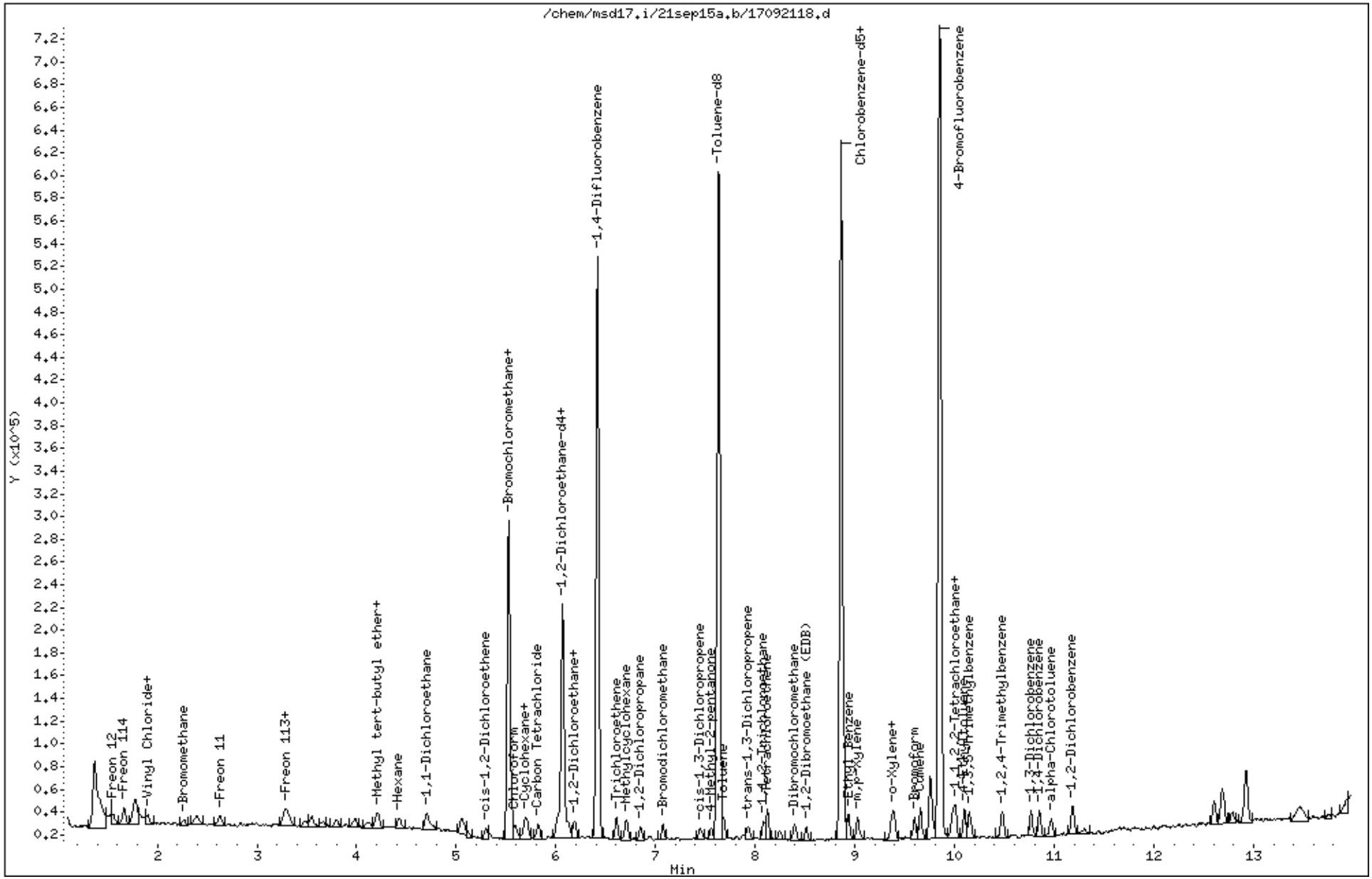
Sample Info: 50ml 2736-257

Column phase: RTX-624

Instrument: msd17.i

Operator: gh

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092411.d
Lab Smp Id: ICAL Level 3
Inj Date : 24-SEP-2015 13:15
Operator : cb Inst ID: msd17.i
Smp Info : 200ml 2736-198
Misc Info : 2.0ppbv(2.0ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921b.m
Meth Date : 25-Sep-2015 15:30 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 13:15 Cal File: 17092411.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT1.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.535	5.535 (1.000)	130	99380	25.0000		80.00- 120.00	100.00
5.535	5.535 (1.000)	128	78100			46.54- 106.54	78.59
5.528	5.528 (1.000)	49	111228			83.83- 143.83	111.92
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.416	6.416 (1.000)	114	416767	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	63772			0.00- 44.86	15.30
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	377917	25.0000		80.00- 120.00	100.00
8.866	8.866 (1.000)	82	201858			23.93- 83.93	53.41
6 Freon 143a					CAS #: 420-46-2		
1.438	1.438 (0.260)	65	4445	2.00000	2.000	0.00- 0.00	100.00
1.438	1.438 (0.260)	69	12640			0.00- 0.00	284.36
1.438	1.438 (0.260)	64	979			0.00- 0.00	22.02

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
7 Freon 134a					CAS #: 811-97-2		
1.488	1.488 (0.269)	83	12236	2.00000	2.000	0.00- 0.00	100.00
1.488	1.488 (0.269)	69	11226			0.00- 0.00	91.75
1.488	1.488 (0.269)	63	1281			0.00- 0.00	10.47
10 1,1-Difluoroethane					CAS #: 75-37-6		
1.545	1.545 (0.279)	65	6929	2.00000	2.000	0.00- 0.00	100.00
1.552	1.552 (0.280)	51	15678			0.00- 0.00	226.27
1.538	1.538 (0.278)	47	3412			0.00- 0.00	49.24
13 Chlorodifluoromethane					CAS #: 75-45-6		
1.588	1.588 (0.287)	67	3430	2.00000	2.000	0.00- 0.00	100.00
1.588	1.588 (0.287)	51	16512			0.00- 0.00	481.40
1.595	1.595 (0.288)	85	216			0.00- 0.00	6.30
16 Freon 142b					CAS #: 75-68-3		
1.724	1.724 (0.312)	65	26100	2.00000	2.000	0.00- 0.00	100.00
1.717	1.717 (0.310)	45	7113			0.00- 0.00	27.25
37 Dichlorofluoromethane					CAS #: 75-43-4		
2.655	2.655 (0.480)	67	30984	2.00000	2.000	0.00- 0.00	100.00
2.655	2.655 (0.480)	69	10229			0.00- 0.00	33.01
3.128	3.128 (0.565)	35	942			0.00- 0.00	3.04
48 Freon 123					CAS #: 306-83-2		
3.228	3.228 (0.583)	83	33009	2.00000	2.000	0.00- 0.00	100.00
3.228	3.228 (0.583)	133	6183			0.00- 0.00	18.73
3.228	3.228 (0.583)	85	22201			0.00- 0.00	67.26
59 Cyclopentene					CAS #: 142-29-0		
3.809	3.809 (0.688)	67	22074	2.00000	2.000	0.00- 0.00	100.00
3.809	3.809 (0.688)	68	8681			0.00- 0.00	39.33
3.809	3.809 (0.688)	53	4554			0.00- 0.00	20.63
84 1-Propanol					CAS #: 71-23-8		
4.862	4.862 (0.878)	42	3361	2.00000	2.000	0.00- 0.00	100.00
4.862	4.862 (0.878)	59	2956			0.00- 0.00	87.95
4.862	4.862 (0.878)	41	1895			0.00- 0.00	56.38
90 2,2-Dichloropropane					CAS #: 594-20-7		
5.256	5.256 (0.950)	77	22639	2.00000	2.000	0.00- 0.00	100.00
5.256	5.256 (0.950)	79	6856			0.00- 0.00	30.28
5.256	5.256 (0.950)	97	4746			0.00- 0.00	20.96
107 1,1-Dichloropropene					CAS #: 563-58-6		
5.857	5.857 (0.913)	110	6207	2.00000	2.000	0.00- 0.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE		RATIO
107 1,1-Dichloropropene (continued)								
5.857	5.857 (0.913)	75	16423			0.00-	0.00	264.59
115 Isobutanol					CAS #: 78-83-1			
6.015	6.015 (1.087)	39	4790	2.00000		0.00-	0.00	100.00(a)
6.015	6.015 (1.087)	41	7126			0.00-	0.00	148.77
6.015	6.015 (1.087)	43	9492			0.00-	0.00	198.16
124 n-Butanol					CAS #: 71-36-3			
6.588	6.588 (1.027)	56	18256	2.00000	2.000	0.00-	0.00	100.00
6.588	6.588 (1.027)	41	10583			0.00-	0.00	57.97
6.588	6.588 (1.027)	43	11725			0.00-	0.00	64.23
157 1,3-Dichloropropane					CAS #: 142-28-9			
8.228	8.228 (1.282)	76	25428	2.00000	2.000	0.00-	0.00	100.00
8.228	8.228 (1.282)	41	13872			0.00-	0.00	54.55
8.228	8.228 (1.282)	78	8548			0.00-	0.00	33.62
159 Butyl Acetate					CAS #: 123-86-4			
8.307	8.307 (1.295)	56	6457	2.00000	2.000	0.00-	0.00	100.00
8.307	8.307 (1.295)	73	2961			0.00-	0.00	45.86
8.307	8.307 (1.295)	43	12372			0.00-	0.00	191.61
168 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6			
8.952	8.952 (1.010)	131	22941	2.00000	2.000	0.00-	0.00	100.00
8.952	8.952 (1.010)	117	18897			0.00-	0.00	82.37
8.952	8.952 (1.010)	95	7754			0.00-	0.00	33.80
176 Cyclohexanone					CAS #: 108-94-1			
9.833	9.833 (1.109)	55	19692	2.00000	2.000	0.00-	0.00	100.00
9.833	9.833 (1.109)	98	9095			0.00-	0.00	46.19
9.833	9.833 (1.109)	42	11968			0.00-	0.00	60.78
180 Bromobenzene					CAS #: 108-86-1			
9.983	9.983 (1.126)	156	27344	2.00000	2.000	0.00-	0.00	100.00
9.983	9.983 (1.126)	158	26315			0.00-	0.00	96.24
9.983	9.983 (1.126)	77	40119			0.00-	0.00	146.72
185 1,2,3-Trichloropropane					CAS #: 96-18-4			
10.033	10.033 (1.132)	110	12550	2.00000	2.000	0.00-	0.00	100.00
10.033	10.033 (1.132)	75	36263			0.00-	0.00	288.95
10.033	10.033 (1.132)	61	8689			0.00-	0.00	69.24
189 2-Chlorotoluene					CAS #: 95-49-8			
10.127	10.127 (1.142)	126	19961	2.00000	2.000	0.00-	0.00	100.00
10.127	10.127 (1.142)	91	54439			0.00-	0.00	272.73

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
189 2-Chlorotoluene (continued)							
10.127	10.127 (1.142)	65	4962			0.00- 0.00	24.86
191 4-Chlorotoluene					CAS #: 106-43-4		
10.220	10.220 (1.153)	126	20109	2.00000	2.000	0.00- 0.00	100.00
10.220	10.220 (1.153)	91	57254			0.00- 0.00	284.72
10.220	10.220 (1.153)	63	6919			0.00- 0.00	34.41
195 tert-Butylbenzene					CAS #: 98-06-6		
10.420	10.420 (1.175)	119	59567	2.00000	2.000	0.00- 0.00	100.00
10.427	10.427 (1.176)	134	14609			0.00- 0.00	24.53
10.420	10.420 (1.175)	91	40354			0.00- 0.00	67.75
197 Pentachloroethane					CAS #: 76-01-7		
10.499	10.499 (1.184)	167	15059	2.00000	2.000	0.00- 0.00	100.00
10.499	10.499 (1.184)	117	15468			0.00- 0.00	102.72
10.499	10.499 (1.184)	169	8201			0.00- 0.00	54.46
203 sec-Butylbenzene					CAS #: 135-98-8		
10.606	10.606 (1.196)	134	18770	2.00000	2.000	0.00- 0.00	100.00
10.606	10.606 (1.196)	105	90393			0.00- 0.00	481.58
10.606	10.606 (1.196)	91	13885			0.00- 0.00	73.97
207 p-Cymene					CAS #: 99-87-6		
10.721	10.721 (1.209)	119	78741	2.00000	2.000	0.00- 0.00	100.00
10.721	10.721 (1.209)	134	19606			0.00- 0.00	24.90
10.721	10.721 (1.209)	91	18110			0.00- 0.00	23.00
210 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
10.850	10.850 (1.224)	120	30241	2.00000	2.000	0.00- 0.00	100.00
10.850	10.850 (1.224)	105	68428			0.00- 0.00	226.28
10.850	10.850 (1.224)	77	9402			0.00- 0.00	31.09
213 Butylbenzene					CAS #: 104-51-8		
11.072	11.072 (1.249)	134	21499	2.00000	2.000	0.00- 0.00	100.00
11.072	11.072 (1.249)	91	90253			0.00- 0.00	419.80
11.072	11.072 (1.249)	92	45042			0.00- 0.00	209.51
221 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.867	11.867 (1.339)	157	30562	2.00000	2.000	0.00- 0.00	100.00
11.867	11.867 (1.339)	75	25767			0.00- 0.00	84.31
11.867	11.867 (1.339)	155	24286			0.00- 0.00	79.46

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092411.d
Lab Smp Id: ICAL Level 3
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921b.m
Misc Info: 2.0ppbv(2.0ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 08:49
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	102227	61336	143118	99380	-2.78
123 1,4-Difluorobenze	417792	250675	584909	416767	-0.25
163 Chlorobenzene-d5	379305	227583	531027	377917	-0.37

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.54	0.13
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.87	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092411.d

Page 1

Date : 24-SEP-2015 13:15

Client ID:

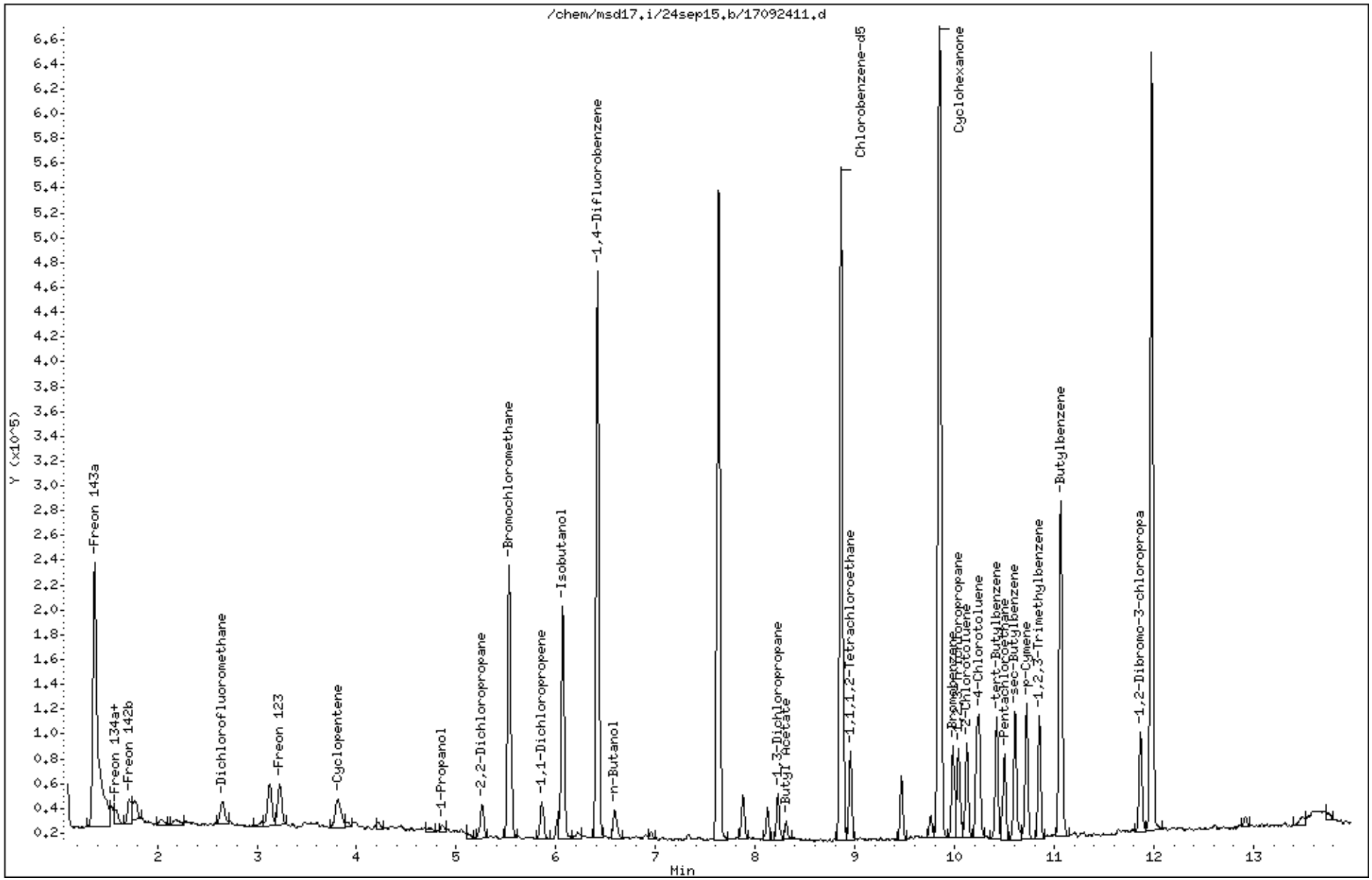
Instrument: msd17.i

Sample Info: 200ml 2736-198

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092408.d
Lab Smp Id: ICAL Level 3
Inj Date : 24-SEP-2015 12:00
Operator : cb Inst ID: msd17.i
Smp Info : 80ml 2736-223
Misc Info : 2.0ppbv(5.0ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921b.m
Meth Date : 25-Sep-2015 15:50 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 13:15 Cal File: 17092411.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Combo.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

					AMOUNTS CAL-AMT	AMOUNTS ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE		(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane							CAS #: 74-97-5	
5.528	5.528 (1.000)	130	99095	25.0000			80.00- 120.00	100.00
5.528	5.528 (1.000)	128	77820				46.54- 106.54	78.53
5.528	5.528 (1.000)	49	116853				83.83- 143.83	117.92
* 123 1,4-Difluorobenzene							CAS #: 540-36-3	
6.416	6.416 (1.000)	114	410857	25.0000			80.00- 120.00	100.00
6.416	6.416 (1.000)	88	62533				0.00- 44.86	15.22
* 163 Chlorobenzene-d5							CAS #: 3114-55-4	
8.852	8.852 (1.000)	117	363548	25.0000			80.00- 120.00	100.00
8.852	8.852 (1.000)	82	192348				23.93- 83.93	52.91
32 Vinyl Bromide							CAS #: 593-60-2	
2.591	2.591 (0.469)	106	12882	2.00000	2.050		0.00- 0.00	100.00
2.584	2.584 (0.467)	108	13210				0.00- 0.00	102.55

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
94 Ethyl Acetate					CAS #: 141-78-6		
5.342	5.342 (0.966)	70	1981	2.00000	2.227	0.00- 0.00	100.00
5.342	5.342 (0.966)	61	2202			0.00- 0.00	111.16
5.342	5.342 (0.966)	45	2853			0.00- 0.00	144.02
63 Acetonitrile					CAS #: 75-05-8		
3.916	3.916 (0.708)	40	8250	2.00000	2.484	0.00- 0.00	100.00
3.909	3.909 (0.707)	41	16155			0.00- 0.00	195.82
3.909	3.909 (0.707)	38	2062			0.00- 0.00	24.99
64 Cyclopentane					CAS #: 287-92-3		
3.916	3.916 (0.708)	70	7510	2.00000	2.000	0.00- 0.00	100.00
3.916	3.916 (0.708)	55	9772			0.00- 0.00	130.12
74 Acrylonitrile					CAS #: 107-13-1		
4.332	4.332 (0.784)	52	9338	2.00000	2.141	0.00- 0.00	100.00
4.332	4.332 (0.784)	53	12037			0.00- 0.00	128.90
134 Methyl Methacrylate					CAS #: 80-62-6		
6.903	6.903 (0.780)	41	15876	2.00000	1.894	0.00- 0.00	100.00(a)
6.903	6.903 (0.780)	69	13829			0.00- 0.00	87.11
6.903	6.903 (0.780)	100	4934			0.00- 0.00	31.08
137 Dibromomethane					CAS #: 74-95-3		
6.961	6.961 (0.786)	174	15805	2.00000	1.734	0.00- 0.00	100.00(a)
6.953	6.953 (0.786)	93	15604			0.00- 0.00	98.73
6.953	6.953 (0.786)	95	13678			0.00- 0.00	86.54
173 2-Heptanone					CAS #: 110-43-0		
6.180	6.180 (1.118)	58	699	2.00000	2.536	0.00- 0.00	100.00
6.187	6.187 (1.119)	43	17712			0.00- 0.00	2533.91
34 Pentane					CAS #: 109-66-0		
2.706	2.706 (0.489)	43	18875	2.00000	1.914	0.00- 0.00	100.00(a)
2.713	2.713 (0.491)	57	3561			0.00- 0.00	18.87
2.706	2.706 (0.489)	72	2063			0.00- 0.00	10.93
148 Octane					CAS #: 111-65-9		
7.684	7.684 (1.198)	57	11156	2.00000	1.943	0.00- 0.00	100.00(a)
7.684	7.684 (1.198)	85	12574			0.00- 0.00	112.71
7.684	7.684 (1.198)	43	23365			0.00- 0.00	209.44
170 Nonane					CAS #: 111-84-2		
8.930	8.930 (1.009)	43	23424	2.00000	1.817	0.00- 0.00	100.00(a)
8.930	8.930 (1.009)	57	23629			0.00- 0.00	100.88
8.930	8.930 (1.009)	85	9610			0.00- 0.00	41.03

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
187 Decane					CAS #: 124-18-5		
10.012	10.012 (1.131)	57	27068	2.00000	1.636	0.00- 0.00	100.00(a)
10.019	10.019 (1.132)	71	12935			0.00- 0.00	47.79
10.019	10.019 (1.132)	142	1809			0.00- 0.00	6.68
215 Undecane					CAS #: 1120-21-4		
11.001	11.001 (1.243)	57	28773	2.00000	1.558	0.00- 0.00	100.00(a)
11.001	11.001 (1.243)	43	23484			0.00- 0.00	81.62
225 Dodecane					CAS #: 112-40-3		
11.917	11.917 (1.346)	57	22653	2.00000	1.386	0.00- 0.00	100.00(a)
11.917	11.917 (1.346)	43	18113			0.00- 0.00	79.96

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Report Date: 25-Sep-2015 15:50

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092408.d
Lab Smp Id: ICAL Level 3
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921b.m
Misc Info: 2.0ppbv(5.0ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 08:49
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	102227	61336	143118	99095	-3.06
123 1,4-Difluorobenze	417792	250675	584909	410857	-1.66
163 Chlorobenzene-d5	379305	227583	531027	363548	-4.15

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.85	-0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092408.d

Page 1

Date : 24-SEP-2015 12:00

Client ID:

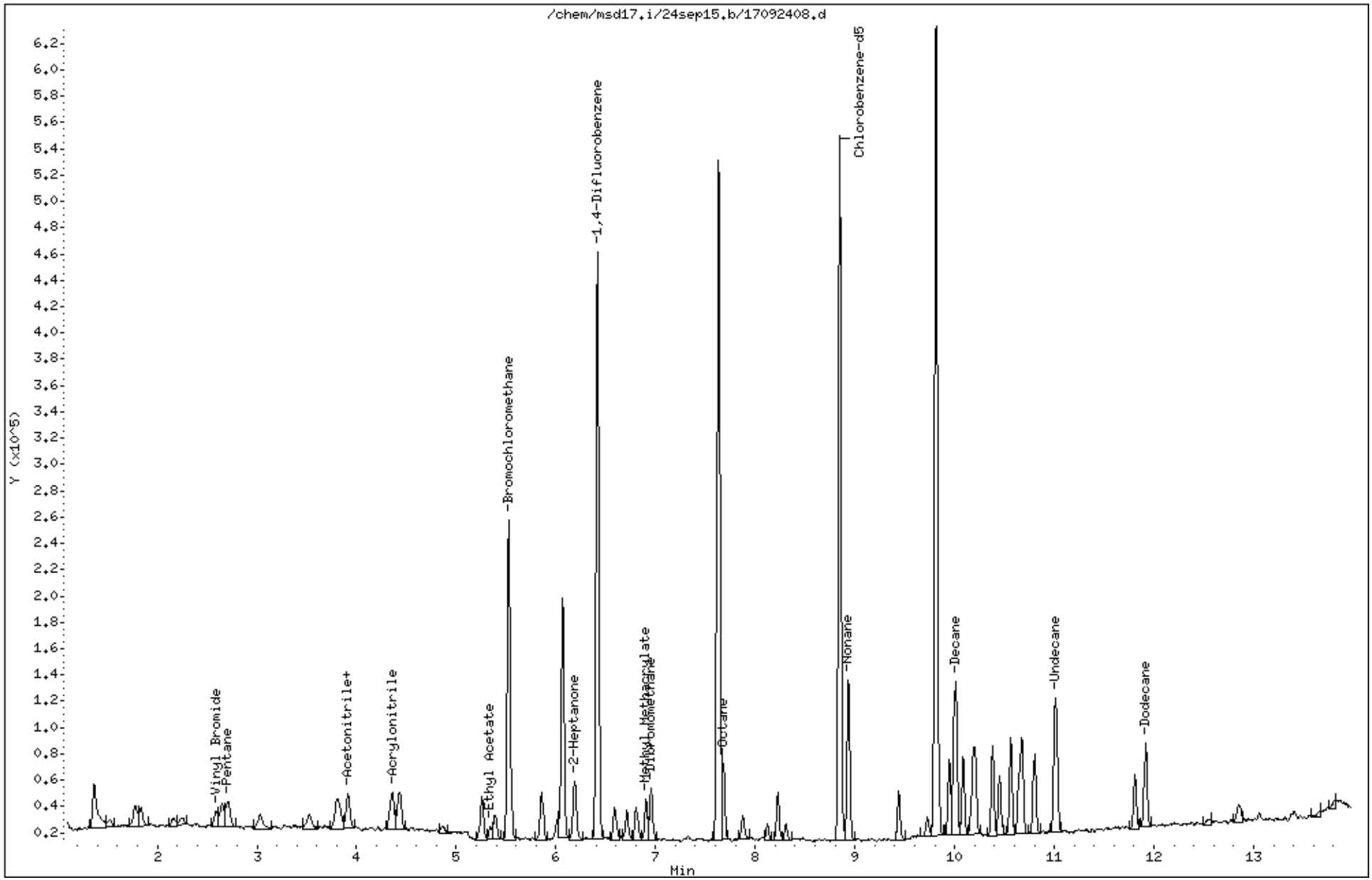
Instrument: msd17.i

Sample Info: 80ml 2736-223

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092405.d
Lab Smp Id: ICAL Level 3
Inj Date : 24-SEP-2015 10:29
Operator : cb Inst ID: msd17.i
Smp Info : 200ml 2736-111
Misc Info : 2.0ppbv(2.0ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921b.m
Meth Date : 25-Sep-2015 15:28 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 10:29 Cal File: 17092405.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 123TCB.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.535	5.535 (1.000)	130	101626	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	77625			46.54- 106.54	76.38
5.528	5.528 (1.000)	49	113831			83.83- 143.83	112.01
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.416	6.416 (1.000)	114	419310	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	63769			0.00- 44.86	15.21
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	379484	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	203080			23.93- 83.93	53.51
229 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
13.135	13.135 (1.482)	180	24569	2.00000	2.000	0.00- 0.00	100.00
13.135	13.135 (1.482)	182	24328			0.00- 0.00	99.02
13.135	13.135 (1.482)	145	7754			0.00- 0.00	31.56

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092405.d
Lab Smp Id: ICAL Level 3
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921b.m
Misc Info: 2.0ppbv(2.0ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 08:49
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	102227	61336	143118	101626	-0.59
123 1,4-Difluorobenze	417792	250675	584909	419310	0.36
163 Chlorobenzene-d5	379305	227583	531027	379484	0.05

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.54	0.13
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.87	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092405.d

Date : 24-SEP-2015 10:29

Client ID:

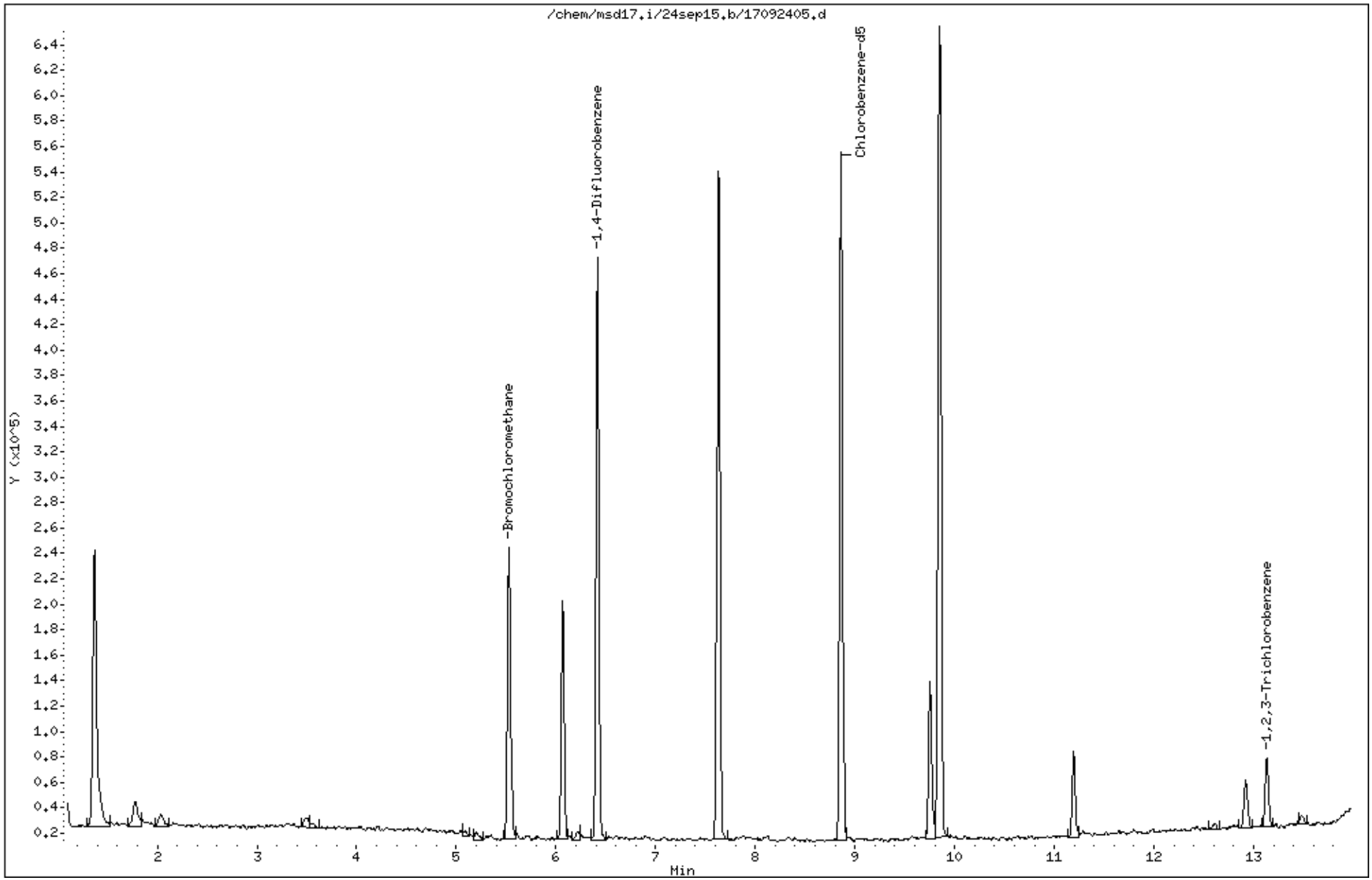
Instrument: msd17.i

Sample Info: 200ml 2736-111

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/21sep15a.b/17092119.d
Lab Smp Id: ICAL Level #3
Inj Date : 21-SEP-2015 21:07
Operator : gh Inst ID: msd17.i
Smp Info : 200ml 2736-257
Misc Info : 2.0ppbv(2.0pbbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/21sep15a.b/175q0921a.m
Meth Date : 25-Sep-2015 15:15 cbond Quant Type: ISTD
Cal Date : 21-SEP-2015 21:07 Cal File: 17092119.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12mdlnoNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.535	5.535 (1.000)	130	109646	25.0000		80.00- 120.00	100.00
5.535	5.535 (1.000)	128	86155			46.54- 106.54	78.58
5.528	5.528 (1.000)	49	125534			83.83- 143.83	114.49
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.416	6.416 (1.000)	114	467141	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	71465			0.00- 44.86	15.30
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	415351	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	220173			23.93- 83.93	53.01
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.065	6.065 (1.096)	65	152545	25.0000	25.819	80.00- 120.00	100.00
6.065	6.065 (1.096)	67	83827			25.51- 85.51	54.95

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.634	7.634 (1.190)	98	474343	25.0000	24.628	80.00- 120.00	100.00
7.627	7.627 (1.189)	70	49513			0.00- 40.39	10.44
7.627	7.627 (1.189)	100	300906			33.97- 93.97	63.44
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.854	9.854 (1.111)	174	255833	25.0000	24.124	80.00- 120.00	100.00
9.847	9.847 (1.111)	95	288370			79.64- 139.64	112.72
9.854	9.854 (1.111)	176	246971			65.80- 125.80	96.54
9 Propylene					CAS #: 115-07-1		
1.524	1.524 (0.275)	41	9046	2.00000	2.079	80.00- 120.00	100.00
1.524	1.524 (0.275)	42	5543			37.10- 97.10	61.28
1.524	1.524 (0.275)	39	9714			44.98- 104.98	107.38
11 Freon 12					CAS #: 75-71-8		
1.560	1.560 (0.282)	85	37699	2.00000	2.136	80.00- 120.00	100.00
1.560	1.560 (0.282)	87	12599			2.33- 62.33	33.42
15 Freon 114					CAS #: 76-14-2		
1.674	1.674 (0.302)	135	27048	2.00000	2.112	80.00- 120.00	100.00
1.674	1.674 (0.302)	137	8780			2.02- 62.02	32.46
17 Chloromethane					CAS #: 74-87-3		
1.767	1.767 (0.319)	50	14359	2.00000	2.325	80.00- 120.00	100.00(a)
1.767	1.767 (0.319)	52	4618			2.35- 62.35	32.16
23 Butane					CAS #: 106-97-8		
1.839	1.839 (0.332)	58	3039	2.00000	2.244	80.00- 120.00	100.00
1.839	1.839 (0.332)	43	19609			657.81- 717.81	645.25
25 Vinyl Chloride					CAS #: 75-01-4		
1.882	1.882 (0.340)	62	15103	2.00000	2.164	80.00- 120.00	100.00
1.875	1.875 (0.339)	64	5868			2.69- 62.69	38.85
26 1,3-Butadiene					CAS #: 106-99-0		
1.903	1.903 (0.344)	54	10216	2.00000	2.110	80.00- 120.00	100.00
1.903	1.903 (0.344)	39	10899			63.95- 123.95	106.69
29 Bromomethane					CAS #: 74-83-9		
2.261	2.261 (0.409)	94	11083	2.00000	1.793	80.00- 120.00	100.00(a)
2.261	2.261 (0.409)	96	11058			63.69- 123.69	99.77
30 Chloroethane					CAS #: 75-00-3		
2.383	2.383 (0.431)	64	7474	2.00000	2.112	80.00- 120.00	100.00
2.376	2.376 (0.429)	66	2456			1.86- 61.86	32.86

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.383	2.383 (0.431)	49	1852			0.00- 55.51	24.78
31 Isopentane					CAS #: 78-78-4		
2.405	2.405 (0.434)	43	13533	2.00000	1.972	80.00- 120.00	100.00(a)
2.405	2.405 (0.434)	57	11465			44.35- 104.35	84.72
35 Freon 11					CAS #: 75-69-4		
2.634	2.634 (0.476)	101	37241	2.00000	2.049	80.00- 120.00	100.00
2.634	2.634 (0.476)	103	24318			35.20- 95.20	65.30
42 Ethanol					CAS #: 64-17-5		
3.021	3.021 (0.546)	45	6736	2.00000	2.768	80.00- 120.00	100.00
3.014	3.014 (0.544)	43	1211			0.00- 50.36	17.98
3.021	3.021 (0.546)	46	2652			10.31- 70.31	39.37
49 Freon 113					CAS #: 76-13-1		
3.286	3.286 (0.594)	151	24929	2.00000	1.925	80.00- 120.00	100.00
3.286	3.286 (0.594)	153	16362			33.72- 93.72	65.63
3.286	3.286 (0.594)	101	30850			95.23- 155.23	123.75
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.322	3.322 (0.600)	98	9788	2.00000	2.051	80.00- 120.00	100.00
3.322	3.322 (0.600)	96	15170			130.14- 190.14	154.99
3.322	3.322 (0.600)	61	24117			218.16- 278.16	246.39
52 Acetone					CAS #: 67-64-1		
3.494	3.494 (0.631)	58	7784	2.00000	2.360	80.00- 120.00	100.00(a)
3.494	3.494 (0.631)	43	26546			266.49- 326.49	341.03
56 Carbon Disulfide					CAS #: 75-15-0		
3.551	3.551 (0.642)	76	46429	2.00000	2.106	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.665	3.665 (0.662)	45	21186	2.00000	2.071	80.00- 120.00	100.00
3.665	3.665 (0.662)	43	3627			0.00- 50.02	17.12
3.673	3.673 (0.664)	59	1190			0.00- 34.32	5.62
58 3-Chloropropene					CAS #: 107-05-1		
3.794	3.794 (0.686)	76	7649	2.00000	2.152	80.00- 120.00	100.00
3.794	3.794 (0.686)	41	16232			185.01- 245.01	212.21
66 Methylene Chloride					CAS #: 75-09-2		
3.981	3.981 (0.719)	49	16585	2.00000	2.146	80.00- 120.00	100.00(a)
3.981	3.981 (0.719)	84	14800			59.02- 119.02	89.24
3.981	3.981 (0.719)	51	6300			1.78- 61.78	37.99

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.117	4.117 (0.744)	59	27368	2.00000	2.130	80.00- 120.00	100.00
4.117	4.117 (0.744)	41	6053			0.00- 50.26	22.12
4.124	4.124 (0.745)	57	3756			0.00- 40.80	13.72
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.203	4.203 (0.759)	73	41155	2.00000	2.055	80.00- 120.00	100.00
4.203	4.203 (0.759)	57	9899			0.00- 51.46	24.05
4.203	4.203 (0.759)	41	7127			0.00- 49.34	17.32
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.224	4.224 (0.763)	98	10025	2.00000	2.108	80.00- 120.00	100.00
4.224	4.224 (0.763)	61	21079			184.16- 244.16	210.26
4.224	4.224 (0.763)	96	15410			127.84- 187.84	153.72
78 Hexane					CAS #: 110-54-3		
4.432	4.432 (0.801)	57	22348	2.00000	2.066	80.00- 120.00	100.00
4.432	4.432 (0.801)	43	13080			27.64- 87.64	58.53
4.432	4.432 (0.801)	86	3665			0.00- 46.92	16.40
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.711	4.711 (0.851)	63	26050	2.00000	2.025	80.00- 120.00	100.00
4.711	4.711 (0.851)	65	8939			2.04- 62.04	34.31
83 Isopropyl ether					CAS #: 108-20-3		
4.704	4.704 (0.850)	45	41909	2.00000	2.003	80.00- 120.00	100.00
4.704	4.704 (0.850)	87	12838			1.31- 61.31	30.63
4.704	4.704 (0.850)	59	5734			0.00- 42.69	13.68
86 Vinyl Acetate					CAS #: 108-05-4		
4.761	4.761 (0.860)	86	3879	2.00000	1.976	80.00- 120.00	100.00(a)
4.761	4.761 (0.860)	43	35440			891.41- 951.41	913.64
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.062	5.062 (0.915)	59	42265	2.00000	1.936	80.00- 120.00	100.00(a)
5.062	5.062 (0.915)	87	17993			13.52- 73.52	42.57
5.062	5.062 (0.915)	41	7918			0.00- 47.26	18.73
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.299	5.299 (0.957)	98	10928	2.00000	2.131	80.00- 120.00	100.00
5.299	5.299 (0.957)	96	16433			124.38- 184.38	150.38
5.299	5.299 (0.957)	61	20343			162.07- 222.07	186.15
92 2-Butanone					CAS #: 78-93-3		
5.334	5.334 (0.964)	72	7820	2.00000	2.157	80.00- 120.00	100.00
5.334	5.334 (0.964)	43	25553			306.33- 366.33	326.76

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.334	5.334 (0.964)	57	2831			0.00- 59.26	36.20
99 Tetrahydrofuran					CAS #: 109-99-9		
5.535	5.535 (1.000)	42	14476	2.00000	2.049	80.00- 120.00	100.00
5.535	5.535 (1.000)	71	5624			17.72- 77.72	38.85
5.535	5.535 (1.000)	72	7257			20.99- 80.99	50.13
100 Chloroform					CAS #: 67-66-3		
5.592	5.592 (1.010)	83	31784	2.00000	2.016	80.00- 120.00	100.00
5.592	5.592 (1.010)	85	19812			34.67- 94.67	62.33
102 Cyclohexane					CAS #: 110-82-7		
5.693	5.693 (1.028)	84	19521	2.00000	1.994	80.00- 120.00	100.00
5.685	5.685 (1.027)	56	21955			77.09- 137.09	112.47
5.685	5.685 (1.027)	41	11402			25.87- 85.87	58.41
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.707	5.707 (1.031)	97	32027	2.00000	2.049	80.00- 120.00	100.00
5.707	5.707 (1.031)	99	20708			34.33- 94.33	64.66
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.822	5.822 (1.052)	119	32117	2.00000	2.056	80.00- 120.00	100.00
5.822	5.822 (1.052)	117	32088			74.90- 134.90	99.91
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.087)	57	64683	2.00000	1.956	80.00- 120.00	100.00
6.015	6.015 (1.087)	56	21494			1.80- 61.80	33.23
6.015	6.015 (1.087)	41	17691			0.00- 55.83	27.35
116 Benzene					CAS #: 71-43-2		
6.044	6.044 (0.942)	78	44057	2.00000	1.862	80.00- 120.00	100.00
6.044	6.044 (0.942)	77	10813			0.00- 54.08	24.54
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.115	6.115 (1.105)	87	10192	2.00000	1.945	80.00- 120.00	100.00(a)
6.108	6.108 (1.104)	73	42339			376.57- 436.57	415.41
6.108	6.108 (1.104)	55	10850			64.52- 124.52	106.46
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.137	6.137 (0.956)	62	19611	2.00000	1.897	80.00- 120.00	100.00
6.130	6.130 (0.955)	64	6321			2.16- 62.16	32.23
121 Heptane					CAS #: 142-82-5		
6.187	6.187 (0.964)	71	15183	2.00000	1.854	80.00- 120.00	100.00
6.187	6.187 (0.964)	43	22953			110.94- 170.94	151.18

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.187	6.187 (0.964)	57	12962			53.72- 113.72	85.37
125 Trichloroethene					CAS #: 79-01-6		
6.609	6.609 (1.030)	95	20966	2.00000	1.878	80.00- 120.00	100.00
6.609	6.609 (1.030)	130	20983			74.97- 134.97	100.08
6.609	6.609 (1.030)	97	14299			35.33- 95.33	68.20
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.211)	83	25978	2.00000	1.922	80.00- 120.00	100.00(a)
6.710	6.710 (1.212)	98	11558			16.41- 76.41	44.49
6.710	6.710 (1.212)	55	19543			40.41- 100.41	75.23
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.846	6.846 (1.067)	63	15816	2.00000	1.867	80.00- 120.00	100.00
6.846	6.846 (1.067)	62	11823			38.78- 98.78	74.75
6.846	6.846 (1.067)	41	8550			20.16- 80.16	54.06
136 1,4-Dioxane					CAS #: 123-91-1		
6.946	6.946 (1.083)	88	10001	2.00000	1.951	80.00- 120.00	100.00(a)
6.939	6.939 (1.081)	58	6523			31.02- 91.02	65.22
6.946	6.946 (1.083)	57	2646			0.00- 51.33	26.46
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.103)	83	33779	2.00000	1.927	80.00- 120.00	100.00
7.075	7.075 (1.103)	85	23453			34.16- 94.16	69.43
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.448	7.448 (1.161)	75	28355	2.00000	1.926	80.00- 120.00	100.00
7.448	7.448 (1.161)	77	9723			1.57- 61.57	34.29
7.448	7.448 (1.161)	39	13221			13.98- 73.98	46.63
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.562	7.562 (1.179)	58	10993	2.00000	1.929	80.00- 120.00	100.00
7.562	7.562 (1.179)	43	27627			205.93- 265.93	251.31
7.562	7.562 (1.179)	85	6118			18.04- 78.04	55.65
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.198)	91	54320	2.00000	1.830	80.00- 120.00	100.00
7.684	7.684 (1.198)	92	30456			27.24- 87.24	56.07
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.927	7.927 (0.894)	75	23996	2.00000	1.860	80.00- 120.00	100.00
7.927	7.927 (0.894)	77	8589			1.57- 61.57	35.79
7.927	7.927 (0.894)	39	10559			13.98- 73.98	44.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.085	8.085 (0.912)	97	18900	2.00000	1.857	80.00- 120.00	100.00
8.085	8.085 (0.912)	99	12417			31.05- 91.05	65.70
8.085	8.085 (0.912)	83	17736			58.29- 118.29	93.84
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.916)	166	28786	2.00000	1.927	80.00- 120.00	100.00
8.121	8.121 (0.916)	129	21733			42.46- 102.46	75.50
8.121	8.121 (0.916)	131	19706			40.24- 100.24	68.46
158 2-Hexanone					CAS #: 591-78-6		
8.250	8.250 (0.930)	58	14296	2.00000	1.990	80.00- 120.00	100.00(a)
8.250	8.250 (0.930)	43	25820			205.93- 265.93	180.61
8.250	8.250 (0.930)	100	3312			11.40- 71.40	23.17
160 Dibromochloromethane					CAS #: 124-48-1		
8.400	8.400 (0.947)	129	36543	2.00000	1.923	80.00- 120.00	100.00
8.400	8.400 (0.947)	127	28134			47.28- 107.28	76.99
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.515	8.515 (0.960)	107	29536	2.00000	1.836	80.00- 120.00	100.00
8.515	8.515 (0.960)	109	27694			66.45- 126.45	93.76
165 Chlorobenzene					CAS #: 108-90-7		
8.887	8.887 (1.002)	112	45739	2.00000	1.963	80.00- 120.00	100.00
8.887	8.887 (1.002)	114	13794			2.06- 62.06	30.16
8.887	8.887 (1.002)	77	30452			26.47- 86.47	66.58
167 Ethyl Benzene					CAS #: 100-41-4		
8.930	8.930 (1.007)	106	21113	2.00000	1.861	80.00- 120.00	100.00
8.930	8.930 (1.007)	91	67005			289.94- 349.94	317.36
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	26444	2.00000	1.877	80.00- 120.00	100.00
9.031	9.031 (1.019)	91	52202			167.83- 227.83	197.41
171 o-Xylene					CAS #: 95-47-6		
9.374	9.374 (1.057)	106	23412	2.00000	1.791	80.00- 120.00	100.00
9.374	9.374 (1.057)	91	51719			181.11- 241.11	220.91
172 Styrene					CAS #: 100-42-5		
9.396	9.396 (1.060)	104	38442	2.00000	1.724	80.00- 120.00	100.00
9.396	9.396 (1.060)	78	19228			17.79- 77.79	50.02
174 Bromoform					CAS #: 75-25-2		
9.596	9.596 (1.082)	173	35081	2.00000	1.828	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.596	9.596 (1.082)	171	18924			21.45- 81.45	53.94
175 Cumene					CAS #: 98-82-8		
9.661	9.661 (1.090)	105	73479	2.00000	1.760	80.00- 120.00	100.00
9.661	9.661 (1.090)	120	21050			0.00- 57.47	28.65
9.661	9.661 (1.090)	51	7821			0.00- 38.62	10.64
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.976	9.976 (1.125)	83	42559	2.00000	1.937	80.00- 120.00	100.00
9.983	9.983 (1.126)	85	26988			34.77- 94.77	63.41
182 Propylbenzene					CAS #: 103-65-1		
10.005	10.005 (1.128)	91	90554	2.00000	1.806	80.00- 120.00	100.00
10.005	10.005 (1.128)	120	20624			0.00- 53.65	22.78
10.005	10.005 (1.128)	105	3685			0.00- 33.57	4.07
188 4-Ethyltoluene					CAS #: 622-96-8		
10.098	10.098 (1.139)	120	23291	2.00000	1.754	80.00- 120.00	100.00
10.098	10.098 (1.139)	105	80066			292.89- 352.89	343.76
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.155	10.155 (1.145)	120	31412	2.00000	1.801	80.00- 120.00	100.00
10.148	10.148 (1.145)	105	62876			175.25- 235.25	200.17
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.478	10.478 (1.182)	120	28158	2.00000	1.798	80.00- 120.00	100.00
10.478	10.478 (1.182)	105	59253			183.76- 243.76	210.43
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.771	10.771 (1.215)	146	48023	2.00000	1.907	80.00- 120.00	100.00
10.771	10.771 (1.215)	148	30700			33.69- 93.69	63.93
10.771	10.771 (1.215)	111	18123			8.12- 68.12	37.74
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.850	10.850 (1.224)	146	47575	2.00000	1.909	80.00- 120.00	100.00
10.850	10.850 (1.224)	148	30025			33.86- 93.86	63.11
10.850	10.850 (1.224)	111	18491			6.71- 66.71	38.87
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.972	10.972 (1.238)	91	49661	2.00000	1.676	80.00- 120.00	100.00
10.972	10.972 (1.238)	126	11576			0.00- 51.95	23.31
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.179	11.179 (1.261)	146	45230	2.00000	1.896	80.00- 120.00	100.00
11.179	11.179 (1.261)	148	30096			33.90- 93.90	66.54

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.179	11.179 (1.261)	111	17454			8.86- 68.86	38.59
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.605	12.605 (1.422)	180	38979	2.00000	1.881	80.00- 120.00	100.00(a)
12.598	12.598 (1.421)	182	35550			65.21- 125.21	91.20
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.691	12.691 (1.431)	225	34859	2.00000	1.959	80.00- 120.00	100.00(a)
12.691	12.691 (1.431)	223	22314			33.22- 93.22	64.01

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092119.d
Lab Smp Id: ICAL Level #3
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msd17.i/21sep15a.b/175q0921a.m
Misc Info: 2.0ppbv(2.0pbbv)

Calibration Date: 21-SEP-2015
Calibration Time: 22:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	116527	69916	163138	109646	-5.91
123 1,4-Difluorobenze	475185	285111	665259	467141	-1.69
163 Chlorobenzene-d5	418099	250859	585339	415351	-0.66

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.54	0.13
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/21sep15a.b/17092119.d

Date : 21-SEP-2015 21:07

Client ID:

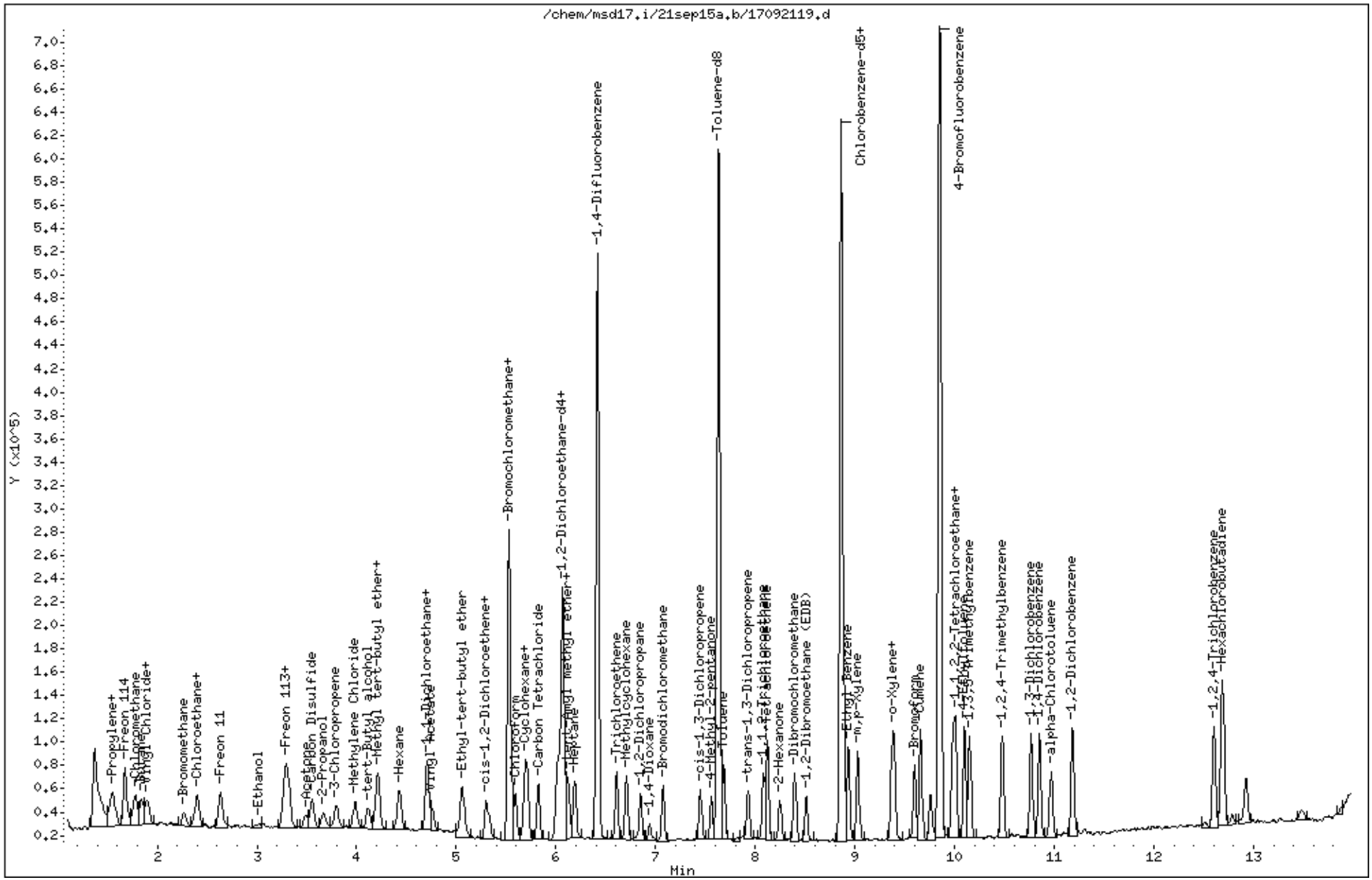
Sample Info: 200ml 2736-257

Column phase: RTX-624

Instrument: msd17.i

Operator: gh

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/21sep15a.b/17092120.d
Lab Smp Id: ICAL Level #4
Inj Date : 21-SEP-2015 21:52
Operator : gh Inst ID: msd17.i
Smp Info : 200ml 2737-258
Misc Info : 5.0ppbv(5.0ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/21sep15a.b/175q0921a.m
Meth Date : 25-Sep-2015 15:15 cbond Quant Type: ISTD
Cal Date : 21-SEP-2015 21:52 Cal File: 17092120.d
Als bottle: 3 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12mdlnoNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.528	5.528 (1.000)	130	112944	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	87359			46.54- 106.54	77.35
5.528	5.528 (1.000)	49	127652			83.83- 143.83	113.02
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.416	6.416 (1.000)	114	465394	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	72804			0.00- 44.86	15.64
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	418681	25.0000		80.00- 120.00	100.00
8.866	8.866 (1.000)	82	224070			23.93- 83.93	53.52
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.065	6.065 (1.097)	65	154481	25.0000	25.383	80.00- 120.00	100.00
6.065	6.065 (1.097)	67	84205			25.51- 85.51	54.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.189)	98	479645	25.0000	24.997	80.00- 120.00	100.00
7.627	7.627 (1.189)	70	50037			0.00- 40.39	10.43
7.627	7.627 (1.189)	100	302272			33.97- 93.97	63.02
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.854	9.854 (1.111)	174	260133	25.0000	24.334	80.00- 120.00	100.00
9.847	9.847 (1.111)	95	293552			79.64- 139.64	112.85
9.854	9.854 (1.111)	176	246683			65.80- 125.80	94.83
9 Propylene					CAS #: 115-07-1		
1.524	1.524 (0.276)	41	21142	5.00000	4.718	80.00- 120.00	100.00
1.524	1.524 (0.276)	42	15078			37.10- 97.10	71.32
1.524	1.524 (0.276)	39	18989			44.98- 104.98	89.82
11 Freon 12					CAS #: 75-71-8		
1.559	1.559 (0.282)	85	86674	5.00000	4.768	80.00- 120.00	100.00
1.559	1.559 (0.282)	87	27826			2.33- 62.33	32.10
15 Freon 114					CAS #: 76-14-2		
1.674	1.674 (0.303)	135	62368	5.00000	4.727	80.00- 120.00	100.00
1.674	1.674 (0.303)	137	20254			2.02- 62.02	32.47
17 Chloromethane					CAS #: 74-87-3		
1.767	1.767 (0.320)	50	30127	5.00000	4.736	80.00- 120.00	100.00(a)
1.774	1.774 (0.321)	52	11418			2.35- 62.35	37.90
23 Butane					CAS #: 106-97-8		
1.839	1.839 (0.333)	58	7357	5.00000	5.274	80.00- 120.00	100.00
1.839	1.839 (0.333)	43	44662			657.81- 717.81	607.07
25 Vinyl Chloride					CAS #: 75-01-4		
1.882	1.882 (0.340)	62	33356	5.00000	4.640	80.00- 120.00	100.00
1.882	1.882 (0.340)	64	11256			2.69- 62.69	33.75
26 1,3-Butadiene					CAS #: 106-99-0		
1.903	1.903 (0.344)	54	23855	5.00000	4.782	80.00- 120.00	100.00
1.903	1.903 (0.344)	39	22032			63.95- 123.95	92.36
29 Bromomethane					CAS #: 74-83-9		
2.261	2.261 (0.409)	94	28780	5.00000	4.520	80.00- 120.00	100.00(a)
2.269	2.269 (0.410)	96	27324			63.69- 123.69	94.94
30 Chloroethane					CAS #: 75-00-3		
2.383	2.383 (0.431)	64	17834	5.00000	4.894	80.00- 120.00	100.00
2.383	2.383 (0.431)	66	5445			1.86- 61.86	30.53

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.383	2.383 (0.431)	49	4809			0.00- 55.51	26.97
31 Isopentane					CAS #: 78-78-4		
2.405	2.405 (0.435)	43	34285	5.00000	4.850	80.00- 120.00	100.00
2.405	2.405 (0.435)	57	25815			44.35- 104.35	75.30
35 Freon 11					CAS #: 75-69-4		
2.634	2.634 (0.476)	101	89788	5.00000	4.797	80.00- 120.00	100.00
2.634	2.634 (0.476)	103	55682			35.20- 95.20	62.01
42 Ethanol					CAS #: 64-17-5		
3.006	3.006 (0.544)	45	9702	5.00000	3.871	80.00- 120.00	100.00
3.006	3.006 (0.544)	43	4400			0.00- 50.36	45.35
2.999	2.999 (0.543)	46	4130			10.31- 70.31	42.57
49 Freon 113					CAS #: 76-13-1		
3.286	3.286 (0.594)	151	62162	5.00000	4.661	80.00- 120.00	100.00
3.286	3.286 (0.594)	153	38815			33.72- 93.72	62.44
3.286	3.286 (0.594)	101	78180			95.23- 155.23	125.77
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.322	3.322 (0.601)	98	23001	5.00000	4.678	80.00- 120.00	100.00
3.322	3.322 (0.601)	96	36541			130.14- 190.14	158.87
3.322	3.322 (0.601)	61	54810			218.16- 278.16	238.29
52 Acetone					CAS #: 67-64-1		
3.479	3.479 (0.629)	58	16221	5.00000	4.775	80.00- 120.00	100.00(a)
3.486	3.486 (0.631)	43	46009			266.49- 326.49	283.64
56 Carbon Disulfide					CAS #: 75-15-0		
3.551	3.551 (0.642)	76	108257	5.00000	4.768	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.658	3.658 (0.662)	45	40991	5.00000	3.890	80.00- 120.00	100.00
3.658	3.658 (0.662)	43	7872			0.00- 50.02	19.20
3.658	3.658 (0.662)	59	1859			0.00- 34.32	4.54
58 3-Chloropropene					CAS #: 107-05-1		
3.794	3.794 (0.686)	76	17100	5.00000	4.671	80.00- 120.00	100.00
3.794	3.794 (0.686)	41	36976			185.01- 245.01	216.23
66 Methylene Chloride					CAS #: 75-09-2		
3.981	3.981 (0.720)	49	39718	5.00000	4.988	80.00- 120.00	100.00(a)
3.981	3.981 (0.720)	84	34337			59.02- 119.02	86.45
3.981	3.981 (0.720)	51	12690			1.78- 61.78	31.95

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.117	4.117 (0.745)	59	41700	5.00000	3.151	80.00- 120.00	100.00
4.117	4.117 (0.745)	41	9829			0.00- 50.26	23.57
4.117	4.117 (0.745)	57	5421			0.00- 40.80	13.00
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.203	4.203 (0.760)	73	95390	5.00000	4.625	80.00- 120.00	100.00
4.195	4.195 (0.759)	57	21440			0.00- 51.46	22.48
4.195	4.195 (0.759)	41	20453			0.00- 49.34	21.44
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.224	4.224 (0.764)	98	23987	5.00000	4.896	80.00- 120.00	100.00
4.224	4.224 (0.764)	61	49470			184.16- 244.16	206.24
4.224	4.224 (0.764)	96	38197			127.84- 187.84	159.24
78 Hexane					CAS #: 110-54-3		
4.432	4.432 (0.802)	57	53167	5.00000	4.772	80.00- 120.00	100.00
4.432	4.432 (0.802)	43	29754			27.64- 87.64	55.96
4.432	4.432 (0.802)	86	8831			0.00- 46.92	16.61
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.711	4.711 (0.852)	63	63208	5.00000	4.769	80.00- 120.00	100.00
4.711	4.711 (0.852)	65	21666			2.04- 62.04	34.28
83 Isopropyl ether					CAS #: 108-20-3		
4.704	4.704 (0.851)	45	97526	5.00000	4.525	80.00- 120.00	100.00
4.704	4.704 (0.851)	87	31304			1.31- 61.31	32.10
4.704	4.704 (0.851)	59	12095			0.00- 42.69	12.40
86 Vinyl Acetate					CAS #: 108-05-4		
4.754	4.754 (0.860)	86	8481	5.00000	4.194	80.00- 120.00	100.00
4.754	4.754 (0.860)	43	77663			891.41- 951.41	915.73
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.062	5.062 (0.916)	59	99693	5.00000	4.432	80.00- 120.00	100.00
5.055	5.055 (0.914)	87	42965			13.52- 73.52	43.10
5.062	5.062 (0.916)	41	18636			0.00- 47.26	18.69
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.299	5.299 (0.959)	98	23640	5.00000	4.475	80.00- 120.00	100.00
5.299	5.299 (0.959)	96	38746			124.38- 184.38	163.90
5.299	5.299 (0.959)	61	46197			162.07- 222.07	195.42
92 2-Butanone					CAS #: 78-93-3		
5.327	5.327 (0.964)	72	15502	5.00000	4.150	80.00- 120.00	100.00
5.327	5.327 (0.964)	43	48914			306.33- 366.33	315.53

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.334	5.334 (0.965)	57	4264			0.00- 59.26	27.51
99 Tetrahydrofuran					CAS #: 109-99-9		
5.535	5.535 (1.001)	42	28792	5.00000	3.957	80.00- 120.00	100.00
5.535	5.535 (1.001)	71	14976			17.72- 77.72	52.01
5.535	5.535 (1.001)	72	15454			20.99- 80.99	53.67
100 Chloroform					CAS #: 67-66-3		
5.592	5.592 (1.012)	83	76376	5.00000	4.702	80.00- 120.00	100.00
5.592	5.592 (1.012)	85	49046			34.67- 94.67	64.22
102 Cyclohexane					CAS #: 110-82-7		
5.693	5.693 (1.030)	84	46203	5.00000	4.581	80.00- 120.00	100.00
5.693	5.693 (1.030)	56	50264			77.09- 137.09	108.79
5.693	5.693 (1.030)	41	25787			25.87- 85.87	55.81
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.707	5.707 (1.032)	97	73371	5.00000	4.556	80.00- 120.00	100.00
5.707	5.707 (1.032)	99	48468			34.33- 94.33	66.06
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.821	5.821 (1.053)	119	72361	5.00000	4.498	80.00- 120.00	100.00
5.821	5.821 (1.053)	117	79120			74.90- 134.90	109.34
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.088)	57	151923	5.00000	4.460	80.00- 120.00	100.00
6.015	6.015 (1.088)	56	47206			1.80- 61.80	31.07
6.015	6.015 (1.088)	41	40695			0.00- 55.83	26.79
116 Benzene					CAS #: 71-43-2		
6.044	6.044 (0.942)	78	108596	5.00000	4.606	80.00- 120.00	100.00
6.044	6.044 (0.942)	77	27133			0.00- 54.08	24.99
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.108	6.108 (1.105)	87	22480	5.00000	4.164	80.00- 120.00	100.00
6.108	6.108 (1.105)	73	100041			376.57- 436.57	445.02
6.108	6.108 (1.105)	55	22460			64.52- 124.52	99.91
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.137	6.137 (0.956)	62	47594	5.00000	4.621	80.00- 120.00	100.00
6.137	6.137 (0.956)	64	16953			2.16- 62.16	35.62
121 Heptane					CAS #: 142-82-5		
6.187	6.187 (0.964)	71	36564	5.00000	4.481	80.00- 120.00	100.00
6.187	6.187 (0.964)	43	48254			110.94- 170.94	131.97

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.187	6.187 (0.964)	57	31001			53.72- 113.72	84.79
125 Trichloroethene					CAS #: 79-01-6		
6.609	6.609 (1.030)	95	48785	5.00000	4.386	80.00- 120.00	100.00
6.609	6.609 (1.030)	130	52216			74.97- 134.97	107.03
6.609	6.609 (1.030)	97	33667			35.33- 95.33	69.01
127 Methylcyclohexane					CAS #: 108-87-2		
6.710	6.710 (1.214)	83	60516	5.00000	4.348	80.00- 120.00	100.00
6.703	6.703 (1.212)	98	27887			16.41- 76.41	46.08
6.703	6.703 (1.212)	55	47266			40.41- 100.41	78.10
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.846	6.846 (1.067)	63	40889	5.00000	4.845	80.00- 120.00	100.00
6.846	6.846 (1.067)	62	25917			38.78- 98.78	63.38
6.846	6.846 (1.067)	41	21058			20.16- 80.16	51.50
136 1,4-Dioxane					CAS #: 123-91-1		
6.939	6.939 (1.081)	88	16373	5.00000	3.206	80.00- 120.00	100.00
6.939	6.939 (1.081)	58	9995			31.02- 91.02	61.05
6.939	6.939 (1.081)	57	3881			0.00- 51.33	23.70
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.103)	83	81329	5.00000	4.658	80.00- 120.00	100.00
7.075	7.075 (1.103)	85	51888			34.16- 94.16	63.80
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.447	7.447 (1.161)	75	66309	5.00000	4.521	80.00- 120.00	100.00
7.447	7.447 (1.161)	77	21756			1.57- 61.57	32.81
7.447	7.447 (1.161)	39	27983			13.98- 73.98	42.20
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.562	7.562 (1.179)	58	16058	5.00000	2.828	80.00- 120.00	100.00
7.562	7.562 (1.179)	43	38772			205.93- 265.93	241.45
7.562	7.562 (1.179)	85	7083			18.04- 78.04	44.11
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.198)	91	132426	5.00000	4.479	80.00- 120.00	100.00
7.684	7.684 (1.198)	92	73320			27.24- 87.24	55.37
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.927	7.927 (0.894)	75	57197	5.00000	4.398	80.00- 120.00	100.00
7.927	7.927 (0.894)	77	19801			1.57- 61.57	34.62
7.927	7.927 (0.894)	39	27890			13.98- 73.98	48.76

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.085	8.085 (0.912)	97	48089	5.00000	4.687	80.00- 120.00	100.00
8.085	8.085 (0.912)	99	29888			31.05- 91.05	62.15
8.085	8.085 (0.912)	83	41206			58.29- 118.29	85.69
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.916)	166	69489	5.00000	4.615	80.00- 120.00	100.00
8.121	8.121 (0.916)	129	51896			42.46- 102.46	74.68
8.121	8.121 (0.916)	131	50485			40.24- 100.24	72.65
158 2-Hexanone					CAS #: 591-78-6		
8.250	8.250 (0.930)	58	14399	5.00000	1.989	80.00- 120.00	100.00(a)
8.250	8.250 (0.930)	43	24831			205.93- 265.93	172.45
8.250	8.250 (0.930)	100	3109			11.40- 71.40	21.59
160 Dibromochloromethane					CAS #: 124-48-1		
8.400	8.400 (0.947)	129	83264	5.00000	4.347	80.00- 120.00	100.00
8.400	8.400 (0.947)	127	67506			47.28- 107.28	81.07
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.515	8.515 (0.960)	107	74904	5.00000	4.618	80.00- 120.00	100.00
8.515	8.515 (0.960)	109	71024			66.45- 126.45	94.82
165 Chlorobenzene					CAS #: 108-90-7		
8.887	8.887 (1.002)	112	106019	5.00000	4.514	80.00- 120.00	100.00
8.887	8.887 (1.002)	114	34344			2.06- 62.06	32.39
8.887	8.887 (1.002)	77	64761			26.47- 86.47	61.08
167 Ethyl Benzene					CAS #: 100-41-4		
8.930	8.930 (1.007)	106	51166	5.00000	4.474	80.00- 120.00	100.00
8.930	8.930 (1.007)	91	158783			289.94- 349.94	310.33
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	60310	5.00000	4.247	80.00- 120.00	100.00
9.031	9.031 (1.019)	91	120517			167.83- 227.83	199.83
171 o-Xylene					CAS #: 95-47-6		
9.374	9.374 (1.057)	106	57797	5.00000	4.387	80.00- 120.00	100.00
9.374	9.374 (1.057)	91	122841			181.11- 241.11	212.54
172 Styrene					CAS #: 100-42-5		
9.396	9.396 (1.060)	104	94402	5.00000	4.200	80.00- 120.00	100.00
9.396	9.396 (1.060)	78	44884			17.79- 77.79	47.55
174 Bromoform					CAS #: 75-25-2		
9.596	9.596 (1.082)	173	83191	5.00000	4.302	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.596	9.596 (1.082)	171	42862			21.45- 81.45	51.52
175 Cumene					CAS #: 98-82-8		
9.661	9.661 (1.090)	105	178026	5.00000	4.230	80.00- 120.00	100.00
9.661	9.661 (1.090)	120	48893			0.00- 57.47	27.46
9.661	9.661 (1.090)	51	16114			0.00- 38.62	9.05
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.976	9.976 (1.125)	83	94887	5.00000	4.284	80.00- 120.00	100.00
9.976	9.976 (1.125)	85	61487			34.77- 94.77	64.80
182 Propylbenzene					CAS #: 103-65-1		
10.005	10.005 (1.128)	91	213004	5.00000	4.216	80.00- 120.00	100.00
10.005	10.005 (1.128)	120	50530			0.00- 53.65	23.72
10.005	10.005 (1.128)	105	7749			0.00- 33.57	3.64
188 4-Ethyltoluene					CAS #: 622-96-8		
10.098	10.098 (1.139)	120	56424	5.00000	4.216	80.00- 120.00	100.00
10.098	10.098 (1.139)	105	178871			292.89- 352.89	317.01
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.155	10.155 (1.145)	120	72937	5.00000	4.148	80.00- 120.00	100.00
10.148	10.148 (1.145)	105	152697			175.25- 235.25	209.35
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.477	10.477 (1.182)	120	64933	5.00000	4.114	80.00- 120.00	100.00
10.477	10.477 (1.182)	105	140019			183.76- 243.76	215.64
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.771	10.771 (1.215)	146	107216	5.00000	4.223	80.00- 120.00	100.00
10.771	10.771 (1.215)	148	70347			33.69- 93.69	65.61
10.771	10.771 (1.215)	111	40067			8.12- 68.12	37.37
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.850	10.850 (1.224)	146	108118	5.00000	4.304	80.00- 120.00	100.00
10.850	10.850 (1.224)	148	69729			33.86- 93.86	64.49
10.850	10.850 (1.224)	111	40106			6.71- 66.71	37.09
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.965	10.965 (1.237)	91	107871	5.00000	3.612	80.00- 120.00	100.00
10.972	10.972 (1.238)	126	21658			0.00- 51.95	20.08
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.179	11.179 (1.261)	146	101633	5.00000	4.226	80.00- 120.00	100.00
11.179	11.179 (1.261)	148	65008			33.90- 93.90	63.96

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.179	11.179 (1.261)	111	39054			8.86- 68.86	38.43
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.605	12.605 (1.422)	180	80500	5.00000	3.854	80.00- 120.00	100.00
12.605	12.605 (1.422)	182	78218			65.21- 125.21	97.17
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.691	12.691 (1.431)	225	72961	5.00000	4.068	80.00- 120.00	100.00
12.691	12.691 (1.431)	223	46175			33.22- 93.22	63.29

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092120.d
Lab Smp Id: ICAL Level #4
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msd17.i/21sep15a.b/175q0921a.m
Misc Info: 5.0ppbv(5.0ppbv)

Calibration Date: 21-SEP-2015
Calibration Time: 22:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	116527	69916	163138	112944	-3.07
123 1,4-Difluorobenze	475185	285111	665259	465394	-2.06
163 Chlorobenzene-d5	418099	250859	585339	418681	0.14

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/21sep15a.b/17092120.d

Date : 21-SEP-2015 21:52

Client ID:

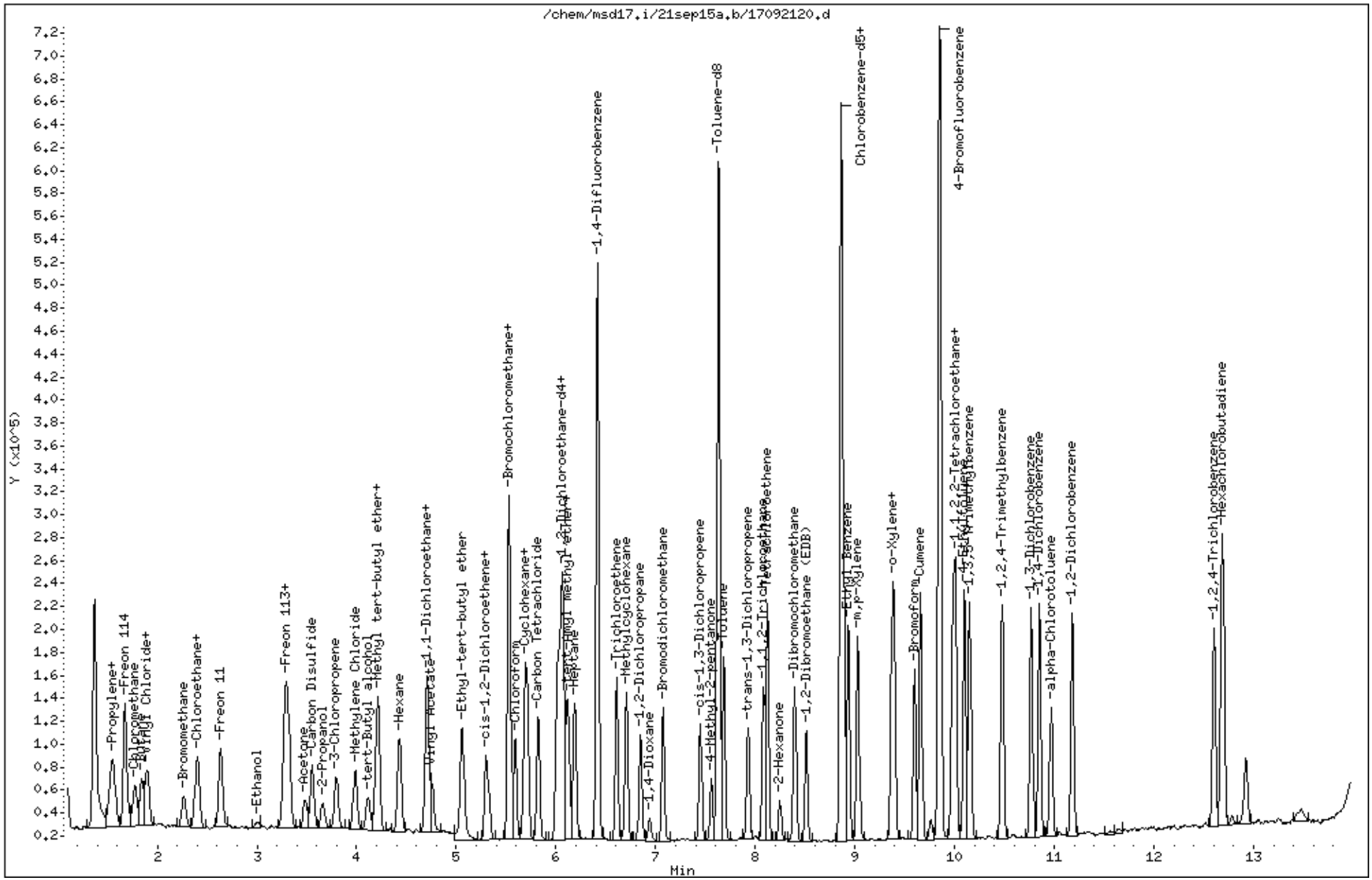
Sample Info: 200ml 2737-258

Column phase: RTX-624

Instrument: msd17.i

Operator: gh

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092415.d
Lab Smp Id: ICAL Level 5
Inj Date : 24-SEP-2015 15:59
Operator : cb Inst ID: msd17.i
Smp Info : 20ml 2736-262
Misc Info : 2.0ppbv(20ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921c.m
Meth Date : 25-Sep-2015 15:58 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 15:59 Cal File: 17092415.d
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Naphcrv.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.521	5.521 (1.000)	130	102544	25.0000		80.00- 120.00	100.00
5.521	5.521 (1.000)	128	83053			46.54- 106.54	80.99
5.521	5.521 (1.000)	49	116480			83.83- 143.83	113.59
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.409	6.409 (1.000)	114	420054	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	66642			0.00- 44.86	15.87
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	392554	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	208378			23.93- 83.93	53.08
228 Naphthalene					CAS #: 91-20-3		
12.805	12.805 (1.444)	128	38576	2.00000	1.634	0.00- 30.00	100.00(a)
12.805	12.805 (1.444)	127	5483			0.00- 30.00	14.21

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092415.d
Lab Smp Id: ICAL Level 5
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921c.m
Misc Info: 2.0ppbv(20ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 08:49
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	102227	61336	143118	102544	0.31
123 1,4-Difluorobenze	417792	250675	584909	420054	0.54
163 Chlorobenzene-d5	379305	227583	531027	392554	3.49

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.52	-0.13
123 1,4-Difluorobenze	6.42	6.09	6.75	6.41	-0.11
163 Chlorobenzene-d5	8.86	8.53	9.19	8.87	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092415.d

Page 1

Date : 24-SEP-2015 15:59

Client ID:

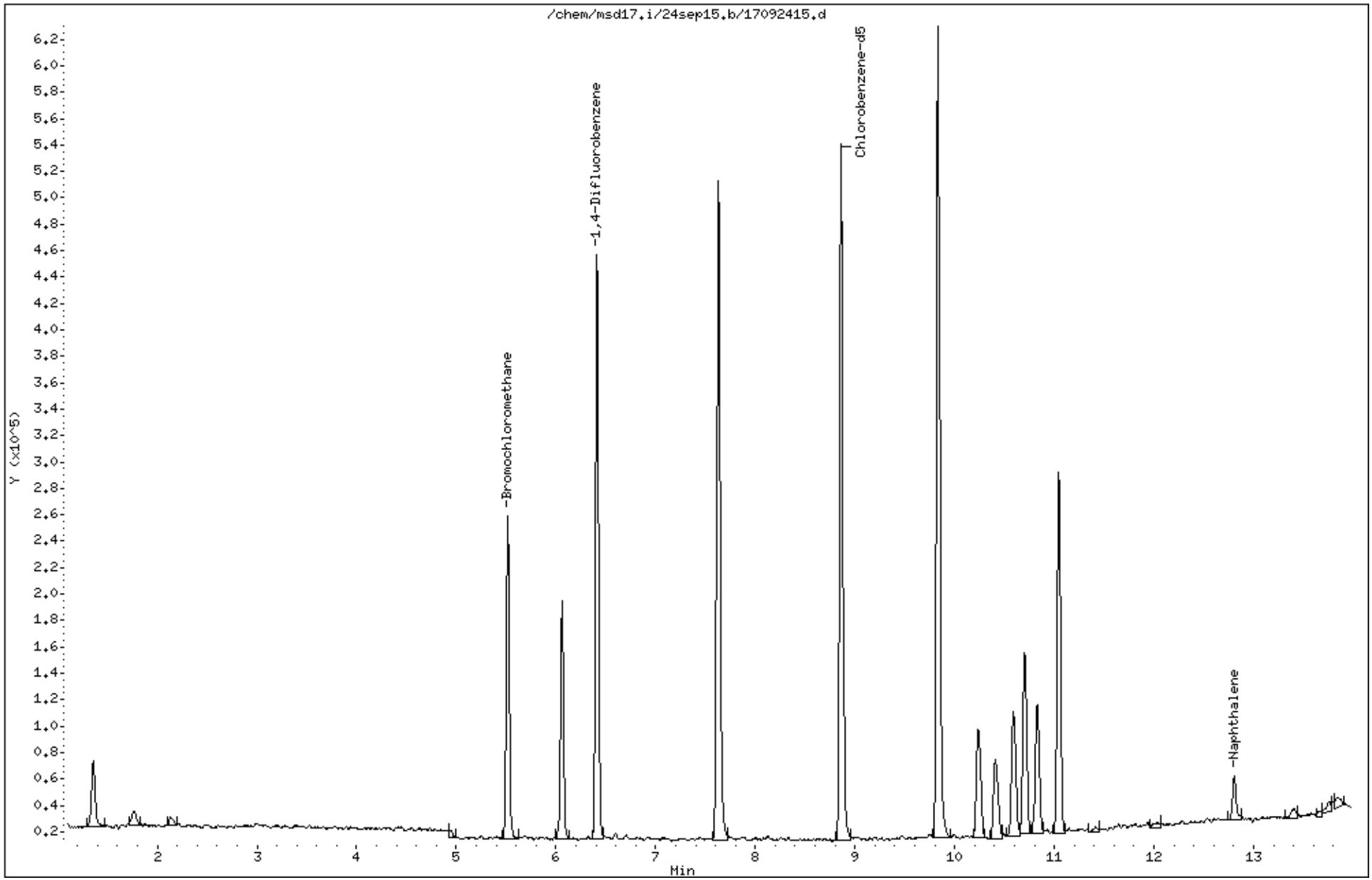
Instrument: msd17.i

Sample Info: 20ml 2736-262

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/21sep15a.b/17092121.d
Lab Smp Id: ICAL Level #5
Inj Date : 21-SEP-2015 22:31
Operator : gh Inst ID: msd17.i
Smp Info : 20ml 2737-240
Misc Info : 20ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/21sep15a.b/175q0921a.m
Meth Date : 25-Sep-2015 15:15 cbond Quant Type: ISTD
Cal Date : 21-SEP-2015 22:31 Cal File: 17092121.d
Als bottle: 2 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12noNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.528	5.528 (1.000)	130	116580	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	91994			46.54- 106.54	78.91
5.528	5.528 (1.000)	49	131106			83.83- 143.83	112.46
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.416	6.416 (1.000)	114	472978	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	71236			0.00- 44.86	15.06
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.866	8.866 (1.000)	117	426962	25.0000		80.00- 120.00	100.00
8.866	8.866 (1.000)	82	225856			23.93- 83.93	52.90
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.065	6.065 (1.097)	65	155816	25.0000	24.804	80.00- 120.00	100.00
6.065	6.065 (1.097)	67	85278			25.51- 85.51	54.73

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.189)	98	484772	25.0000	24.859	80.00- 120.00	100.00
7.627	7.627 (1.189)	70	50902			0.00- 40.39	10.50
7.627	7.627 (1.189)	100	310665			33.97- 93.97	64.08
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.840	9.840 (1.110)	174	271311	25.0000	24.888	80.00- 120.00	100.00
9.833	9.833 (1.109)	95	296477			79.64- 139.64	109.28
9.840	9.840 (1.110)	176	259686			65.80- 125.80	95.72
9 Propylene					CAS #: 115-07-1		
1.517	1.517 (0.274)	41	106465	20.0000	23.017	80.00- 120.00	100.00
1.517	1.517 (0.274)	42	73164			37.10- 97.10	68.72
1.517	1.517 (0.274)	39	79092			44.98- 104.98	74.29
11 Freon 12					CAS #: 75-71-8		
1.552	1.552 (0.281)	85	429721	20.0000	22.902	80.00- 120.00	100.00
1.552	1.552 (0.281)	87	140052			2.33- 62.33	32.59
15 Freon 114					CAS #: 76-14-2		
1.667	1.667 (0.302)	135	310335	20.0000	22.786	80.00- 120.00	100.00
1.667	1.667 (0.302)	137	100039			2.02- 62.02	32.24
17 Chloromethane					CAS #: 74-87-3		
1.753	1.753 (0.317)	50	151839	20.0000	23.126	80.00- 120.00	100.00
1.753	1.753 (0.317)	52	49402			2.35- 62.35	32.54
23 Butane					CAS #: 106-97-8		
1.839	1.839 (0.333)	58	30815	20.0000	21.400	80.00- 120.00	100.00
1.839	1.839 (0.333)	43	212419			657.81- 717.81	689.34
25 Vinyl Chloride					CAS #: 75-01-4		
1.875	1.875 (0.339)	62	165162	20.0000	22.257	80.00- 120.00	100.00
1.875	1.875 (0.339)	64	53343			2.69- 62.69	32.30
26 1,3-Butadiene					CAS #: 106-99-0		
1.896	1.896 (0.343)	54	116359	20.0000	22.600	80.00- 120.00	100.00
1.896	1.896 (0.343)	39	112535			63.95- 123.95	96.71
29 Bromomethane					CAS #: 74-83-9		
2.254	2.254 (0.408)	94	162522	20.0000	24.727	80.00- 120.00	100.00
2.254	2.254 (0.408)	96	152776			63.69- 123.69	94.00
30 Chloroethane					CAS #: 75-00-3		
2.376	2.376 (0.430)	64	85040	20.0000	22.607	80.00- 120.00	100.00
2.376	2.376 (0.430)	66	27198			1.86- 61.86	31.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.376	2.376 (0.430)	49	22137			0.00- 55.51	26.03
31 Isopentane					CAS #: 78-78-4		
2.405	2.405 (0.435)	43	171021	20.0000	23.438	80.00- 120.00	100.00
2.405	2.405 (0.435)	57	125008			44.35- 104.35	73.10
35 Freon 11					CAS #: 75-69-4		
2.634	2.634 (0.476)	101	440281	20.0000	22.788	80.00- 120.00	100.00
2.634	2.634 (0.476)	103	284428			35.20- 95.20	64.60
42 Ethanol					CAS #: 64-17-5		
2.985	2.985 (0.540)	45	56830	20.0000	21.968	80.00- 120.00	100.00
2.992	2.992 (0.541)	43	14467			0.00- 50.36	25.46
2.992	2.992 (0.541)	46	21561			10.31- 70.31	37.94
49 Freon 113					CAS #: 76-13-1		
3.286	3.286 (0.594)	151	320314	20.0000	23.268	80.00- 120.00	100.00
3.286	3.286 (0.594)	153	206569			33.72- 93.72	64.49
3.286	3.286 (0.594)	101	402248			95.23- 155.23	125.58
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.314	3.314 (0.600)	98	114846	20.0000	22.630	80.00- 120.00	100.00
3.314	3.314 (0.600)	96	177965			130.14- 190.14	154.96
3.314	3.314 (0.600)	61	286795			218.16- 278.16	249.72
52 Acetone					CAS #: 67-64-1		
3.479	3.479 (0.629)	58	77675	20.0000	22.154	80.00- 120.00	100.00
3.472	3.472 (0.628)	43	237583			266.49- 326.49	305.87
56 Carbon Disulfide					CAS #: 75-15-0		
3.551	3.551 (0.642)	76	536081	20.0000	22.874	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.651	3.651 (0.660)	45	258147	20.0000	23.734	80.00- 120.00	100.00
3.651	3.651 (0.660)	43	53921			0.00- 50.02	20.89
3.651	3.651 (0.660)	59	12078			0.00- 34.32	4.68
58 3-Chloropropene					CAS #: 107-05-1		
3.794	3.794 (0.686)	76	85966	20.0000	22.752	80.00- 120.00	100.00
3.794	3.794 (0.686)	41	187094			185.01- 245.01	217.64
66 Methylene Chloride					CAS #: 75-09-2		
3.974	3.974 (0.719)	49	183775	20.0000	22.361	80.00- 120.00	100.00
3.981	3.981 (0.720)	84	163843			59.02- 119.02	89.15
3.981	3.981 (0.720)	51	57083			1.78- 61.78	31.06

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.110	4.110 (0.743)	59	330395	20.0000	24.190	80.00- 120.00	100.00
4.110	4.110 (0.743)	41	67242			0.00- 50.26	20.35
4.110	4.110 (0.743)	57	34562			0.00- 40.80	10.46
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.196	4.196 (0.759)	73	498195	20.0000	23.402	80.00- 120.00	100.00
4.196	4.196 (0.759)	57	110218			0.00- 51.46	22.12
4.196	4.196 (0.759)	41	100017			0.00- 49.34	20.08
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.217	4.217 (0.763)	98	122198	20.0000	24.167	80.00- 120.00	100.00
4.217	4.217 (0.763)	61	252578			184.16- 244.16	206.70
4.217	4.217 (0.763)	96	187366			127.84- 187.84	153.33
78 Hexane					CAS #: 110-54-3		
4.425	4.425 (0.800)	57	271039	20.0000	23.568	80.00- 120.00	100.00
4.425	4.425 (0.800)	43	156729			27.64- 87.64	57.83
4.432	4.432 (0.802)	86	48639			0.00- 46.92	17.95
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.711	4.711 (0.852)	63	323534	20.0000	23.651	80.00- 120.00	100.00
4.711	4.711 (0.852)	65	104747			2.04- 62.04	32.38
83 Isopropyl ether					CAS #: 108-20-3		
4.697	4.697 (0.850)	45	535717	20.0000	24.082	80.00- 120.00	100.00
4.697	4.697 (0.850)	87	170369			1.31- 61.31	31.80
4.704	4.704 (0.851)	59	66501			0.00- 42.69	12.41
86 Vinyl Acetate					CAS #: 108-05-4		
4.754	4.754 (0.860)	86	49143	20.0000	23.544	80.00- 120.00	100.00
4.754	4.754 (0.860)	43	452767			891.41- 951.41	921.33
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.055	5.055 (0.914)	59	568599	20.0000	24.491	80.00- 120.00	100.00
5.055	5.055 (0.914)	87	242845			13.52- 73.52	42.71
5.055	5.055 (0.914)	41	101505			0.00- 47.26	17.85
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.299	5.299 (0.959)	98	123554	20.0000	22.658	80.00- 120.00	100.00
5.299	5.299 (0.959)	96	190477			124.38- 184.38	154.16
5.299	5.299 (0.959)	61	234391			162.07- 222.07	189.71
92 2-Butanone					CAS #: 78-93-3		
5.327	5.327 (0.964)	72	88376	20.0000	22.924	80.00- 120.00	100.00
5.327	5.327 (0.964)	43	304596			306.33- 366.33	344.66

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.327	5.327 (0.964)	57	27923			0.00- 59.26	31.60
99 Tetrahydrofuran					CAS #: 109-99-9		
5.528	5.528 (1.000)	42	162612	20.0000	21.653	80.00- 120.00	100.00
5.528	5.528 (1.000)	71	80764			17.72- 77.72	49.67
5.528	5.528 (1.000)	72	82463			20.99- 80.99	50.71
100 Chloroform					CAS #: 67-66-3		
5.592	5.592 (1.012)	83	382389	20.0000	22.807	80.00- 120.00	100.00
5.592	5.592 (1.012)	85	249450			34.67- 94.67	65.23
102 Cyclohexane					CAS #: 110-82-7		
5.685	5.685 (1.028)	84	241523	20.0000	23.198	80.00- 120.00	100.00
5.685	5.685 (1.028)	56	255895			77.09- 137.09	105.95
5.685	5.685 (1.028)	41	136795			25.87- 85.87	56.64
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.707	5.707 (1.032)	97	386519	20.0000	23.255	80.00- 120.00	100.00
5.707	5.707 (1.032)	99	248118			34.33- 94.33	64.19
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.822	5.822 (1.053)	119	394720	20.0000	23.769	80.00- 120.00	100.00
5.822	5.822 (1.053)	117	406239			74.90- 134.90	102.92
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.088)	57	843719	20.0000	23.995	80.00- 120.00	100.00
6.015	6.015 (1.088)	56	268236			1.80- 61.80	31.79
6.015	6.015 (1.088)	41	219619			0.00- 55.83	26.03
116 Benzene					CAS #: 71-43-2		
6.044	6.044 (0.942)	78	573849	20.0000	23.950	80.00- 120.00	100.00
6.044	6.044 (0.942)	77	140016			0.00- 54.08	24.40
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.108	6.108 (1.105)	87	137984	20.0000	24.764	80.00- 120.00	100.00
6.108	6.108 (1.105)	73	560903			376.57- 436.57	406.50
6.108	6.108 (1.105)	55	133908			64.52- 124.52	97.05
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.130	6.130 (0.955)	62	238845	20.0000	22.820	80.00- 120.00	100.00
6.137	6.137 (0.956)	64	78170			2.16- 62.16	32.73
121 Heptane					CAS #: 142-82-5		
6.187	6.187 (0.964)	71	204256	20.0000	24.630	80.00- 120.00	100.00
6.187	6.187 (0.964)	43	281502			110.94- 170.94	137.82

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.187	6.187 (0.964)	57	170667			53.72- 113.72	83.56
125 Trichloroethene					CAS #: 79-01-6		
6.609	6.609 (1.030)	95	265230	20.0000	23.460	80.00- 120.00	100.00
6.609	6.609 (1.030)	130	282211			74.97- 134.97	106.40
6.609	6.609 (1.030)	97	175445			35.33- 95.33	66.15
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.212)	83	349287	20.0000	24.311	80.00- 120.00	100.00
6.703	6.703 (1.212)	98	166174			16.41- 76.41	47.58
6.703	6.703 (1.212)	55	248114			40.41- 100.41	71.03
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.846	6.846 (1.067)	63	211010	20.0000	24.601	80.00- 120.00	100.00
6.846	6.846 (1.067)	62	142421			38.78- 98.78	67.49
6.846	6.846 (1.067)	41	106343			20.16- 80.16	50.40
136 1,4-Dioxane					CAS #: 123-91-1		
6.939	6.939 (1.081)	88	127200	20.0000	24.509	80.00- 120.00	100.00
6.939	6.939 (1.081)	58	79428			31.02- 91.02	62.44
6.939	6.939 (1.081)	57	24874			0.00- 51.33	19.56
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.103)	83	418266	20.0000	23.570	80.00- 120.00	100.00
7.075	7.075 (1.103)	85	267419			34.16- 94.16	63.94
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.448	7.448 (1.161)	75	360115	20.0000	24.158	80.00- 120.00	100.00
7.448	7.448 (1.161)	77	115808			1.57- 61.57	32.16
7.448	7.448 (1.161)	39	156249			13.98- 73.98	43.39
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.555	7.555 (1.178)	58	147740	20.0000	25.604	80.00- 120.00	100.00
7.555	7.555 (1.178)	43	358300			205.93- 265.93	242.52
7.562	7.562 (1.179)	85	74632			18.04- 78.04	50.52
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.198)	91	725573	20.0000	24.149	80.00- 120.00	100.00
7.684	7.684 (1.198)	92	412425			27.24- 87.24	56.84
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.928	7.928 (0.894)	75	313988	20.0000	23.676	80.00- 120.00	100.00
7.928	7.928 (0.894)	77	100557			1.57- 61.57	32.03
7.928	7.928 (0.894)	39	135192			13.98- 73.98	43.06

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.085	8.085 (0.912)	97	247526	20.0000	23.658	80.00- 120.00	100.00
8.085	8.085 (0.912)	99	153555			31.05- 91.05	62.04
8.085	8.085 (0.912)	83	221828			58.29- 118.29	89.62
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.916)	166	365183	20.0000	23.782	80.00- 120.00	100.00
8.121	8.121 (0.916)	129	264485			42.46- 102.46	72.43
8.121	8.121 (0.916)	131	255733			40.24- 100.24	70.03
158 2-Hexanone					CAS #: 591-78-6		
8.250	8.250 (0.931)	58	189433	20.0000	25.657	80.00- 120.00	100.00
8.250	8.250 (0.931)	43	322928			205.93- 265.93	170.47
8.250	8.250 (0.931)	100	41991			11.40- 71.40	22.17
160 Dibromochloromethane					CAS #: 124-48-1		
8.393	8.393 (0.947)	129	459007	20.0000	23.500	80.00- 120.00	100.00
8.393	8.393 (0.947)	127	357216			47.28- 107.28	77.82
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.515	8.515 (0.960)	107	392265	20.0000	23.715	80.00- 120.00	100.00
8.508	8.508 (0.960)	109	374663			66.45- 126.45	95.51
165 Chlorobenzene					CAS #: 108-90-7		
8.887	8.887 (1.002)	112	564263	20.0000	23.561	80.00- 120.00	100.00
8.887	8.887 (1.002)	114	183047			2.06- 62.06	32.44
8.887	8.887 (1.002)	77	329804			26.47- 86.47	58.45
167 Ethyl Benzene					CAS #: 100-41-4		
8.930	8.930 (1.007)	106	281780	20.0000	24.159	80.00- 120.00	100.00
8.930	8.930 (1.007)	91	891544			289.94- 349.94	316.40
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	349344	20.0000	24.124	80.00- 120.00	100.00
9.031	9.031 (1.019)	91	700854			167.83- 227.83	200.62
171 o-Xylene					CAS #: 95-47-6		
9.367	9.367 (1.057)	106	327188	20.0000	24.351	80.00- 120.00	100.00
9.367	9.367 (1.057)	91	687796			181.11- 241.11	210.21
172 Styrene					CAS #: 100-42-5		
9.389	9.389 (1.059)	104	560851	20.0000	24.471	80.00- 120.00	100.00
9.389	9.389 (1.059)	78	266019			17.79- 77.79	47.43
174 Bromoform					CAS #: 75-25-2		
9.589	9.589 (1.082)	173	473315	20.0000	23.999	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.589	9.589 (1.082)	171	238247			21.45- 81.45	50.34
175 Cumene					CAS #: 98-82-8		
9.654	9.654 (1.089)	105	1028653	20.0000	23.966	80.00- 120.00	100.00
9.654	9.654 (1.089)	120	276568			0.00- 57.47	26.89
9.654	9.654 (1.089)	51	88023			0.00- 38.62	8.56
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.962	9.962 (1.124)	83	528402	20.0000	23.395	80.00- 120.00	100.00
9.962	9.962 (1.124)	85	348222			34.77- 94.77	65.90
182 Propylbenzene					CAS #: 103-65-1		
9.990	9.990 (1.127)	91	1209775	20.0000	23.478	80.00- 120.00	100.00
9.990	9.990 (1.127)	120	287653			0.00- 53.65	23.78
9.990	9.990 (1.127)	105	43348			0.00- 33.57	3.58
188 4-Ethyltoluene					CAS #: 622-96-8		
10.084	10.084 (1.137)	120	316862	20.0000	23.220	80.00- 120.00	100.00
10.084	10.084 (1.137)	105	1029784			292.89- 352.89	324.99
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.134	10.134 (1.143)	120	434676	20.0000	24.244	80.00- 120.00	100.00
10.134	10.134 (1.143)	105	890076			175.25- 235.25	204.77
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.449	10.449 (1.179)	120	375379	20.0000	23.322	80.00- 120.00	100.00
10.449	10.449 (1.179)	105	814197			183.76- 243.76	216.90
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.735	10.735 (1.211)	146	597309	20.0000	23.071	80.00- 120.00	100.00
10.735	10.735 (1.211)	148	382680			33.69- 93.69	64.07
10.735	10.735 (1.211)	111	228494			8.12- 68.12	38.25
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.814	10.814 (1.220)	146	592118	20.0000	23.116	80.00- 120.00	100.00
10.814	10.814 (1.220)	148	377830			33.86- 93.86	63.81
10.814	10.814 (1.220)	111	223681			6.71- 66.71	37.78
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.929	10.929 (1.233)	91	713420	20.0000	23.423	80.00- 120.00	100.00
10.936	10.936 (1.233)	126	159267			0.00- 51.95	22.32
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.144	11.144 (1.257)	146	561399	20.0000	22.892	80.00- 120.00	100.00
11.144	11.144 (1.257)	148	357801			33.90- 93.90	63.73

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.144	11.144 (1.257)	111	223856			8.86- 68.86	39.87
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.540	12.540 (1.414)	180	436897	20.0000	20.511	80.00- 120.00	100.00
12.540	12.540 (1.414)	182	415696			65.21- 125.21	95.15
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.626	12.626 (1.424)	225	377437	20.0000	20.636	80.00- 120.00	100.00
12.626	12.626 (1.424)	223	243287			33.22- 93.22	64.46

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092121.d
Lab Smp Id: ICAL Level #5
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msd17.i/21sep15a.b/175q0921a.m
Misc Info: 20ppbv(200ppbv)

Calibration Date: 21-SEP-2015
Calibration Time: 22:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	116527	69916	163138	116580	0.05
123 1,4-Difluorobenze	475185	285111	665259	472978	-0.46
163 Chlorobenzene-d5	418099	250859	585339	426962	2.12

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/21sep15a.b/17092121.d

Date : 21-SEP-2015 22:31

Client ID:

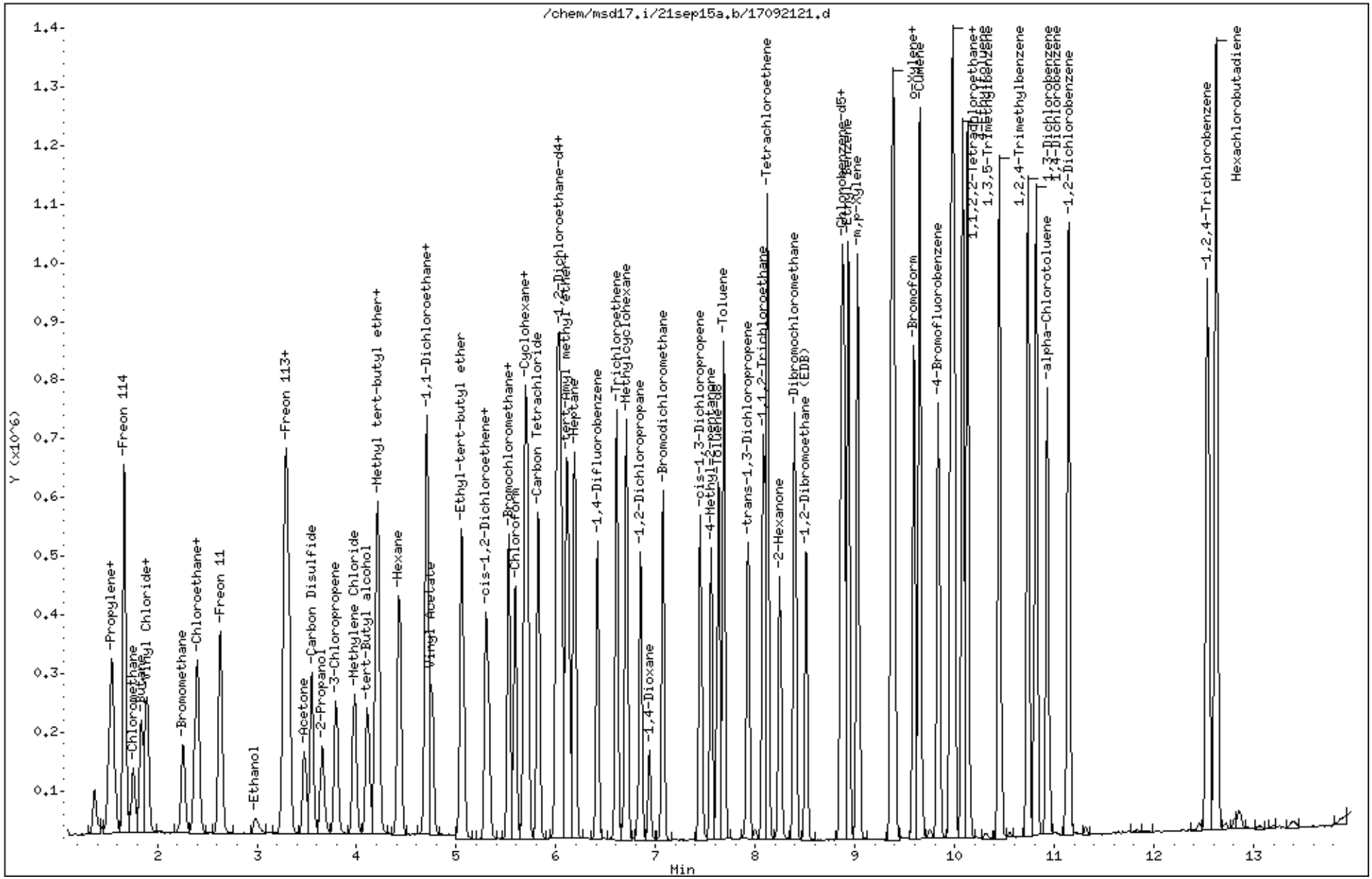
Sample Info: 20ml 2737-240

Column phase: RTX-624

Instrument: msd17.i

Operator: gh

Column diameter: 0.25



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EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092416.d
Lab Smp Id: ICAL Level 6
Inj Date : 24-SEP-2015 16:22
Operator : cb Inst ID: msd17.i
Smp Info : 50ml 2736-262
Misc Info : 5.0ppbv(20ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921c.m
Meth Date : 25-Sep-2015 15:58 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 16:22 Cal File: 17092416.d
Als bottle: 7 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Naphcrv.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.521	5.521 (1.000)	130	103006	25.0000		80.00- 120.00	100.00
5.521	5.521 (1.000)	128	78750			46.54- 106.54	76.45
5.521	5.521 (1.000)	49	114423			83.83- 143.83	111.08
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.409	6.409 (1.000)	114	406535	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	63795			0.00- 44.86	15.69
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	381821	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	204942			23.93- 83.93	53.67
228 Naphthalene					CAS #: 91-20-3		
12.877	12.877 (1.452)	128	76686	5.00000	4.215	0.00- 30.00	100.00
12.877	12.877 (1.452)	127	10326			0.00- 30.00	13.47

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092416.d
Lab Smp Id: ICAL Level 6
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921c.m
Misc Info: 5.0ppbv(20ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 16:22
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	103006	61804	144208	103006	0.00
123 1,4-Difluorobenze	406535	243921	569149	406535	0.00
163 Chlorobenzene-d5	381821	229093	534549	381821	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.52	0.00
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092416.d

Page 1

Date : 24-SEP-2015 16:22

Client ID:

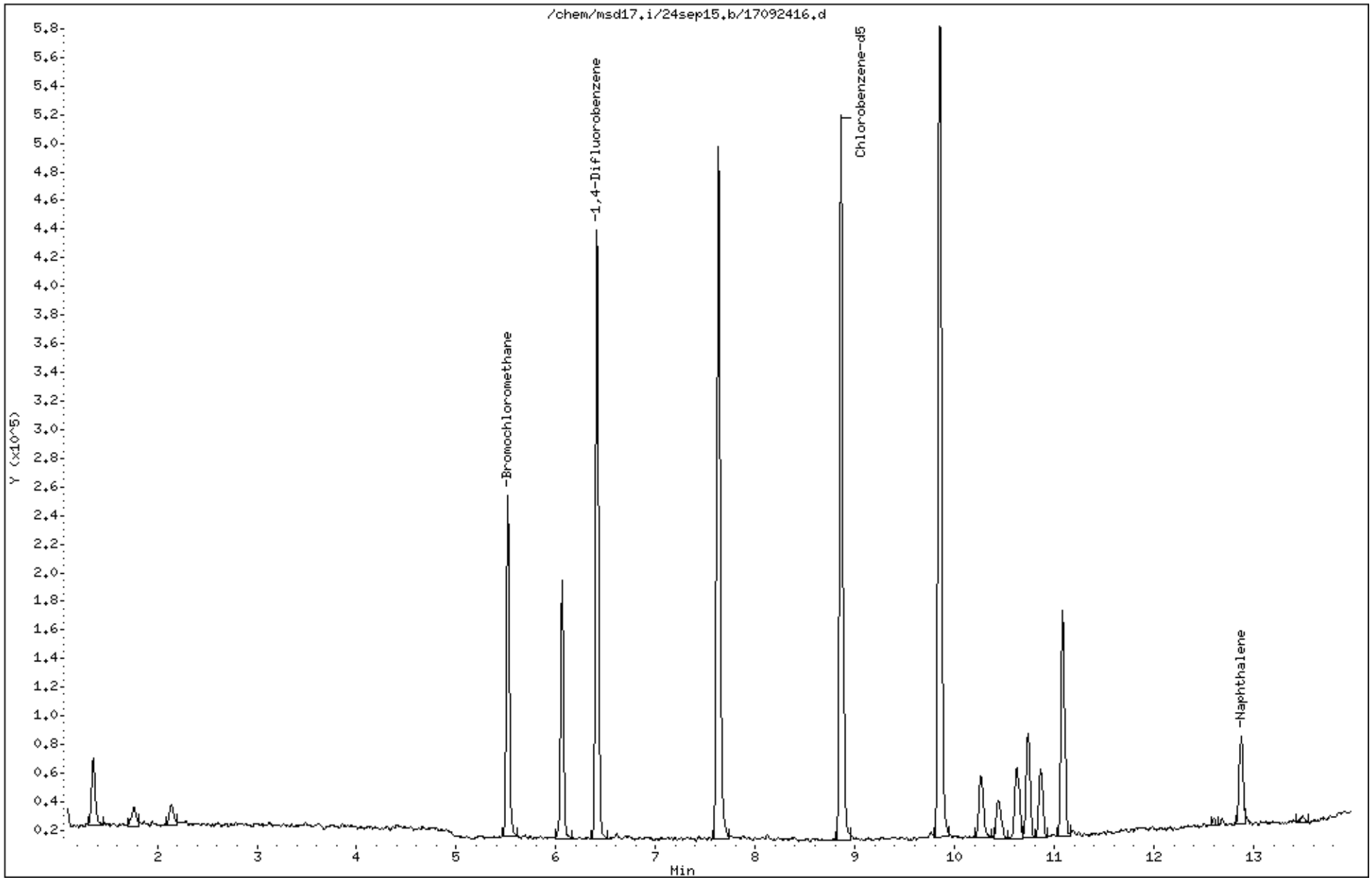
Instrument: msd17.i

Sample Info: 50ml 2736-262

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092412.d
Lab Smp Id: ICAL Level 6
Inj Date : 24-SEP-2015 13:50
Operator : cb Inst ID: msd17.i
Smp Info : 50ml 2736-197
Misc Info : 50ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921b.m
Meth Date : 25-Sep-2015 15:30 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 13:50 Cal File: 17092412.d
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT1.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.528	5.528 (1.000)	130	107258	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	83295			46.54- 106.54	77.66
5.528	5.528 (1.000)	49	121787			83.83- 143.83	113.55
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.416	6.416 (1.000)	114	429141	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	63393			0.00- 44.86	14.77
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.851	8.851 (1.000)	117	371322	25.0000		80.00- 120.00	100.00
8.851	8.851 (1.000)	82	198471			23.93- 83.93	53.45
6 Freon 143a					CAS #: 420-46-2		
1.438	1.438 (0.260)	65	123646	50.0000	65.491	0.00- 0.00	100.00
1.438	1.438 (0.260)	69	425420			0.00- 0.00	344.06
1.438	1.438 (0.260)	64	30950			0.00- 0.00	25.03

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
7 Freon 134a					CAS #: 811-97-2		
1.481	1.481 (0.268)	83	277985	50.0000	52.226	0.00- 0.00	100.00
1.481	1.481 (0.268)	69	251165			0.00- 0.00	90.35
1.481	1.481 (0.268)	63	35009			0.00- 0.00	12.59
10 1,1-Difluoroethane					CAS #: 75-37-6		
1.538	1.538 (0.278)	65	156574	50.0000	53.720	0.00- 0.00	100.00
1.538	1.538 (0.278)	51	269227			0.00- 0.00	171.95
1.538	1.538 (0.278)	47	66387			0.00- 0.00	42.40
13 Chlorodifluoromethane					CAS #: 75-45-6		
1.588	1.588 (0.287)	67	71794	50.0000	49.682	0.00- 0.00	100.00
1.581	1.581 (0.286)	51	459361			0.00- 0.00	639.83
1.588	1.588 (0.287)	85	8102			0.00- 0.00	11.29
16 Freon 142b					CAS #: 75-68-3		
1.717	1.717 (0.311)	65	611877	50.0000	46.892	0.00- 0.00	100.00
1.717	1.717 (0.311)	45	140077			0.00- 0.00	22.89
37 Dichlorofluoromethane					CAS #: 75-43-4		
2.648	2.648 (0.479)	67	713071	50.0000	46.574	0.00- 0.00	100.00
2.648	2.648 (0.479)	69	238350			0.00- 0.00	33.43
2.713	2.713 (0.491)	35	569			0.00- 0.00	0.08
48 Freon 123					CAS #: 306-83-2		
3.229	3.229 (0.584)	83	829198	50.0000	48.626	0.00- 0.00	100.00
3.229	3.229 (0.584)	133	148092			0.00- 0.00	17.86
3.229	3.229 (0.584)	85	552069			0.00- 0.00	66.58
59 Cyclopentene					CAS #: 142-29-0		
3.809	3.809 (0.689)	67	458114	50.0000	44.660	0.00- 0.00	100.00
3.809	3.809 (0.689)	68	183728			0.00- 0.00	40.11
3.809	3.809 (0.689)	53	84011			0.00- 0.00	18.34
84 1-Propanol					CAS #: 71-23-8		
4.855	4.855 (0.878)	42	46797	50.0000	37.519	0.00- 0.00	100.00
4.855	4.855 (0.878)	59	69703			0.00- 0.00	148.95
4.855	4.855 (0.878)	41	34272			0.00- 0.00	73.24
90 2,2-Dichloropropane					CAS #: 594-20-7		
5.256	5.256 (0.951)	77	504155	50.0000	46.293	0.00- 0.00	100.00
5.256	5.256 (0.951)	79	159053			0.00- 0.00	31.55
5.256	5.256 (0.951)	97	104638			0.00- 0.00	20.76
107 1,1-Dichloropropene					CAS #: 563-58-6		
5.857	5.857 (0.913)	110	143250	50.0000	48.352	0.00- 0.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
107 1,1-Dichloropropene (continued)							
5.857	5.857 (0.913)	75	384012			0.00- 0.00	268.07
115 Isobutanol					CAS #: 78-83-1		
6.015	6.015 (1.088)	39	73371	50.0000		0.00- 0.00	100.00(a)
6.015	6.015 (1.088)	41	185493			0.00- 0.00	252.82
6.015	6.015 (1.088)	43	251041			0.00- 0.00	342.15
124 n-Butanol					CAS #: 71-36-3		
6.581	6.581 (1.026)	56	413813	50.0000	47.434	0.00- 0.00	100.00
6.581	6.581 (1.026)	41	259453			0.00- 0.00	62.70
6.581	6.581 (1.026)	43	215413			0.00- 0.00	52.06
157 1,3-Dichloropropane					CAS #: 142-28-9		
8.228	8.228 (1.282)	76	587161	50.0000	48.147	0.00- 0.00	100.00
8.228	8.228 (1.282)	41	306792			0.00- 0.00	52.25
8.228	8.228 (1.282)	78	187627			0.00- 0.00	31.95
159 Butyl Acetate					CAS #: 123-86-4		
8.307	8.307 (1.295)	56	120191	50.0000	43.044	0.00- 0.00	100.00
8.307	8.307 (1.295)	73	61375			0.00- 0.00	51.06
8.307	8.307 (1.295)	43	279339			0.00- 0.00	232.41
168 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.937	8.937 (1.010)	131	540183	50.0000	49.603	0.00- 0.00	100.00
8.937	8.937 (1.010)	117	378747			0.00- 0.00	70.11
8.937	8.937 (1.010)	95	206034			0.00- 0.00	38.14
176 Cyclohexanone					CAS #: 108-94-1		
9.797	9.797 (1.107)	55	411690	50.0000	47.028	0.00- 0.00	100.00
9.797	9.797 (1.107)	98	207761			0.00- 0.00	50.47
9.797	9.797 (1.107)	42	266127			0.00- 0.00	64.64
180 Bromobenzene					CAS #: 108-86-1		
9.947	9.947 (1.124)	156	601224	50.0000	47.343	0.00- 0.00	100.00
9.947	9.947 (1.124)	158	580396			0.00- 0.00	96.54
9.947	9.947 (1.124)	77	879243			0.00- 0.00	146.24
185 1,2,3-Trichloropropane					CAS #: 96-18-4		
9.998	9.998 (1.129)	110	296788	50.0000	49.334	0.00- 0.00	100.00
9.998	9.998 (1.129)	75	781261			0.00- 0.00	263.24
9.998	9.998 (1.129)	61	196912			0.00- 0.00	66.35
189 2-Chlorotoluene					CAS #: 95-49-8		
10.084	10.084 (1.139)	126	445207	50.0000	47.030	0.00- 0.00	100.00
10.084	10.084 (1.139)	91	1245796			0.00- 0.00	279.82

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
189 2-Chlorotoluene (continued)							
10.084	10.084 (1.139)	65	111130			0.00- 0.00	24.96
191 4-Chlorotoluene					CAS #: 106-43-4		
10.184	10.184 (1.151)	126	458940	50.0000	46.957	0.00- 0.00	100.00
10.184	10.184 (1.151)	91	1286910			0.00- 0.00	280.41
10.177	10.177 (1.150)	63	167476			0.00- 0.00	36.49
195 tert-Butylbenzene					CAS #: 98-06-6		
10.384	10.384 (1.173)	119	1416068	50.0000	48.382	0.00- 0.00	100.00
10.384	10.384 (1.173)	134	352179			0.00- 0.00	24.87
10.377	10.377 (1.172)	91	925626			0.00- 0.00	65.37
197 Pentachloroethane					CAS #: 76-01-7		
10.456	10.456 (1.181)	167	508378	50.0000	53.362	0.00- 0.00	100.00
10.456	10.456 (1.181)	117	496698			0.00- 0.00	97.70
10.456	10.456 (1.181)	169	248052			0.00- 0.00	48.79
203 sec-Butylbenzene					CAS #: 135-98-8		
10.563	10.563 (1.193)	134	443796	50.0000	48.709	0.00- 0.00	100.00
10.563	10.563 (1.193)	105	2160407			0.00- 0.00	486.80
10.563	10.563 (1.193)	91	331763			0.00- 0.00	74.76
207 p-Cymene					CAS #: 99-87-6		
10.678	10.678 (1.206)	119	1897822	50.0000	49.161	0.00- 0.00	100.00
10.678	10.678 (1.206)	134	513329			0.00- 0.00	27.05
10.678	10.678 (1.206)	91	420939			0.00- 0.00	22.18
210 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
10.800	10.800 (1.220)	120	729967	50.0000	48.663	0.00- 0.00	100.00
10.800	10.800 (1.220)	105	1701343			0.00- 0.00	233.07
10.800	10.800 (1.220)	77	204603			0.00- 0.00	28.03
213 Butylbenzene					CAS #: 104-51-8		
11.022	11.022 (1.245)	134	517446	50.0000	51.384	0.00- 0.00	100.00
11.022	11.022 (1.245)	91	1911302			0.00- 0.00	369.37
11.022	11.022 (1.245)	92	1003563			0.00- 0.00	193.95
221 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.810	11.810 (1.334)	157	668111	50.0000	46.264	0.00- 0.00	100.00
11.810	11.810 (1.334)	75	554689			0.00- 0.00	83.02
11.810	11.810 (1.334)	155	510589			0.00- 0.00	76.42

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092412.d
Lab Smp Id: ICAL Level 6
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921b.m
Misc Info: 50ppbv(200ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 13:50
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	107258	64355	150161	107258	0.00
123 1,4-Difluorobenze	429141	257485	600797	429141	0.00
163 Chlorobenzene-d5	371322	222793	519851	371322	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.85	8.52	9.18	8.85	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092412.d

Date : 24-SEP-2015 13:50

Client ID:

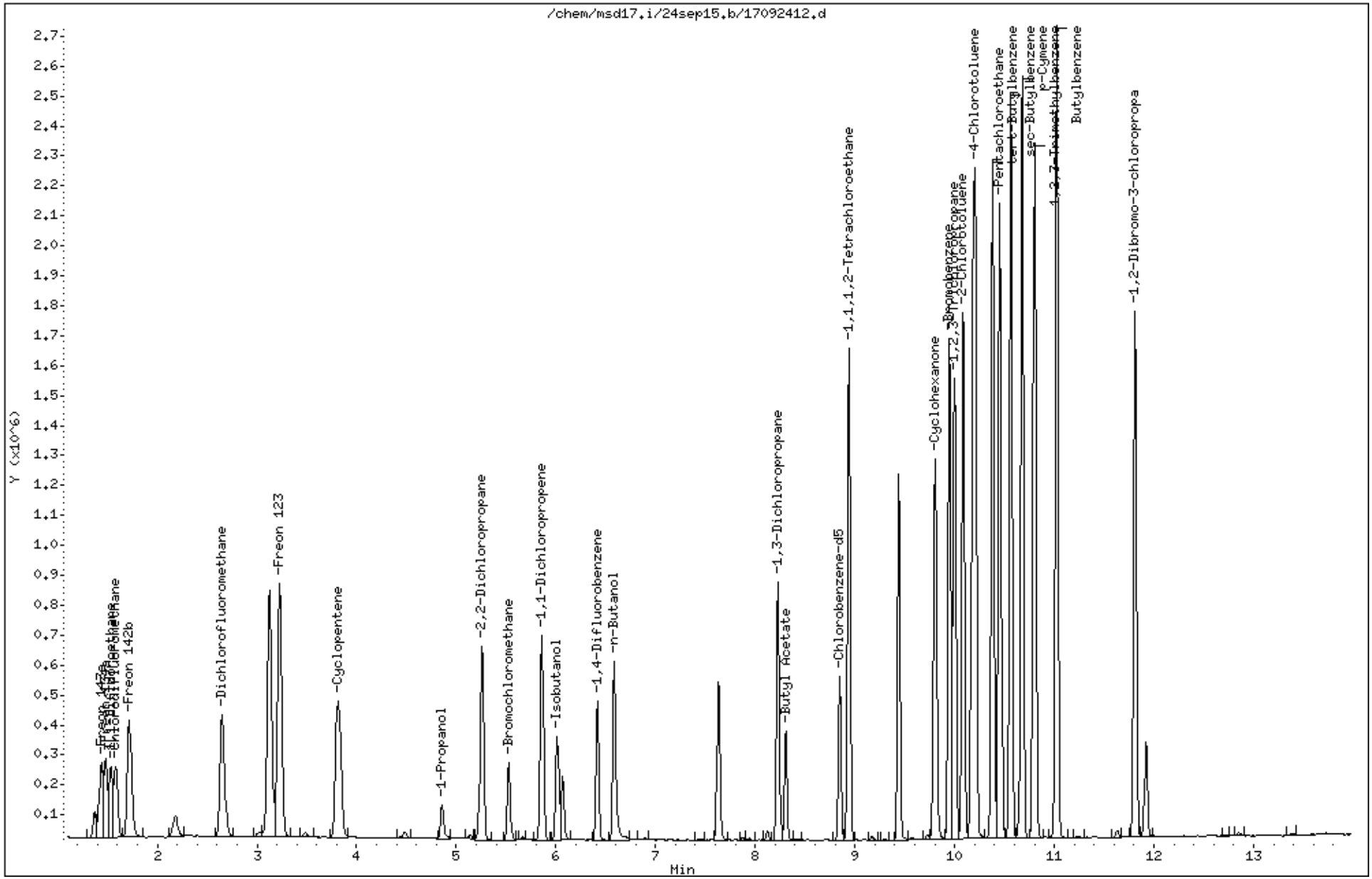
Sample Info: 50ml 2736-197

Column phase: RTX-624

Instrument: msd17.i

Operator: cb

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092409.d
Lab Smp Id: ICAL Level 6
Inj Date : 24-SEP-2015 12:23
Operator : cb Inst ID: msd17.i
Smp Info : 50ml 2736-222
Misc Info : 50ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921b.m
Meth Date : 25-Sep-2015 15:50 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 13:50 Cal File: 17092412.d
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Combo.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.528	5.528 (1.000)	130	109679	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	84514			46.54- 106.54	77.06
5.528	5.528 (1.000)	49	126299			83.83- 143.83	115.15
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.416	6.416 (1.000)	114	409952	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	62302			0.00- 44.86	15.20
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.852	8.852 (1.000)	117	352896	25.0000		80.00- 120.00	100.00
8.852	8.852 (1.000)	82	186052			23.93- 83.93	52.72
32 Vinyl Bromide						CAS #: 593-60-2	
2.584	2.584 (0.467)	106	334007	50.0000	48.029	0.00- 0.00	100.00
2.584	2.584 (0.467)	108	322897			0.00- 0.00	96.67

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
94 Ethyl Acetate					CAS #: 141-78-6		
5.342	5.342 (0.966)	70	43701	50.0000	44.382	0.00- 0.00	100.00
5.342	5.342 (0.966)	61	58261			0.00- 0.00	133.32
5.342	5.342 (0.966)	45	58032			0.00- 0.00	132.79
63 Acetonitrile					CAS #: 75-05-8		
3.902	3.902 (0.706)	40	178011	50.0000	48.425	0.00- 0.00	100.00
3.902	3.902 (0.706)	41	433117			0.00- 0.00	243.31
3.902	3.902 (0.706)	38	49831			0.00- 0.00	27.99
64 Cyclopentane					CAS #: 287-92-3		
3.916	3.916 (0.708)	70	193037	50.0000	46.448	0.00- 0.00	100.00
3.916	3.916 (0.708)	55	231519			0.00- 0.00	119.94
74 Acrylonitrile					CAS #: 107-13-1		
4.324	4.324 (0.782)	52	229658	50.0000	47.568	0.00- 0.00	100.00
4.324	4.324 (0.782)	53	300953			0.00- 0.00	131.04
134 Methyl Methacrylate					CAS #: 80-62-6		
6.903	6.903 (0.780)	41	409985	50.0000	50.379	0.00- 0.00	100.00
6.903	6.903 (0.780)	69	376942			0.00- 0.00	91.94
6.903	6.903 (0.780)	100	140098			0.00- 0.00	34.17
137 Dibromomethane					CAS #: 74-95-3		
6.960	6.960 (0.786)	174	449635	50.0000	50.815	0.00- 0.00	100.00
6.953	6.953 (0.786)	93	433828			0.00- 0.00	96.48
6.953	6.953 (0.786)	95	364339			0.00- 0.00	81.03
173 2-Heptanone					CAS #: 110-43-0		
6.187	6.187 (1.119)	58	13009	50.0000	42.639	0.00- 0.00	100.00
6.187	6.187 (1.119)	43	468602			0.00- 0.00	3602.14
34 Pentane					CAS #: 109-66-0		
2.706	2.706 (0.489)	43	523876	50.0000	48.011	0.00- 0.00	100.00
2.706	2.706 (0.489)	57	89801			0.00- 0.00	17.14
2.706	2.706 (0.489)	72	64349			0.00- 0.00	12.28
148 Octane					CAS #: 111-65-9		
7.684	7.684 (1.198)	57	286993	50.0000	50.092	0.00- 0.00	100.00
7.684	7.684 (1.198)	85	361489			0.00- 0.00	125.96
7.677	7.677 (1.196)	43	616902			0.00- 0.00	214.95
170 Nonane					CAS #: 111-84-2		
8.930	8.930 (1.009)	43	642660	50.0000	51.367	0.00- 0.00	100.00
8.930	8.930 (1.009)	57	626416			0.00- 0.00	97.47
8.930	8.930 (1.009)	85	284749			0.00- 0.00	44.31

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
==	====== ========	====	========	=======	=======	==========	=====
187 Decane					CAS #: 124-18-5		
10.019	10.019 (1.132)	57	857730	50.0000	53.417	0.00- 0.00	100.00
10.019	10.019 (1.132)	71	383195			0.00- 0.00	44.68
10.019	10.019 (1.132)	142	49740			0.00- 0.00	5.80
215 Undecane					CAS #: 1120-21-4		
11.008	11.008 (1.244)	57	930121	50.0000	51.874	0.00- 0.00	100.00
11.000	11.000 (1.243)	43	744446			0.00- 0.00	80.04
225 Dodecane					CAS #: 112-40-3		
11.917	11.917 (1.346)	57	777481	50.0000	49.016	0.00- 0.00	100.00
11.917	11.917 (1.346)	43	588605			0.00- 0.00	75.71

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092409.d
Lab Smp Id: ICAL Level 6
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921b.m
Misc Info: 50ppbv(200ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 12:23
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	109679	65807	153551	109679	0.00
123 1,4-Difluorobenze	409952	245971	573933	409952	0.00
163 Chlorobenzene-d5	352896	211738	494054	352896	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.85	8.52	9.18	8.85	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092409.d

Page 1

Date : 24-SEP-2015 12:23

Client ID:

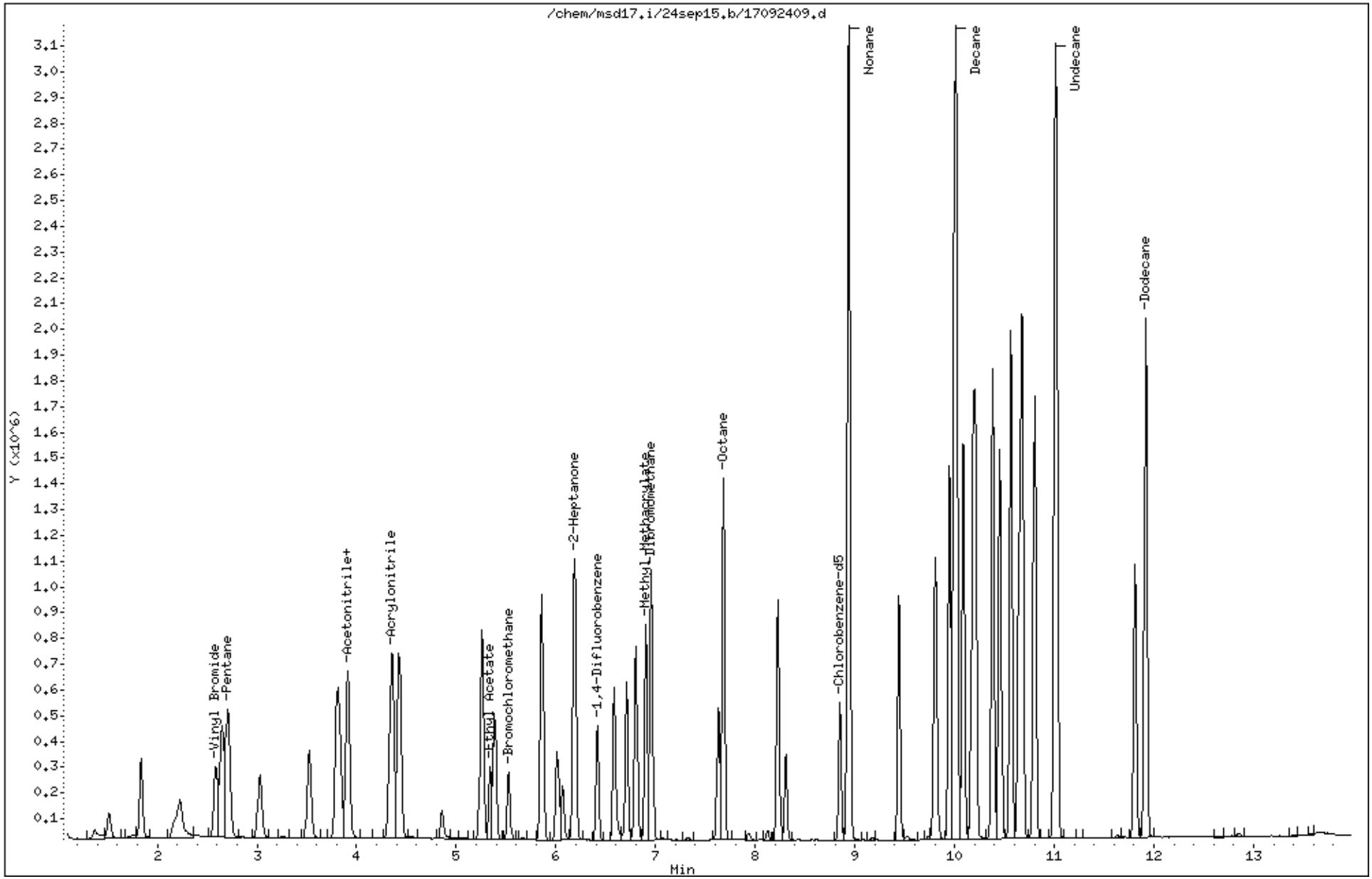
Instrument: msd17.i

Sample Info: 50ml 2736-222

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092406.d
Lab Smp Id: ICAL Level 6
Inj Date : 24-SEP-2015 11:04
Operator : cb Inst ID: msd17.i
Smp Info : 50ml 2736-107
Misc Info : 50ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921b.m
Meth Date : 25-Sep-2015 15:28 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 11:04 Cal File: 17092406.d
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 123TCB.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.528	5.528 (1.000)	130	106181	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	79778			46.54- 106.54	75.13
5.528	5.528 (1.000)	49	115956			83.83- 143.83	109.21
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.416	6.416 (1.000)	114	407033	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	59169			0.00- 44.86	14.54
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.852	8.852 (1.000)	117	361309	25.0000		80.00- 120.00	100.00
8.852	8.852 (1.000)	82	193356			23.93- 83.93	53.52
229 1,2,3-Trichlorobenzene						CAS #: 87-61-6	
13.056	13.056 (1.475)	180	462177	50.0000	41.754	0.00- 0.00	100.00
13.056	13.056 (1.475)	182	444331			0.00- 0.00	96.14
13.056	13.056 (1.475)	145	141455			0.00- 0.00	30.61

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092406.d
Lab Smp Id: ICAL Level 6
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921b.m
Misc Info: 50ppbv(200ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 11:04
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	106181	63709	148653	106181	0.00
123 1,4-Difluorobenze	407033	244220	569846	407033	0.00
163 Chlorobenzene-d5	361309	216785	505833	361309	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.85	8.52	9.18	8.85	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092406.d

Date : 24-SEP-2015 11:04

Client ID:

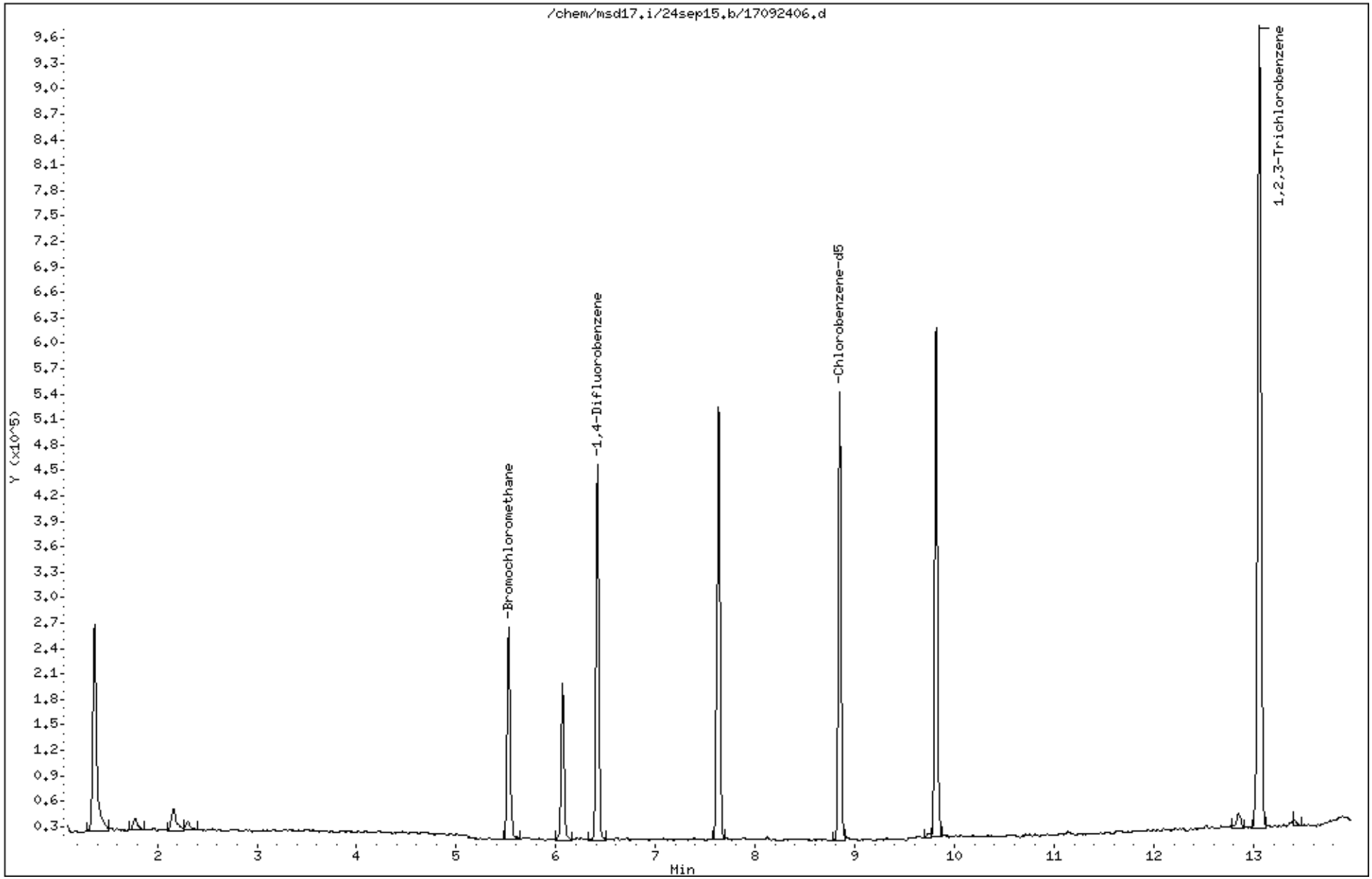
Instrument: msd17.i

Sample Info: 50ml 2736-107

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/21sep15a.b/17092122.d
Lab Smp Id: ICAL Level #6
Inj Date : 21-SEP-2015 22:55
Operator : gh Inst ID: msd17.i
Smp Info : 50ml 2737-240
Misc Info : 50ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/21sep15a.b/175q0921a.m
Meth Date : 25-Sep-2015 15:15 cbond Quant Type: ISTD
Cal Date : 21-SEP-2015 22:55 Cal File: 17092122.d
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12noNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.528	5.528 (1.000)	130	116527	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	89187			46.54- 106.54	76.54
5.528	5.528 (1.000)	49	132641			83.83- 143.83	113.83
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.416	6.416 (1.000)	114	475185	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	70590			0.00- 44.86	14.86
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.866	8.866 (1.000)	117	418099	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	225474			23.93- 83.93	53.93
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.065	6.065 (1.097)	65	159029	25.0000	25.327	80.00- 120.00	100.00
6.065	6.065 (1.097)	67	88280			25.51- 85.51	55.51

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.189)	98	489120	25.0000	24.965	80.00- 120.00	100.00
7.627	7.627 (1.189)	70	50805			0.00- 40.39	10.39
7.627	7.627 (1.189)	100	312890			33.97- 93.97	63.97
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.854	9.854 (1.111)	174	276278	25.0000	25.881	80.00- 120.00	100.00
9.847	9.847 (1.111)	95	302922			79.64- 139.64	109.64
9.847	9.847 (1.111)	176	264680			65.80- 125.80	95.80
9 Propylene					CAS #: 115-07-1		
1.517	1.517 (0.274)	41	223494	50.0000	48.340	80.00- 120.00	100.00
1.517	1.517 (0.274)	42	149958			37.10- 97.10	67.10
1.517	1.517 (0.274)	39	167612			44.98- 104.98	75.00
11 Freon 12					CAS #: 75-71-8		
1.552	1.552 (0.281)	85	924522	50.0000	49.295	80.00- 120.00	100.00
1.552	1.552 (0.281)	87	298917			2.33- 62.33	32.33
15 Freon 114					CAS #: 76-14-2		
1.674	1.674 (0.303)	135	676891	50.0000	49.722	80.00- 120.00	100.00
1.674	1.674 (0.303)	137	216758			2.02- 62.02	32.02
17 Chloromethane					CAS #: 74-87-3		
1.760	1.760 (0.318)	50	311572	50.0000	47.477	80.00- 120.00	100.00
1.760	1.760 (0.318)	52	100790			2.35- 62.35	32.35
23 Butane					CAS #: 106-97-8		
1.839	1.839 (0.333)	58	66950	50.0000	46.516	80.00- 120.00	100.00
1.839	1.839 (0.333)	43	460487			657.81- 717.81	687.81
25 Vinyl Chloride					CAS #: 75-01-4		
1.875	1.875 (0.339)	62	352090	50.0000	47.469	80.00- 120.00	100.00
1.875	1.875 (0.339)	64	115112			2.69- 62.69	32.69
26 1,3-Butadiene					CAS #: 106-99-0		
1.903	1.903 (0.344)	54	249965	50.0000	48.572	80.00- 120.00	100.00
1.903	1.903 (0.344)	39	234827			63.95- 123.95	93.94
29 Bromomethane					CAS #: 74-83-9		
2.262	2.262 (0.409)	94	336367	50.0000	51.200	80.00- 120.00	100.00
2.262	2.262 (0.409)	96	315139			63.69- 123.69	93.69
30 Chloroethane					CAS #: 75-00-3		
2.383	2.383 (0.431)	64	180384	50.0000	47.974	80.00- 120.00	100.00
2.376	2.376 (0.430)	66	57466			1.86- 61.86	31.86

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.383	2.383 (0.431)	49	46021			0.00- 55.51	25.51
31 Isopentane					CAS #: 78-78-4		
2.405	2.405 (0.435)	43	353440	50.0000	48.460	80.00- 120.00	100.00
2.405	2.405 (0.435)	57	262782			44.35- 104.35	74.35
35 Freon 11					CAS #: 75-69-4		
2.634	2.634 (0.476)	101	936693	50.0000	48.503	80.00- 120.00	100.00
2.634	2.634 (0.476)	103	610729			35.20- 95.20	65.20
42 Ethanol					CAS #: 64-17-5		
2.992	2.992 (0.541)	45	118445	50.0000	45.806	80.00- 120.00	100.00
2.992	2.992 (0.541)	43	24121			0.00- 50.36	20.36
2.992	2.992 (0.541)	46	47750			10.31- 70.31	40.31
49 Freon 113					CAS #: 76-13-1		
3.286	3.286 (0.594)	151	672179	50.0000	48.851	80.00- 120.00	100.00
3.286	3.286 (0.594)	153	428313			33.72- 93.72	63.72
3.286	3.286 (0.594)	101	841765			95.23- 155.23	125.23
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.315	3.315 (0.600)	98	240214	50.0000	47.355	80.00- 120.00	100.00
3.315	3.315 (0.600)	96	384687			130.14- 190.14	160.14
3.315	3.315 (0.600)	61	596105			218.16- 278.16	248.16
52 Acetone					CAS #: 67-64-1		
3.479	3.479 (0.629)	58	169379	50.0000	48.331	80.00- 120.00	100.00
3.479	3.479 (0.629)	43	502184			266.49- 326.49	296.49
56 Carbon Disulfide					CAS #: 75-15-0		
3.551	3.551 (0.642)	76	1131425	50.0000	48.299	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.651	3.651 (0.660)	45	552053	50.0000	50.780	80.00- 120.00	100.00
3.651	3.651 (0.660)	43	110507			0.00- 50.02	20.02
3.651	3.651 (0.660)	59	23843			0.00- 34.32	4.32
58 3-Chloropropene					CAS #: 107-05-1		
3.794	3.794 (0.686)	76	182789	50.0000	48.400	80.00- 120.00	100.00
3.794	3.794 (0.686)	41	393028			185.01- 245.01	215.02
66 Methylene Chloride					CAS #: 75-09-2		
3.981	3.981 (0.720)	49	386270	50.0000	47.021	80.00- 120.00	100.00
3.981	3.981 (0.720)	84	343871			59.02- 119.02	89.02
3.981	3.981 (0.720)	51	122744			1.78- 61.78	31.78

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.110	4.110 (0.743)	59	694391	50.0000	50.863	80.00- 120.00	100.00
4.110	4.110 (0.743)	41	140705			0.00- 50.26	20.26
4.110	4.110 (0.743)	57	74979			0.00- 40.80	10.80
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.196	4.196 (0.759)	73	1036218	50.0000	48.697	80.00- 120.00	100.00
4.196	4.196 (0.759)	57	222361			0.00- 51.46	21.46
4.196	4.196 (0.759)	41	200361			0.00- 49.34	19.34
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.224	4.224 (0.764)	98	251688	50.0000	49.798	80.00- 120.00	100.00
4.217	4.217 (0.763)	61	539016			184.16- 244.16	214.16
4.217	4.217 (0.763)	96	397270			127.84- 187.84	157.84
78 Hexane					CAS #: 110-54-3		
4.432	4.432 (0.802)	57	550786	50.0000	47.915	80.00- 120.00	100.00
4.432	4.432 (0.802)	43	317464			27.64- 87.64	57.64
4.432	4.432 (0.802)	86	93218			0.00- 46.92	16.92
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.711	4.711 (0.852)	63	678109	50.0000	49.593	80.00- 120.00	100.00
4.711	4.711 (0.852)	65	217299			2.04- 62.04	32.04
83 Isopropyl ether					CAS #: 108-20-3		
4.697	4.697 (0.850)	45	1083839	50.0000	48.744	80.00- 120.00	100.00
4.704	4.704 (0.851)	87	339300			1.31- 61.31	31.31
4.704	4.704 (0.851)	59	137573			0.00- 42.69	12.69
86 Vinyl Acetate					CAS #: 108-05-4		
4.754	4.754 (0.860)	86	101775	50.0000	48.782	80.00- 120.00	100.00
4.754	4.754 (0.860)	43	937766			891.41- 951.41	921.41
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.055	5.055 (0.914)	59	1136016	50.0000	48.953	80.00- 120.00	100.00
5.055	5.055 (0.914)	87	494412			13.52- 73.52	43.52
5.055	5.055 (0.914)	41	196083			0.00- 47.26	17.26
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.299	5.299 (0.959)	98	263651	50.0000	48.372	80.00- 120.00	100.00
5.299	5.299 (0.959)	96	407034			124.38- 184.38	154.38
5.299	5.299 (0.959)	61	506404			162.07- 222.07	192.07
92 2-Butanone					CAS #: 78-93-3		
5.327	5.327 (0.964)	72	189459	50.0000	49.165	80.00- 120.00	100.00
5.327	5.327 (0.964)	43	637192			306.33- 366.33	336.32

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.327	5.327 (0.964)	57	55434			0.00- 59.26	29.26
99 Tetrahydrofuran					CAS #: 109-99-9		
5.528	5.528 (1.000)	42	350424	50.0000	46.682	80.00- 120.00	100.00
5.528	5.528 (1.000)	71	167219			17.72- 77.72	47.72
5.528	5.528 (1.000)	72	178666			20.99- 80.99	50.99
100 Chloroform					CAS #: 67-66-3		
5.592	5.592 (1.012)	83	805945	50.0000	48.091	80.00- 120.00	100.00
5.592	5.592 (1.012)	85	521178			34.67- 94.67	64.67
102 Cyclohexane					CAS #: 110-82-7		
5.693	5.693 (1.030)	84	504900	50.0000	48.517	80.00- 120.00	100.00
5.686	5.686 (1.028)	56	540705			77.09- 137.09	107.09
5.686	5.686 (1.028)	41	282071			25.87- 85.87	55.87
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.714	5.714 (1.034)	97	793534	50.0000	47.765	80.00- 120.00	100.00
5.714	5.714 (1.034)	99	510495			34.33- 94.33	64.33
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.822	5.822 (1.053)	119	806774	50.0000	48.603	80.00- 120.00	100.00
5.822	5.822 (1.053)	117	846291			74.90- 134.90	104.90
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.088)	57	1729103	50.0000	49.197	80.00- 120.00	100.00
6.015	6.015 (1.088)	56	549907			1.80- 61.80	31.80
6.015	6.015 (1.088)	41	446594			0.00- 55.83	25.83
116 Benzene					CAS #: 71-43-2		
6.044	6.044 (0.942)	78	1162296	50.0000	48.284	80.00- 120.00	100.00
6.044	6.044 (0.942)	77	279937			0.00- 54.08	24.08
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.108	6.108 (1.105)	87	280295	50.0000	50.328	80.00- 120.00	100.00
6.108	6.108 (1.105)	73	1139604			376.57- 436.57	406.57
6.108	6.108 (1.105)	55	264931			64.52- 124.52	94.52
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.130	6.130 (0.955)	62	511784	50.0000	48.670	80.00- 120.00	100.00
6.137	6.137 (0.956)	64	164593			2.16- 62.16	32.16
121 Heptane					CAS #: 142-82-5		
6.187	6.187 (0.964)	71	413738	50.0000	49.659	80.00- 120.00	100.00
6.187	6.187 (0.964)	43	583136			110.94- 170.94	140.94

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.187	6.187 (0.964)	57	346377			53.72- 113.72	83.72
125 Trichloroethene					CAS #: 79-01-6		
6.610	6.610 (1.030)	95	543996	50.0000	47.895	80.00- 120.00	100.00
6.610	6.610 (1.030)	130	571039			74.97- 134.97	104.97
6.610	6.610 (1.030)	97	355417			35.33- 95.33	65.33
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.212)	83	716383	50.0000	49.884	80.00- 120.00	100.00
6.703	6.703 (1.212)	98	332490			16.41- 76.41	46.41
6.703	6.703 (1.212)	55	504402			40.41- 100.41	70.41
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.846	6.846 (1.067)	63	425824	50.0000	49.415	80.00- 120.00	100.00
6.846	6.846 (1.067)	62	292898			38.78- 98.78	68.78
6.846	6.846 (1.067)	41	213581			20.16- 80.16	50.16
136 1,4-Dioxane					CAS #: 123-91-1		
6.939	6.939 (1.081)	88	268826	50.0000	51.558	80.00- 120.00	100.00
6.939	6.939 (1.081)	58	164051			31.02- 91.02	61.02
6.939	6.939 (1.081)	57	57344			0.00- 51.33	21.33
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.103)	83	867996	50.0000	48.686	80.00- 120.00	100.00
7.075	7.075 (1.103)	85	556890			34.16- 94.16	64.16
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.448	7.448 (1.161)	75	736876	50.0000	49.204	80.00- 120.00	100.00
7.448	7.448 (1.161)	77	232660			1.57- 61.57	31.57
7.448	7.448 (1.161)	39	324045			13.98- 73.98	43.98
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.555	7.555 (1.178)	58	313025	50.0000	53.996	80.00- 120.00	100.00
7.555	7.555 (1.178)	43	738528			205.93- 265.93	235.93
7.555	7.555 (1.178)	85	150390			18.04- 78.04	48.04
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.198)	91	1474654	50.0000	48.852	80.00- 120.00	100.00
7.684	7.684 (1.198)	92	844034			27.24- 87.24	57.24
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.928	7.928 (0.894)	75	664633	50.0000	51.179	80.00- 120.00	100.00
7.928	7.928 (0.894)	77	210117			1.57- 61.57	31.61
7.928	7.928 (0.894)	39	281368			13.98- 73.98	42.33

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.085	8.085 (0.912)	97	513144	50.0000	50.086	80.00- 120.00	100.00
8.085	8.085 (0.912)	99	313273			31.05- 91.05	61.05
8.085	8.085 (0.912)	83	453045			58.29- 118.29	88.29
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.916)	166	743463	50.0000	49.443	80.00- 120.00	100.00
8.121	8.121 (0.916)	129	538746			42.46- 102.46	72.46
8.121	8.121 (0.916)	131	522188			40.24- 100.24	70.24
158 2-Hexanone					CAS #: 591-78-6		
8.243	8.243 (0.930)	58	397914	50.0000	55.036	80.00- 120.00	100.00
8.243	8.243 (0.930)	43	690542			205.93- 265.93	173.54
8.250	8.250 (0.931)	100	93019			11.40- 71.40	23.38
160 Dibromochloromethane					CAS #: 124-48-1		
8.393	8.393 (0.947)	129	948070	50.0000	49.567	80.00- 120.00	100.00
8.393	8.393 (0.947)	127	732657			47.28- 107.28	77.28
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.508	8.508 (0.960)	107	813151	50.0000	50.202	80.00- 120.00	100.00
8.508	8.508 (0.960)	109	784293			66.45- 126.45	96.45
165 Chlorobenzene					CAS #: 108-90-7		
8.887	8.887 (1.002)	112	1178074	50.0000	50.235	80.00- 120.00	100.00
8.887	8.887 (1.002)	114	377735			2.06- 62.06	32.06
8.887	8.887 (1.002)	77	665303			26.47- 86.47	56.47
167 Ethyl Benzene					CAS #: 100-41-4		
8.930	8.930 (1.007)	106	591665	50.0000	51.803	80.00- 120.00	100.00
8.930	8.930 (1.007)	91	1892789			289.94- 349.94	319.91
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	739384	50.0000	52.140	80.00- 120.00	100.00
9.031	9.031 (1.019)	91	1462754			167.83- 227.83	197.83
171 o-Xylene					CAS #: 95-47-6		
9.374	9.374 (1.057)	106	689539	50.0000	52.407	80.00- 120.00	100.00
9.374	9.374 (1.057)	91	1455706			181.11- 241.11	211.11
172 Styrene					CAS #: 100-42-5		
9.396	9.396 (1.060)	104	1185176	50.0000	52.808	80.00- 120.00	100.00
9.389	9.389 (1.059)	78	566370			17.79- 77.79	47.79
174 Bromoform					CAS #: 75-25-2		
9.597	9.597 (1.082)	173	1000291	50.0000	51.794	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.597	9.597 (1.082)	171	514639			21.45- 81.45	51.45
175 Cumene					CAS #: 98-82-8		
9.661	9.661 (1.090)	105	2158791	50.0000	51.363	80.00- 120.00	100.00
9.661	9.661 (1.090)	120	593032			0.00- 57.47	27.47
9.661	9.661 (1.090)	51	186045			0.00- 38.62	8.62
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.976	9.976 (1.125)	83	1116702	50.0000	50.489	80.00- 120.00	100.00
9.976	9.976 (1.125)	85	723315			34.77- 94.77	64.77
182 Propylbenzene					CAS #: 103-65-1		
10.005	10.005 (1.128)	91	2605016	50.0000	51.628	80.00- 120.00	100.00
10.005	10.005 (1.128)	120	616195			0.00- 53.65	23.65
10.005	10.005 (1.128)	105	93029			0.00- 33.57	3.57
188 4-Ethyltoluene					CAS #: 622-96-8		
10.098	10.098 (1.139)	120	699809	50.0000	52.370	80.00- 120.00	100.00
10.098	10.098 (1.139)	105	2259630			292.89- 352.89	322.89
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.148	10.148 (1.145)	120	916144	50.0000	52.182	80.00- 120.00	100.00
10.148	10.148 (1.145)	105	1880409			175.25- 235.25	205.25
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.478	10.478 (1.182)	120	830534	50.0000	52.694	80.00- 120.00	100.00
10.478	10.478 (1.182)	105	1775318			183.76- 243.76	213.76
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.771	10.771 (1.215)	146	1294722	50.0000	51.068	80.00- 120.00	100.00
10.771	10.771 (1.215)	148	824564			33.69- 93.69	63.69
10.771	10.771 (1.215)	111	493506			8.12- 68.12	38.12
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.850	10.850 (1.224)	146	1310697	50.0000	52.254	80.00- 120.00	100.00
10.850	10.850 (1.224)	148	836955			33.86- 93.86	63.86
10.850	10.850 (1.224)	111	481102			6.71- 66.71	36.71
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.965	10.965 (1.237)	91	1606093	50.0000	53.848	80.00- 120.00	100.00
10.965	10.965 (1.237)	126	352670			0.00- 51.95	21.96
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.180	11.180 (1.261)	146	1237934	50.0000	51.549	80.00- 120.00	100.00
11.180	11.180 (1.261)	148	791064			33.90- 93.90	63.90

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.180	11.180 (1.261)	111	481014			8.86- 68.86	38.86
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.598	12.598 (1.421)	180	1084943	50.0000	52.014	80.00- 120.00	100.00
12.598	12.598 (1.421)	182	1032972			65.21- 125.21	95.21
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.691	12.691 (1.431)	225	902121	50.0000	50.368	80.00- 120.00	100.00
12.691	12.691 (1.431)	223	570336			33.22- 93.22	63.22

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092122.d
Lab Smp Id: ICAL Level #6
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msd17.i/21sep15a.b/175q0921a.m
Misc Info: 50ppbv(200ppbv)

Calibration Date: 21-SEP-2015
Calibration Time: 22:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	116527	69916	163138	116527	0.00
123 1,4-Difluorobenze	475185	285111	665259	475185	0.00
163 Chlorobenzene-d5	418099	250859	585339	418099	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/21sep15a.b/17092122.d

Date : 21-SEP-2015 22:55

Client ID:

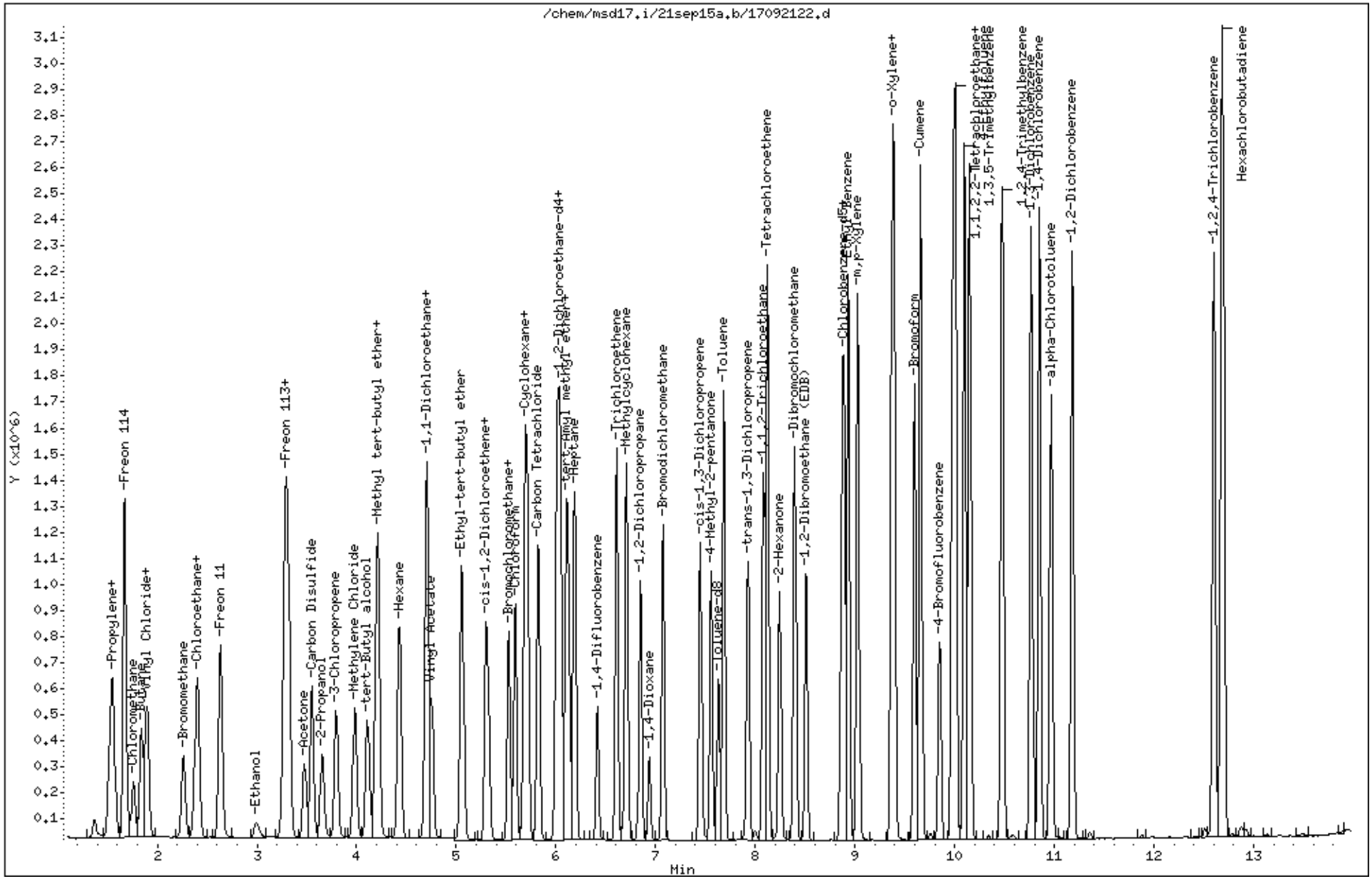
Sample Info: 50ml 2737-240

Column phase: RTX-624

Instrument: msd17.i

Operator: gh

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092417.d
Lab Smp Id: ICAL Level 7
Inj Date : 24-SEP-2015 16:58
Operator : cb Inst ID: msd17.i
Smp Info : 100ml 2736-262
Misc Info : 10ppbv(20ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921c.m
Meth Date : 25-Sep-2015 15:58 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 16:58 Cal File: 17092417.d
Als bottle: 7 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Naphcrv.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.521	5.521 (1.000)	130	100829	25.0000		80.00- 120.00	100.00
5.521	5.521 (1.000)	128	81558			46.54- 106.54	80.89
5.521	5.521 (1.000)	49	113223			83.83- 143.83	112.29
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.409	6.409 (1.000)	114	412467	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	65291			0.00- 44.86	15.83
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.844	8.844 (1.000)	117	379049	25.0000		80.00- 120.00	100.00
8.844	8.844 (1.000)	82	204478			23.93- 83.93	53.95
228 Naphthalene					CAS #: 91-20-3		
12.798	12.798 (1.447)	128	152086	10.0000	7.502	0.00- 30.00	100.00
12.798	12.798 (1.447)	127	22187			0.00- 30.00	14.59

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092417.d
Lab Smp Id: ICAL Level 7
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921c.m
Misc Info: 10ppbv(20ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 08:49
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	102227	61336	143118	100829	-1.37
123 1,4-Difluorobenze	417792	250675	584909	412467	-1.27
163 Chlorobenzene-d5	379305	227583	531027	379049	-0.07

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.52	-0.13
123 1,4-Difluorobenze	6.42	6.09	6.75	6.41	-0.11
163 Chlorobenzene-d5	8.86	8.53	9.19	8.84	-0.16

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092417.d

Page 1

Date : 24-SEP-2015 16:58

Client ID:

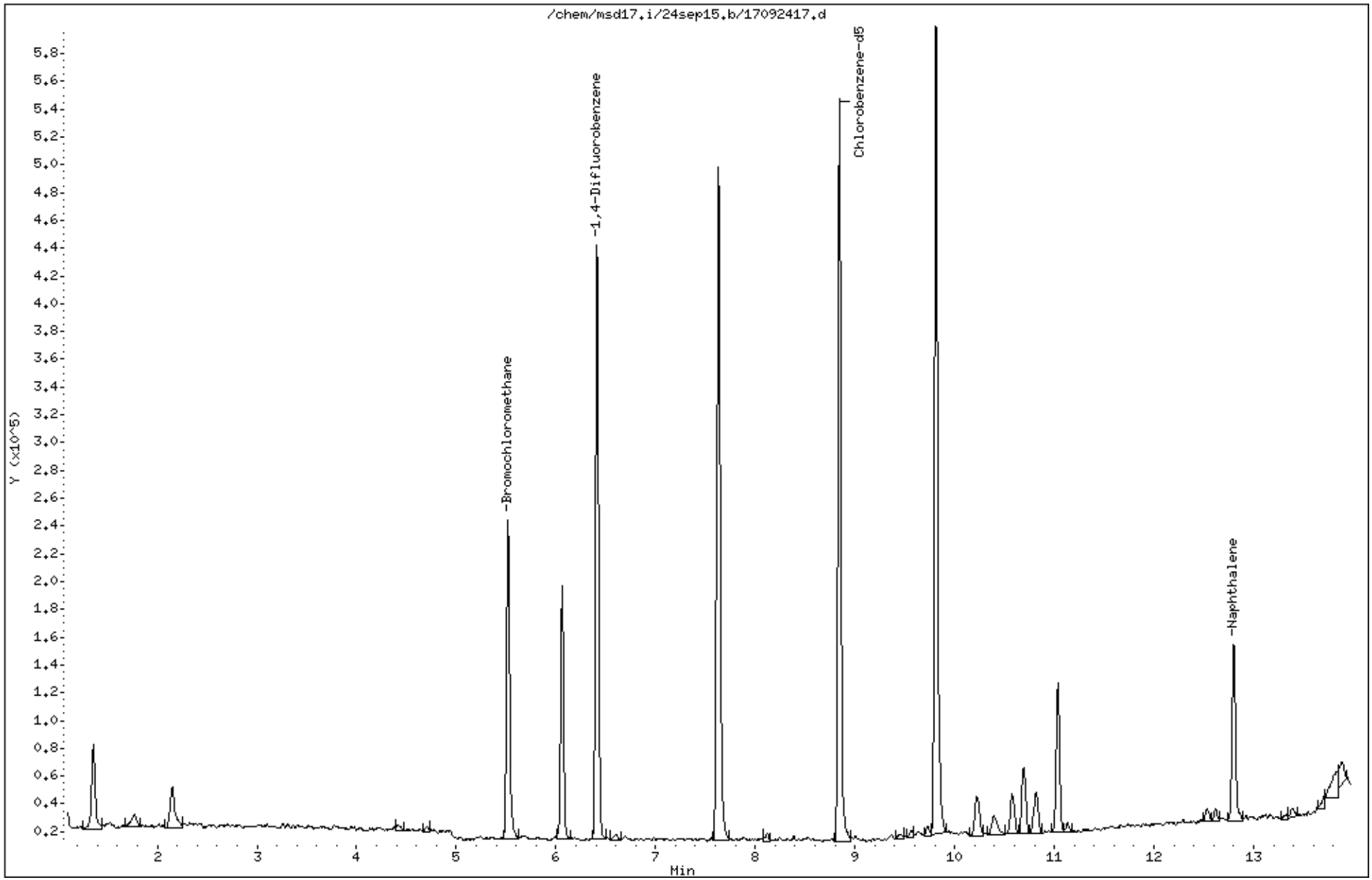
Instrument: msd17.i

Sample Info: 100ml 2736-262

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/21sep15a.b/17092123.d
Lab Smp Id: ICAL Level #7
Inj Date : 21-SEP-2015 23:31
Operator : gh Inst ID: msd17.i
Smp Info : 100ml 2737-240
Misc Info : 100ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/21sep15a.b/175q0921a.m
Meth Date : 25-Sep-2015 15:04 cbond Quant Type: ISTD
Cal Date : 21-SEP-2015 23:31 Cal File: 17092123.d
Als bottle: 2 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12noNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.528	5.528 (1.000)	130	122053	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	89305			46.54- 106.54	73.17
5.528	5.528 (1.000)	49	133058			83.83- 143.83	109.02
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.416	6.416 (1.000)	114	478988	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	73617			0.00- 44.86	15.37
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.852	8.852 (1.000)	117	439963	25.0000		80.00- 120.00	100.00
8.852	8.852 (1.000)	82	232713			23.93- 83.93	52.89
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.065	6.065 (1.097)	65	161988	25.0000	24.630	80.00- 120.00	100.00
6.065	6.065 (1.097)	67	93750			25.51- 85.51	57.87

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.189)	98	502925	25.0000	25.466	80.00- 120.00	100.00
7.627	7.627 (1.189)	70	52648			0.00- 40.39	10.47
7.627	7.627 (1.189)	100	320638			33.97- 93.97	63.75
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.819	9.819 (1.109)	174	284162	25.0000	25.296	80.00- 120.00	100.00
9.811	9.811 (1.108)	95	309487			79.64- 139.64	108.91
9.819	9.819 (1.109)	176	274586			65.80- 125.80	96.63
9 Propylene					CAS #: 115-07-1		
1.517	1.517 (0.274)	41	458709	100.000	94.723	80.00- 120.00	100.00
1.517	1.517 (0.274)	42	304170			37.10- 97.10	66.31
1.517	1.517 (0.274)	39	334083			44.98- 104.98	72.83
11 Freon 12					CAS #: 75-71-8		
1.552	1.552 (0.281)	85	1874849	100.000	95.439	80.00- 120.00	100.00
1.552	1.552 (0.281)	87	604672			2.33- 62.33	32.25
15 Freon 114					CAS #: 76-14-2		
1.674	1.674 (0.303)	135	1371885	100.000	96.210	80.00- 120.00	100.00
1.674	1.674 (0.303)	137	437426			2.02- 62.02	31.89
17 Chloromethane					CAS #: 74-87-3		
1.760	1.760 (0.318)	50	627947	100.000	91.354	80.00- 120.00	100.00
1.760	1.760 (0.318)	52	207584			2.35- 62.35	33.06
23 Butane					CAS #: 106-97-8		
1.839	1.839 (0.333)	58	136244	100.000	90.375	80.00- 120.00	100.00
1.839	1.839 (0.333)	43	926373			657.81- 717.81	679.94
25 Vinyl Chloride					CAS #: 75-01-4		
1.875	1.875 (0.339)	62	718061	100.000	92.427	80.00- 120.00	100.00
1.875	1.875 (0.339)	64	226374			2.69- 62.69	31.53
26 1,3-Butadiene					CAS #: 106-99-0		
1.903	1.903 (0.344)	54	511190	100.000	94.836	80.00- 120.00	100.00
1.903	1.903 (0.344)	39	484652			63.95- 123.95	94.81
29 Bromomethane					CAS #: 74-83-9		
2.262	2.262 (0.409)	94	680461	100.000	98.886	80.00- 120.00	100.00
2.262	2.262 (0.409)	96	639420			63.69- 123.69	93.97
30 Chloroethane					CAS #: 75-00-3		
2.383	2.383 (0.431)	64	363443	100.000	92.284	80.00- 120.00	100.00
2.383	2.383 (0.431)	66	122797			1.86- 61.86	33.79

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.383	2.383 (0.431)	49	95613			0.00- 55.51	26.31
31 Isopentane					CAS #: 78-78-4		
2.405	2.405 (0.435)	43	716609	100.000	93.805	80.00- 120.00	100.00
2.405	2.405 (0.435)	57	544367			44.35- 104.35	75.96
35 Freon 11					CAS #: 75-69-4		
2.634	2.634 (0.476)	101	1921842	100.000	95.009	80.00- 120.00	100.00
2.634	2.634 (0.476)	103	1238983			35.20- 95.20	64.47
42 Ethanol					CAS #: 64-17-5		
2.992	2.992 (0.541)	45	244313	100.000	90.206	80.00- 120.00	100.00
2.992	2.992 (0.541)	43	50399			0.00- 50.36	20.63
2.992	2.992 (0.541)	46	94934			10.31- 70.31	38.86
49 Freon 113					CAS #: 76-13-1		
3.286	3.286 (0.594)	151	1361600	100.000	94.475	80.00- 120.00	100.00
3.286	3.286 (0.594)	153	869723			33.72- 93.72	63.88
3.286	3.286 (0.594)	101	1714439			95.23- 155.23	125.91
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.322	3.322 (0.601)	98	500441	100.000	94.188	80.00- 120.00	100.00
3.322	3.322 (0.601)	96	786199			130.14- 190.14	157.10
3.315	3.315 (0.600)	61	1226712			218.16- 278.16	245.13
52 Acetone					CAS #: 67-64-1		
3.479	3.479 (0.629)	58	325428	100.000	88.654	80.00- 120.00	100.00
3.479	3.479 (0.629)	43	994667			266.49- 326.49	305.65
56 Carbon Disulfide					CAS #: 75-15-0		
3.551	3.551 (0.642)	76	2296363	100.000	93.591	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.651	3.651 (0.660)	45	1127638	100.000	99.028	80.00- 120.00	100.00
3.651	3.651 (0.660)	43	223865			0.00- 50.02	19.85
3.651	3.651 (0.660)	59	48101			0.00- 34.32	4.27
58 3-Chloropropene					CAS #: 107-05-1		
3.795	3.795 (0.686)	76	372065	100.000	94.057	80.00- 120.00	100.00
3.795	3.795 (0.686)	41	818453			185.01- 245.01	219.98
66 Methylene Chloride					CAS #: 75-09-2		
3.981	3.981 (0.720)	49	798654	100.000	92.819	80.00- 120.00	100.00
3.981	3.981 (0.720)	84	691724			59.02- 119.02	86.61
3.981	3.981 (0.720)	51	249009			1.78- 61.78	31.18

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.110	4.110 (0.743)	59	1457198	100.000	101.90	80.00- 120.00	100.00
4.110	4.110 (0.743)	41	287704			0.00- 50.26	19.74
4.110	4.110 (0.743)	57	147486			0.00- 40.80	10.12
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.196	4.196 (0.759)	73	2125374	100.000	95.359	80.00- 120.00	100.00
4.196	4.196 (0.759)	57	461380			0.00- 51.46	21.71
4.196	4.196 (0.759)	41	405607			0.00- 49.34	19.08
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.224	4.224 (0.764)	98	512910	100.000	96.888	80.00- 120.00	100.00
4.217	4.217 (0.763)	61	1108643			184.16- 244.16	216.15
4.224	4.224 (0.764)	96	822010			127.84- 187.84	160.26
78 Hexane					CAS #: 110-54-3		
4.432	4.432 (0.802)	57	1114600	100.000	92.572	80.00- 120.00	100.00
4.425	4.425 (0.800)	43	640523			27.64- 87.64	57.47
4.432	4.432 (0.802)	86	192809			0.00- 46.92	17.30
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.711	4.711 (0.852)	63	1396292	100.000	97.494	80.00- 120.00	100.00
4.711	4.711 (0.852)	65	441836			2.04- 62.04	31.64
83 Isopropyl ether					CAS #: 108-20-3		
4.697	4.697 (0.850)	45	2189787	100.000	94.023	80.00- 120.00	100.00
4.704	4.704 (0.851)	87	694892			1.31- 61.31	31.73
4.704	4.704 (0.851)	59	276167			0.00- 42.69	12.61
86 Vinyl Acetate					CAS #: 108-05-4		
4.754	4.754 (0.860)	86	217912	100.000	99.718	80.00- 120.00	100.00
4.754	4.754 (0.860)	43	1933743			891.41- 951.41	887.40
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.055	5.055 (0.914)	59	2317179	100.000	95.331	80.00- 120.00	100.00
5.055	5.055 (0.914)	87	997282			13.52- 73.52	43.04
5.055	5.055 (0.914)	41	392720			0.00- 47.26	16.95
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.299	5.299 (0.959)	98	542166	100.000	94.968	80.00- 120.00	100.00
5.299	5.299 (0.959)	96	849574			124.38- 184.38	156.70
5.299	5.299 (0.959)	61	1039452			162.07- 222.07	191.72
92 2-Butanone					CAS #: 78-93-3		
5.327	5.327 (0.964)	72	390840	100.000	96.833	80.00- 120.00	100.00
5.327	5.327 (0.964)	43	1316051			306.33- 366.33	336.72

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.327	5.327 (0.964)	57	117026			0.00- 59.26	29.94
99 Tetrahydrofuran					CAS #: 109-99-9		
5.528	5.528 (1.000)	42	716737	100.000	91.158	80.00- 120.00	100.00
5.528	5.528 (1.000)	71	344205			17.72- 77.72	48.02
5.528	5.528 (1.000)	72	363854			20.99- 80.99	50.77
100 Chloroform					CAS #: 67-66-3		
5.592	5.592 (1.012)	83	1630424	100.000	92.884	80.00- 120.00	100.00
5.592	5.592 (1.012)	85	1072713			34.67- 94.67	65.79
102 Cyclohexane					CAS #: 110-82-7		
5.693	5.693 (1.030)	84	1053141	100.000	96.618	80.00- 120.00	100.00
5.693	5.693 (1.030)	56	1105787			77.09- 137.09	105.00
5.686	5.686 (1.028)	41	572474			25.87- 85.87	54.36
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.714	5.714 (1.034)	97	1628220	100.000	93.570	80.00- 120.00	100.00
5.714	5.714 (1.034)	99	1046725			34.33- 94.33	64.29
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.822	5.822 (1.053)	119	1668499	100.000	95.966	80.00- 120.00	100.00
5.822	5.822 (1.053)	117	1730847			74.90- 134.90	103.74
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.088)	57	3489823	100.000	94.797	80.00- 120.00	100.00
6.015	6.015 (1.088)	56	1104546			1.80- 61.80	31.65
6.015	6.015 (1.088)	41	894052			0.00- 55.83	25.62
116 Benzene					CAS #: 71-43-2		
6.044	6.044 (0.942)	78	2331724	100.000	96.096	80.00- 120.00	100.00
6.044	6.044 (0.942)	77	562702			0.00- 54.08	24.13
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.108	6.108 (1.105)	87	564290	100.000	96.733	80.00- 120.00	100.00
6.108	6.108 (1.105)	73	2342362			376.57- 436.57	415.10
6.108	6.108 (1.105)	55	526272			64.52- 124.52	93.26
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.137	6.137 (0.956)	62	1043460	100.000	98.444	80.00- 120.00	100.00
6.130	6.130 (0.955)	64	336685			2.16- 62.16	32.27
121 Heptane					CAS #: 142-82-5		
6.187	6.187 (0.964)	71	833053	100.000	99.193	80.00- 120.00	100.00
6.187	6.187 (0.964)	43	1164745			110.94- 170.94	139.82

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.187	6.187 (0.964)	57	691780			53.72- 113.72	83.04
125 Trichloroethene					CAS #: 79-01-6		
6.610	6.610 (1.030)	95	1109611	100.000	96.918	80.00- 120.00	100.00
6.610	6.610 (1.030)	130	1151358			74.97- 134.97	103.76
6.610	6.610 (1.030)	97	719375			35.33- 95.33	64.83
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.212)	83	1434093	100.000	95.339	80.00- 120.00	100.00
6.710	6.710 (1.214)	98	671566			16.41- 76.41	46.83
6.703	6.703 (1.212)	55	1013951			40.41- 100.41	70.70
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.846	6.846 (1.067)	63	859940	100.000	99.000	80.00- 120.00	100.00
6.846	6.846 (1.067)	62	592155			38.78- 98.78	68.86
6.846	6.846 (1.067)	41	431819			20.16- 80.16	50.22
136 1,4-Dioxane					CAS #: 123-91-1		
6.939	6.939 (1.081)	88	555160	100.000	105.63	80.00- 120.00	100.00
6.939	6.939 (1.081)	58	341722			31.02- 91.02	61.55
6.939	6.939 (1.081)	57	112941			0.00- 51.33	20.34
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.103)	83	1777040	100.000	98.883	80.00- 120.00	100.00
7.075	7.075 (1.103)	85	1136268			34.16- 94.16	63.94
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.448	7.448 (1.161)	75	1494904	100.000	99.027	80.00- 120.00	100.00
7.448	7.448 (1.161)	77	483581			1.57- 61.57	32.35
7.448	7.448 (1.161)	39	666959			13.98- 73.98	44.62
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.555	7.555 (1.178)	58	631698	100.000	108.10	80.00- 120.00	100.00
7.555	7.555 (1.178)	43	1501133			205.93- 265.93	237.63
7.555	7.555 (1.178)	85	307078			18.04- 78.04	48.61
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.198)	91	2974453	100.000	97.755	80.00- 120.00	100.00
7.684	7.684 (1.198)	92	1704708			27.24- 87.24	57.31
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.928	7.928 (0.896)	75	1354825	100.000	99.141	80.00- 120.00	100.00
7.928	7.928 (0.896)	77	422564			1.57- 61.57	31.19
7.928	7.928 (0.896)	39	574862			13.98- 73.98	42.43

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.085	8.085 (0.913)	97	1035019	100.000	96.003	80.00- 120.00	100.00
8.085	8.085 (0.913)	99	641822			31.05- 91.05	62.01
8.085	8.085 (0.913)	83	911745			58.29- 118.29	88.09
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.917)	166	1495545	100.000	94.517	80.00- 120.00	100.00
8.121	8.121 (0.917)	129	1085648			42.46- 102.46	72.59
8.121	8.121 (0.917)	131	1048144			40.24- 100.24	70.08
158 2-Hexanone					CAS #: 591-78-6		
8.243	8.243 (0.931)	58	833773	100.000	109.59	80.00- 120.00	100.00
8.243	8.243 (0.931)	43	1414583			205.93- 265.93	169.66
8.250	8.250 (0.932)	100	191214			11.40- 71.40	22.93
160 Dibromochloromethane					CAS #: 124-48-1		
8.393	8.393 (0.948)	129	1961692	100.000	97.465	80.00- 120.00	100.00
8.393	8.393 (0.948)	127	1514740			47.28- 107.28	77.22
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.508	8.508 (0.961)	107	1684706	100.000	98.840	80.00- 120.00	100.00
8.508	8.508 (0.961)	109	1593499			66.45- 126.45	94.59
165 Chlorobenzene					CAS #: 108-90-7		
8.873	8.873 (1.002)	112	2416939	100.000	97.940	80.00- 120.00	100.00
8.873	8.873 (1.002)	114	771024			2.06- 62.06	31.90
8.873	8.873 (1.002)	77	1384602			26.47- 86.47	57.29
167 Ethyl Benzene					CAS #: 100-41-4		
8.916	8.916 (1.007)	106	1223081	100.000	101.76	80.00- 120.00	100.00
8.916	8.916 (1.007)	91	3898307			289.94- 349.94	318.73
169 m,p-Xylene					CAS #: 108-38-3		
9.009	9.009 (1.018)	106	1535276	100.000	102.88	80.00- 120.00	100.00
9.009	9.009 (1.018)	91	3086520			167.83- 227.83	201.04
171 o-Xylene					CAS #: 95-47-6		
9.346	9.346 (1.056)	106	1425020	100.000	102.92	80.00- 120.00	100.00
9.346	9.346 (1.056)	91	3016482			181.11- 241.11	211.68
172 Styrene					CAS #: 100-42-5		
9.367	9.367 (1.058)	104	2507654	100.000	106.18	80.00- 120.00	100.00
9.367	9.367 (1.058)	78	1185052			17.79- 77.79	47.26
174 Bromoform					CAS #: 75-25-2		
9.568	9.568 (1.081)	173	2085207	100.000	102.60	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.568	9.568 (1.081)	171	1066791			21.45- 81.45	51.16
175 Cumene					CAS #: 98-82-8		
9.625	9.625 (1.087)	105	4573230	100.000	103.40	80.00- 120.00	100.00
9.632	9.632 (1.088)	120	1238682			0.00- 57.47	27.09
9.625	9.625 (1.087)	51	382981			0.00- 38.62	8.37
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.940	9.940 (1.123)	83	2286457	100.000	98.240	80.00- 120.00	100.00
9.940	9.940 (1.123)	85	1489705			34.77- 94.77	65.15
182 Propylbenzene					CAS #: 103-65-1		
9.969	9.969 (1.126)	91	5451721	100.000	102.68	80.00- 120.00	100.00
9.969	9.969 (1.126)	120	1271096			0.00- 53.65	23.32
9.969	9.969 (1.126)	105	197731			0.00- 33.57	3.63
188 4-Ethyltoluene					CAS #: 622-96-8		
10.062	10.062 (1.137)	120	1393399	100.000	99.092	80.00- 120.00	100.00(H)
10.062	10.062 (1.137)	105	4856224			292.89- 352.89	348.52
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.112	10.112 (1.142)	120	1988815	100.000	107.65	80.00- 120.00	100.00
10.112	10.112 (1.142)	105	3855193			175.25- 235.25	193.84
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.435	10.435 (1.179)	120	1751548	100.000	105.61	80.00- 120.00	100.00
10.435	10.435 (1.179)	105	3780696			183.76- 243.76	215.85
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.800	10.800 (1.220)	146	2741571	100.000	102.76	80.00- 120.00	100.00
10.800	10.800 (1.220)	148	1751398			33.69- 93.69	63.88
10.800	10.800 (1.220)	111	1007540			8.12- 68.12	36.75
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.800	10.800 (1.220)	146	2741571	100.000	103.87	80.00- 120.00	100.00
10.800	10.800 (1.220)	148	1751398			33.86- 93.86	63.88
10.800	10.800 (1.220)	111	1007540			6.71- 66.71	36.75
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.922	10.922 (1.234)	91	3453138	100.000	110.02	80.00- 120.00	100.00
10.922	10.922 (1.234)	126	774197			0.00- 51.95	22.42
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.129	11.129 (1.257)	146	2603147	100.000	103.01	80.00- 120.00	100.00
11.129	11.129 (1.257)	148	1650566			33.90- 93.90	63.41

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.129	11.129 (1.257)	111	1011526			8.86- 68.86	38.86
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.533	12.533 (1.416)	180	2361191	100.000	107.57	80.00- 120.00	100.00
12.533	12.533 (1.416)	182	2264550			65.21- 125.21	95.91
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.619	12.619 (1.426)	225	1968211	100.000	104.43	80.00- 120.00	100.00
12.619	12.619 (1.426)	223	1227265			33.22- 93.22	62.35

QC Flag Legend

H - Operator selected an alternate compound hit.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092123.d
Lab Smp Id: ICAL Level #7
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msd17.i/21sep15a.b/175q0921a.m
Misc Info: 100ppbv(200ppbv)

Calibration Date: 21-SEP-2015
Calibration Time: 22:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	116527	69916	163138	122053	4.74
123 1,4-Difluorobenze	475185	285111	665259	478988	0.80
163 Chlorobenzene-d5	418099	250859	585339	439963	5.23

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.85	-0.16

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/21sep15a.b/17092123.d

Date : 21-SEP-2015 23:31

Client ID:

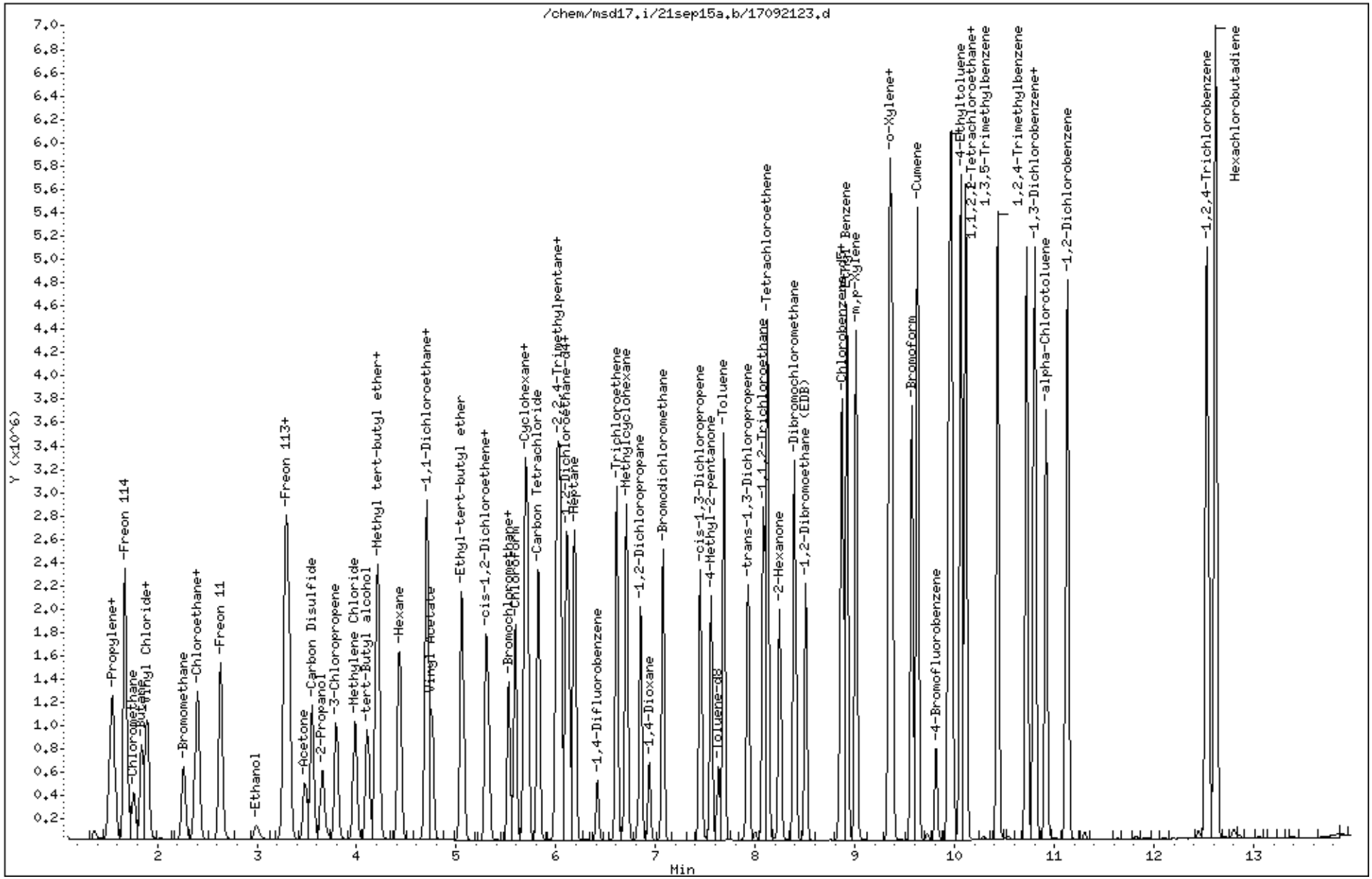
Sample Info: 100ml 2737-240

Column phase: RTX-624

Instrument: msd17.i

Operator: gh

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092418.d
Lab Smp Id: ICAL Level 8
Inj Date : 24-SEP-2015 17:21
Operator : cb Inst ID: msd17.i
Smp Info : 200ml 2736-262
Misc Info : 20ppbv(20ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921c.m
Meth Date : 25-Sep-2015 15:58 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 17:21 Cal File: 17092418.d
Als bottle: 7 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Naphcrv.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.528	5.528 (1.000)	130	100324	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	79433			46.54- 106.54	79.18
5.528	5.528 (1.000)	49	116214			83.83- 143.83	115.84
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.409	6.409 (1.000)	114	417065	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	63217			0.00- 44.86	15.16
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.866	8.866 (1.000)	117	381749	25.0000		80.00- 120.00	100.00
8.866	8.866 (1.000)	82	197856			23.93- 83.93	51.83
228 Naphthalene						CAS #: 91-20-3	
12.820	12.820 (1.446)	128	287419	20.0000	15.204	0.00- 30.00	100.00(H)
12.820	12.820 (1.446)	127	38961			0.00- 30.00	13.56

QC Flag Legend

H - Operator selected an alternate compound hit.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092418.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921c.m
Misc Info: 20ppbv(20ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 08:49
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	102227	61336	143118	100324	-1.86
123 1,4-Difluorobenze	417792	250675	584909	417065	-0.17
163 Chlorobenzene-d5	379305	227583	531027	381749	0.64

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.41	-0.11
163 Chlorobenzene-d5	8.86	8.53	9.19	8.87	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092418.d

Page 1

Date : 24-SEP-2015 17:21

Client ID:

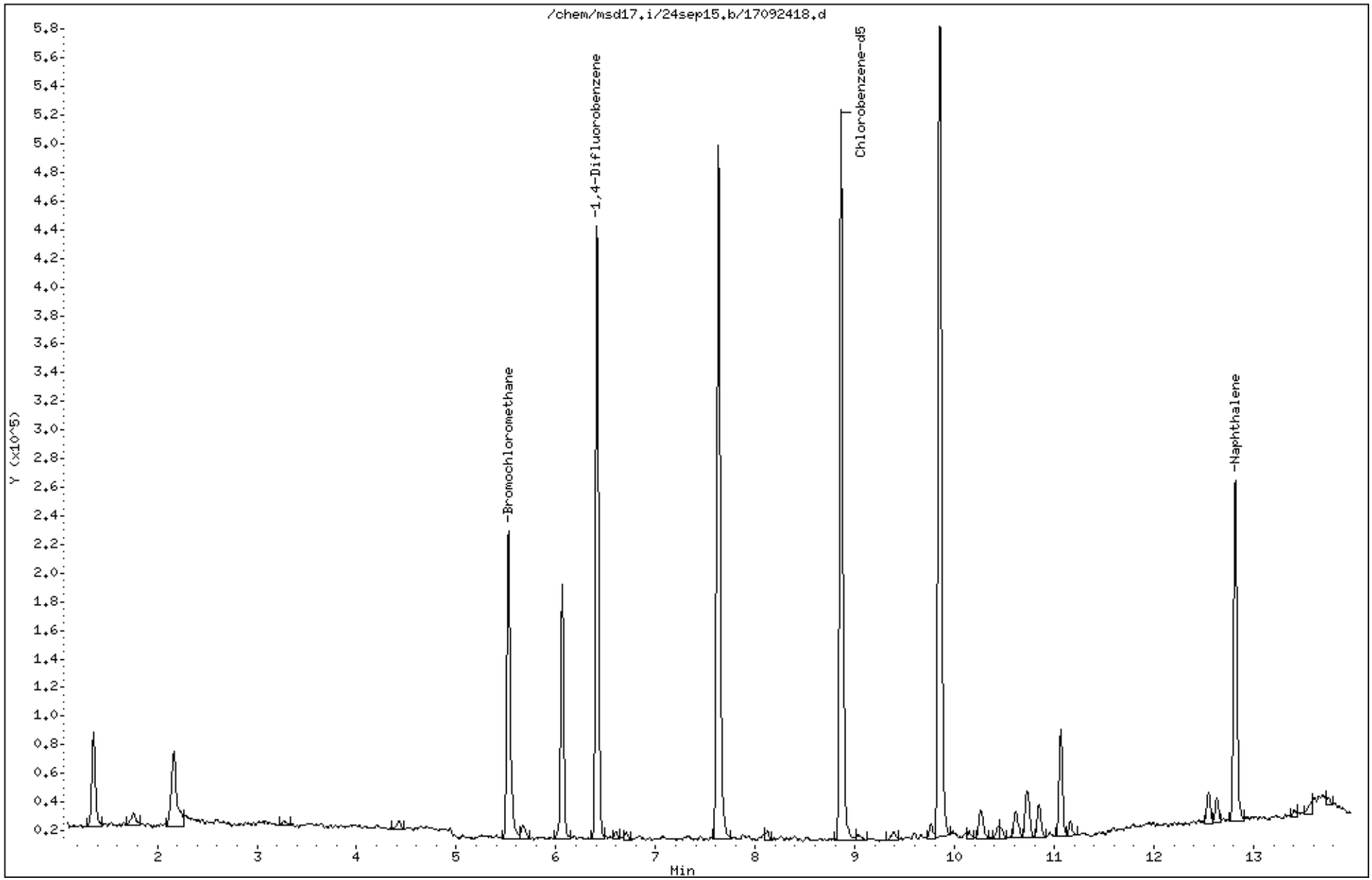
Instrument: msd17.i

Sample Info: 200ml 2736-262

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092413.d
Lab Smp Id: ICAL Level 8
Inj Date : 24-SEP-2015 14:13
Operator : cb Inst ID: msd17.i
Smp Info : 200ml 2736-197
Misc Info : 200ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921b.m
Meth Date : 25-Sep-2015 15:30 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 14:13 Cal File: 17092413.d
Als bottle: 2 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT1.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.528	5.528 (1.000)	130	107785	25.0000		80.00- 120.00	100.00
5.528	5.528 (1.000)	128	81652			46.54- 106.54	75.75
5.528	5.528 (1.000)	49	115151			83.83- 143.83	106.83
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.409	6.409 (1.000)	114	441324	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	66005			0.00- 44.86	14.96
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.866	8.866 (1.000)	117	398249	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	208986			23.93- 83.93	52.48
6 Freon 143a						CAS #: 420-46-2	
1.431	1.431 (0.259)	65	159242	200.000	99.319	0.00- 0.00	100.00
1.431	1.431 (0.259)	69	485664			0.00- 0.00	304.98
1.431	1.431 (0.259)	64	43334			0.00- 0.00	27.21

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
7 Freon 134a					CAS #: 811-97-2		
1.481	1.481 (0.268)	83	764866	200.000	146.25	0.00- 0.00	100.00
1.481	1.481 (0.268)	69	770710			0.00- 0.00	100.76
1.481	1.481 (0.268)	63	89252			0.00- 0.00	11.67
10 1,1-Difluoroethane					CAS #: 75-37-6		
1.531	1.531 (0.277)	65	376499	200.000	133.51	0.00- 0.00	100.00
1.581	1.581 (0.286)	51	1948966			0.00- 0.00	517.66
1.538	1.538 (0.278)	47	164459			0.00- 0.00	43.68
13 Chlorodifluoromethane					CAS #: 75-45-6		
1.588	1.588 (0.287)	67	210698	200.000	144.63	0.00- 0.00	100.00
1.581	1.581 (0.286)	51	1948966			0.00- 0.00	925.00
1.588	1.588 (0.287)	85	24172			0.00- 0.00	11.47
16 Freon 142b					CAS #: 75-68-3		
1.710	1.710 (0.309)	65	2577332	200.000	190.63	0.00- 0.00	100.00
1.710	1.710 (0.309)	45	588683			0.00- 0.00	22.84
37 Dichlorofluoromethane					CAS #: 75-43-4		
2.634	2.634 (0.476)	67	3004761	200.000	188.82	0.00- 0.00	100.00
2.634	2.634 (0.476)	69	971917			0.00- 0.00	32.35
2.799	2.799 (0.506)	35	326			0.00- 0.00	0.01
48 Freon 123					CAS #: 306-83-2		
3.214	3.214 (0.581)	83	3368716	200.000	193.92	0.00- 0.00	100.00
3.214	3.214 (0.581)	133	618889			0.00- 0.00	18.37
3.214	3.214 (0.581)	85	2296776			0.00- 0.00	68.18
59 Cyclopentene					CAS #: 142-29-0		
3.794	3.794 (0.686)	67	1949383	200.000	179.52	0.00- 0.00	100.00
3.794	3.794 (0.686)	68	759984			0.00- 0.00	38.99
3.787	3.787 (0.685)	53	358601			0.00- 0.00	18.40
84 1-Propanol					CAS #: 71-23-8		
4.847	4.847 (0.877)	42	199409	200.000	141.44	0.00- 0.00	100.00
4.855	4.855 (0.878)	59	283369			0.00- 0.00	142.10
4.847	4.847 (0.877)	41	137868			0.00- 0.00	69.14
90 2,2-Dichloropropane					CAS #: 594-20-7		
5.248	5.248 (0.949)	77	2084492	200.000	183.66	0.00- 0.00	100.00
5.248	5.248 (0.949)	79	664749			0.00- 0.00	31.89
5.248	5.248 (0.949)	97	438318			0.00- 0.00	21.03
107 1,1-Dichloropropene					CAS #: 563-58-6		
5.857	5.857 (0.914)	110	581514	200.000	187.77	0.00- 0.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
107 1,1-Dichloropropene (continued)							
5.850	5.850 (0.913)	75	1592077			0.00- 0.00	273.78
115 Isobutanol					CAS #: 78-83-1		
6.008	6.008 (1.087)	39	301303	200.000		0.00- 0.00	100.00(a)
6.008	6.008 (1.087)	41	781295			0.00- 0.00	259.31
6.008	6.008 (1.087)	43	1049960			0.00- 0.00	348.47
124 n-Butanol					CAS #: 71-36-3		
6.581	6.581 (1.027)	56	1747567	200.000	189.91	0.00- 0.00	100.00
6.581	6.581 (1.027)	41	1115339			0.00- 0.00	63.82
6.581	6.581 (1.027)	43	885988			0.00- 0.00	50.70
157 1,3-Dichloropropane					CAS #: 142-28-9		
8.228	8.228 (1.284)	76	2416816	200.000	189.20	0.00- 0.00	100.00
8.228	8.228 (1.284)	41	1246030			0.00- 0.00	51.56
8.228	8.228 (1.284)	78	777774			0.00- 0.00	32.18
159 Butyl Acetate					CAS #: 123-86-4		
8.307	8.307 (1.296)	56	544773	200.000	177.38	0.00- 0.00	100.00
8.307	8.307 (1.296)	73	259011			0.00- 0.00	47.54
8.300	8.300 (1.295)	43	1224585			0.00- 0.00	224.79
168 1,1,1,2-Tetrachloroethane					CAS #: 630-20-6		
8.952	8.952 (1.010)	131	2272944	200.000	193.84	0.00- 0.00	100.00
8.952	8.952 (1.010)	117	1606061			0.00- 0.00	70.66
8.952	8.952 (1.010)	95	844759			0.00- 0.00	37.17
176 Cyclohexanone					CAS #: 108-94-1		
9.833	9.833 (1.109)	55	1792105	200.000	185.36	0.00- 0.00	100.00
9.833	9.833 (1.109)	98	905814			0.00- 0.00	50.54
9.833	9.833 (1.109)	42	1162387			0.00- 0.00	64.86
180 Bromobenzene					CAS #: 108-86-1		
9.983	9.983 (1.126)	156	2711297	200.000	193.91	0.00- 0.00	100.00
9.983	9.983 (1.126)	158	2662996			0.00- 0.00	98.22
9.983	9.983 (1.126)	77	4058136			0.00- 0.00	149.68
185 1,2,3-Trichloropropane					CAS #: 96-18-4		
10.033	10.033 (1.132)	110	1275540	200.000	196.38	0.00- 0.00	100.00
10.033	10.033 (1.132)	75	3348239			0.00- 0.00	262.50
10.033	10.033 (1.132)	61	822759			0.00- 0.00	64.50
189 2-Chlorotoluene					CAS #: 95-49-8		
10.127	10.127 (1.142)	126	2078348	200.000	198.80	0.00- 0.00	100.00
10.127	10.127 (1.142)	91	5786339			0.00- 0.00	278.41

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
189 2-Chlorotoluene (continued)							
10.127	10.127 (1.142)	65	498800			0.00- 0.00	24.00
191 4-Chlorotoluene					CAS #: 106-43-4		
10.220	10.220 (1.153)	126	2201445	200.000	203.81	0.00- 0.00	100.00(A)
10.220	10.220 (1.153)	91	6152731			0.00- 0.00	279.49
10.220	10.220 (1.153)	63	750203			0.00- 0.00	34.08
195 tert-Butylbenzene					CAS #: 98-06-6		
10.427	10.427 (1.176)	119	6482264	200.000	203.21	0.00- 0.00	100.00(A)
10.427	10.427 (1.176)	134	1607850			0.00- 0.00	24.80
10.427	10.427 (1.176)	91	4221534			0.00- 0.00	65.12
197 Pentachloroethane					CAS #: 76-01-7		
10.499	10.499 (1.184)	167	2362753	200.000	239.29	0.00- 0.00	100.00(A)
10.499	10.499 (1.184)	117	2305960			0.00- 0.00	97.60
10.499	10.499 (1.184)	169	1123963			0.00- 0.00	47.57
203 sec-Butylbenzene					CAS #: 135-98-8		
10.614	10.614 (1.197)	134	1981269	200.000	200.16	0.00- 0.00	100.00(A)
10.614	10.614 (1.197)	105	9822352			0.00- 0.00	495.76
10.614	10.614 (1.197)	91	1479616			0.00- 0.00	74.68
207 p-Cymene					CAS #: 99-87-6		
10.721	10.721 (1.209)	119	8402740	200.000	201.26	0.00- 0.00	100.00(A)
10.728	10.728 (1.210)	134	2217864			0.00- 0.00	26.39
10.721	10.721 (1.209)	91	1850159			0.00- 0.00	22.02
210 1,2,3-Trimethylbenzene					CAS #: 526-73-8		
10.850	10.850 (1.224)	120	3334487	200.000	204.53	0.00- 0.00	100.00(A)
10.850	10.850 (1.224)	105	7758143			0.00- 0.00	232.66
10.850	10.850 (1.224)	77	913044			0.00- 0.00	27.38
213 Butylbenzene					CAS #: 104-51-8		
11.079	11.079 (1.250)	134	1994850	200.000	187.29	0.00- 0.00	100.00(H)
11.079	11.079 (1.250)	91	7485442			0.00- 0.00	375.24
11.079	11.079 (1.250)	92	3913082			0.00- 0.00	196.16
221 1,2-Dibromo-3-chloropropane					CAS #: 96-12-8		
11.867	11.867 (1.339)	157	3206165	200.000	199.55	0.00- 0.00	100.00
11.867	11.867 (1.339)	75	2554979			0.00- 0.00	79.69
11.867	11.867 (1.339)	155	2479666			0.00- 0.00	77.34

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
    exceeded maximum amount.
H - Operator selected an alternate compound hit.

Report Date: 25-Sep-2015 15:30

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092413.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921b.m
Misc Info: 200ppbv(200ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 08:49
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	102227	61336	143118	107785	5.44
123 1,4-Difluorobenze	417792	250675	584909	441324	5.63
163 Chlorobenzene-d5	379305	227583	531027	398249	4.99

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.00
123 1,4-Difluorobenze	6.42	6.09	6.75	6.41	-0.11
163 Chlorobenzene-d5	8.86	8.53	9.19	8.87	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092413.d

Date : 24-SEP-2015 14:13

Client ID:

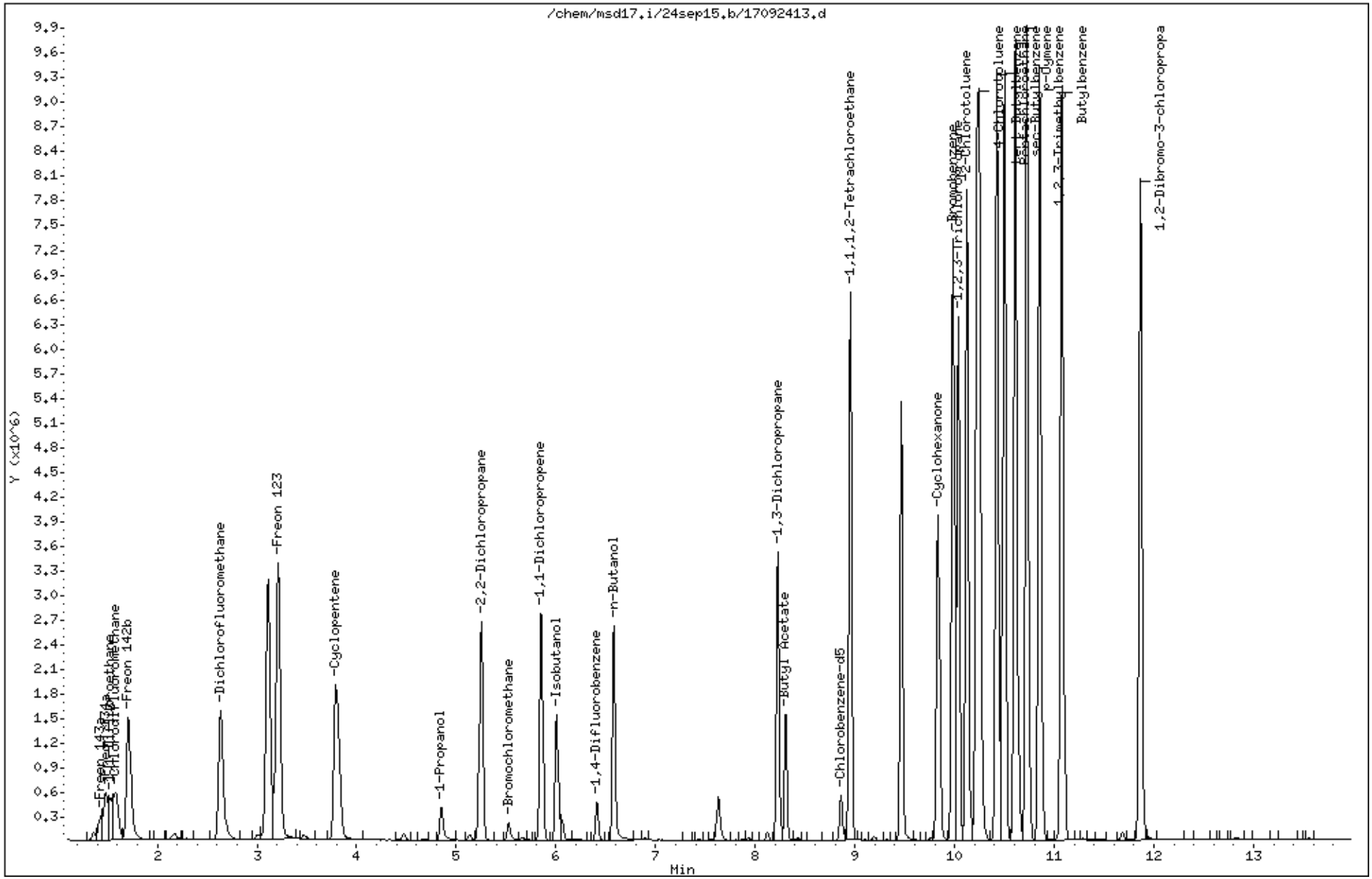
Sample Info: 200ml 2736-197

Column phase: RTX-624

Instrument: msd17.i

Operator: cb

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092410.d
Lab Smp Id: ICAL Level 8
Inj Date : 24-SEP-2015 12:46
Operator : cb Inst ID: msd17.i
Smp Info : 200ml 2736-222
Misc Info : 200ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921b.m
Meth Date : 25-Sep-2015 15:50 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 14:13 Cal File: 17092413.d
Als bottle: 2 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: Combo.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.535	5.535 (1.000)	130	107867	25.0000		80.00- 120.00	100.00
5.535	5.535 (1.000)	128	82587			46.54- 106.54	76.56
5.528	5.528 (1.000)	49	119271			83.83- 143.83	110.57
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.416	6.416 (1.000)	114	435671	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	69127			0.00- 44.86	15.87
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.859	8.859 (1.000)	117	372569	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	196327			23.93- 83.93	52.70
32 Vinyl Bromide						CAS #: 593-60-2	
2.591	2.591 (0.468)	106	1387426	200.000	202.86	0.00- 0.00	100.00(A)
2.591	2.591 (0.468)	108	1316254			0.00- 0.00	94.87

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
94 Ethyl Acetate					CAS #: 141-78-6		
5.342	5.342 (0.965)	70	193486	200.000	199.80	0.00- 0.00	100.00
5.342	5.342 (0.965)	61	258987			0.00- 0.00	133.85
5.342	5.342 (0.965)	45	236278			0.00- 0.00	122.12
63 Acetonitrile					CAS #: 75-05-8		
3.902	3.902 (0.705)	40	745828	200.000	206.30	0.00- 0.00	100.00(A)
3.909	3.909 (0.706)	41	1873068			0.00- 0.00	251.14
3.909	3.909 (0.706)	38	218874			0.00- 0.00	29.35
64 Cyclopentane					CAS #: 287-92-3		
3.916	3.916 (0.708)	70	875512	200.000	214.20	0.00- 0.00	100.00(A)
3.916	3.916 (0.708)	55	1041504			0.00- 0.00	118.96
74 Acrylonitrile					CAS #: 107-13-1		
4.332	4.332 (0.783)	52	929032	200.000	195.66	0.00- 0.00	100.00
4.339	4.339 (0.784)	53	1220691			0.00- 0.00	131.39
134 Methyl Methacrylate					CAS #: 80-62-6		
6.903	6.903 (0.779)	41	1796671	200.000	209.12	0.00- 0.00	100.00(A)
6.903	6.903 (0.779)	69	1675169			0.00- 0.00	93.24
6.903	6.903 (0.779)	100	616131			0.00- 0.00	34.29
137 Dibromomethane					CAS #: 74-95-3		
6.960	6.960 (0.786)	174	2086535	200.000	223.36	0.00- 0.00	100.00(A)
6.960	6.960 (0.786)	93	1953155			0.00- 0.00	93.61
6.960	6.960 (0.786)	95	1632265			0.00- 0.00	78.23
173 2-Heptanone					CAS #: 110-43-0		
6.187	6.187 (1.118)	58	52769	200.000	175.86	0.00- 0.00	100.00
6.187	6.187 (1.118)	43	2038582			0.00- 0.00	3863.22
34 Pentane					CAS #: 109-66-0		
2.706	2.706 (0.489)	43	2323300	200.000	216.50	0.00- 0.00	100.00(A)
2.706	2.706 (0.489)	57	391198			0.00- 0.00	16.84
2.706	2.706 (0.489)	72	289864			0.00- 0.00	12.48
148 Octane					CAS #: 111-65-9		
7.677	7.677 (1.196)	57	1250300	200.000	205.34	0.00- 0.00	100.00(A)
7.677	7.677 (1.196)	85	1589789			0.00- 0.00	127.15
7.677	7.677 (1.196)	43	2754740			0.00- 0.00	220.33
170 Nonane					CAS #: 111-84-2		
8.945	8.945 (1.010)	43	2810735	200.000	212.79	0.00- 0.00	100.00(A)
8.945	8.945 (1.010)	57	2735030			0.00- 0.00	97.31
8.945	8.945 (1.010)	85	1243878			0.00- 0.00	44.25

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
187 Decane					CAS #: 124-18-5		
10.055	10.055 (1.135)	57	3775202	200.000	222.70	0.00- 0.00	100.00(A)
10.055	10.055 (1.135)	71	1686790			0.00- 0.00	44.68
10.055	10.055 (1.135)	142	222921			0.00- 0.00	5.90
215 Undecane					CAS #: 1120-21-4		
11.051	11.051 (1.247)	57	4481289	200.000	236.73	0.00- 0.00	100.00(A)
11.051	11.051 (1.247)	43	3557503			0.00- 0.00	79.39
225 Dodecane					CAS #: 112-40-3		
11.975	11.975 (1.352)	57	4442895	200.000	265.31	0.00- 0.00	100.00(AH)
11.975	11.975 (1.352)	43	3341933			0.00- 0.00	75.22

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
H - Operator selected an alternate compound hit.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092410.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921b.m
Misc Info: 200ppbv(200ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 08:49
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	102227	61336	143118	107867	5.52
123 1,4-Difluorobenze	417792	250675	584909	435671	4.28
163 Chlorobenzene-d5	379305	227583	531027	372569	-1.78

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.54	0.13
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092410.d

Page 1

Date : 24-SEP-2015 12:46

Client ID:

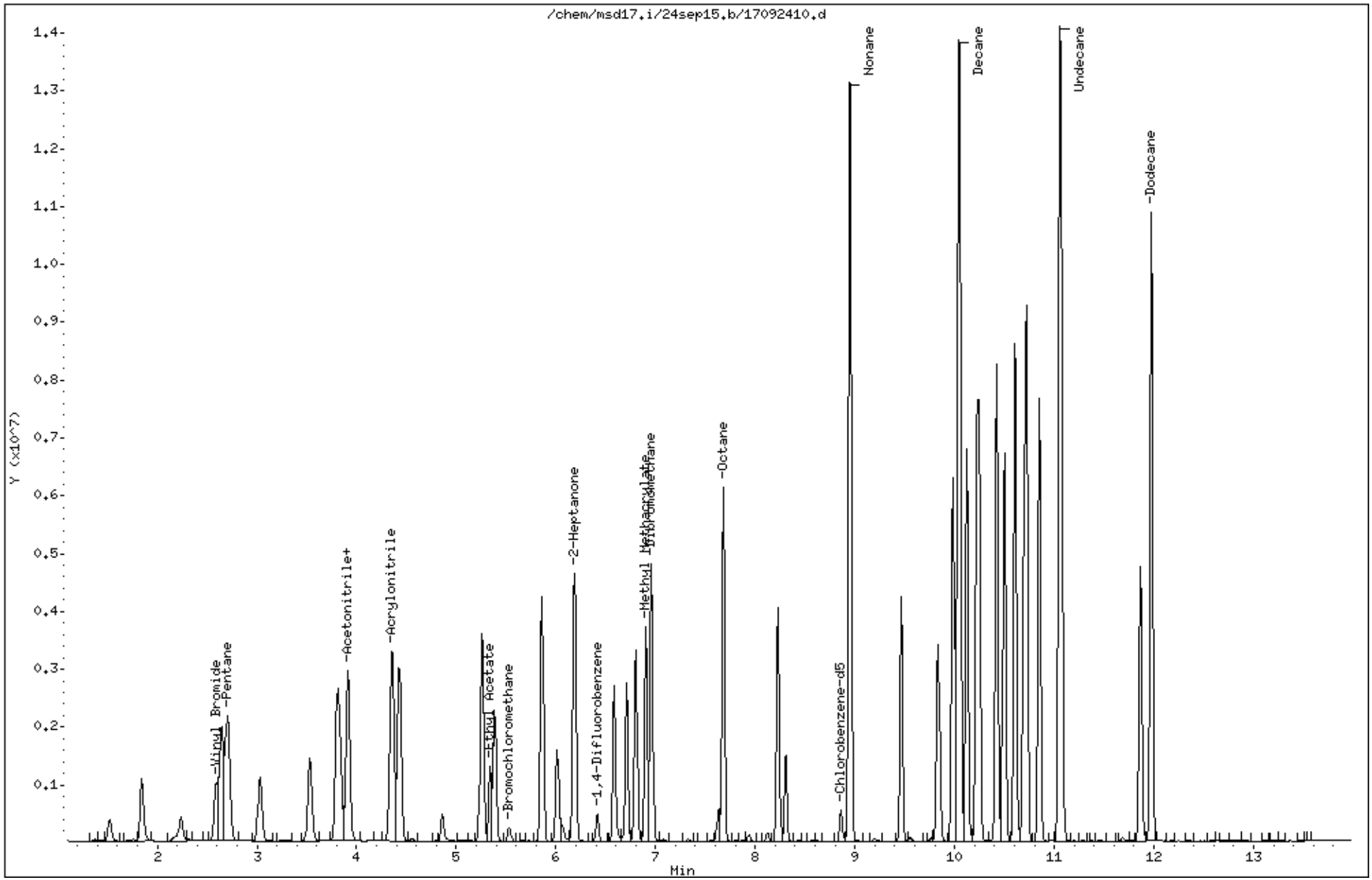
Instrument: msd17.i

Sample Info: 200ml 2736-222

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/24sep15.b/17092407.d
Lab Smp Id: ICAL Level 8
Inj Date : 24-SEP-2015 11:27
Operator : cb Inst ID: msd17.i
Smp Info : 200ml 2736-107
Misc Info : 200ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/24sep15.b/175q0921b.m
Meth Date : 25-Sep-2015 15:28 cbond Quant Type: ISTD
Cal Date : 24-SEP-2015 11:27 Cal File: 17092407.d
Als bottle: 2 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 123TCB.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.535	5.535 (1.000)	130	100902	25.0000		80.00- 120.00	100.00
5.535	5.535 (1.000)	128	76523			46.54- 106.54	75.84
5.528	5.528 (1.000)	49	115100			83.83- 143.83	114.07
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.416	6.416 (1.000)	114	413016	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	63081			0.00- 44.86	15.27
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.866	8.866 (1.000)	117	361587	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	193689			23.93- 83.93	53.57
229 1,2,3-Trichlorobenzene					CAS #: 87-61-6		
13.135	13.135 (1.482)	180	2455297	200.000	204.76	0.00- 0.00	100.00(A)
13.135	13.135 (1.482)	182	2334519			0.00- 0.00	95.08
13.135	13.135 (1.482)	145	743207			0.00- 0.00	30.27

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092407.d
Lab Smp Id: ICAL Level 8
Analysis Type: VOA
Quant Type: ISTD
Operator: cb
Method File: /chem/msd17.i/24sep15.b/175q0921b.m
Misc Info: 200ppbv(200ppbv)

Calibration Date: 24-SEP-2015
Calibration Time: 08:49
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	102227	61336	143118	100902	-1.30
123 1,4-Difluorobenze	417792	250675	584909	413016	-1.14
163 Chlorobenzene-d5	379305	227583	531027	361587	-4.67

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.53	0.13
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.87	0.08

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/24sep15.b/17092407.d

Date : 24-SEP-2015 11:27

Client ID:

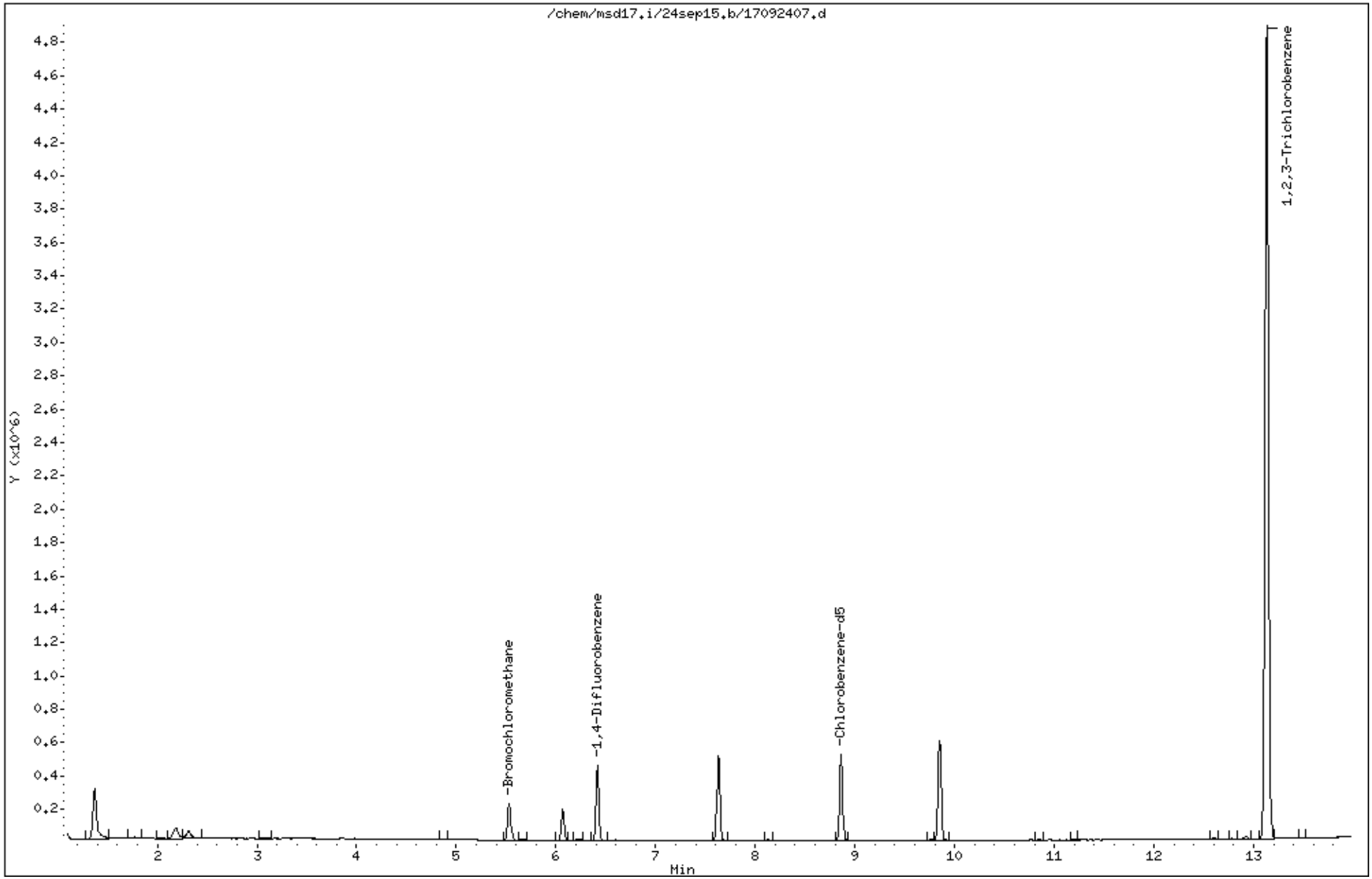
Instrument: msd17.i

Sample Info: 200ml 2736-107

Operator: cb

Column phase: RTX-624

Column diameter: 0.25



Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /chem/msd17.i/21sep15a.b/17092124.d
Lab Smp Id: ICAL Level #8
Inj Date : 21-SEP-2015 23:54
Operator : gh Inst ID: msd17.i
Smp Info : 200ml 2737-240
Misc Info : 200ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/21sep15a.b/175q0921a.m
Meth Date : 25-Sep-2015 15:15 cbond Quant Type: ISTD
Cal Date : 21-SEP-2015 23:54 Cal File: 17092124.d
Als bottle: 2 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12noNaph.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane						CAS #: 74-97-5	
5.535	5.535 (1.000)	130	121699	25.0000		80.00- 120.00	100.00
5.535	5.535 (1.000)	128	93172			46.54- 106.54	76.56
5.535	5.535 (1.000)	49	133941			83.83- 143.83	110.06
* 123 1,4-Difluorobenzene						CAS #: 540-36-3	
6.416	6.416 (1.000)	114	487106	25.0000		80.00- 120.00	100.00
6.416	6.416 (1.000)	88	75921			0.00- 44.86	15.59
* 163 Chlorobenzene-d5						CAS #: 3114-55-4	
8.866	8.866 (1.000)	117	444142	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	235752			23.93- 83.93	53.08
$ 117 1,2-Dichloroethane-d4						CAS #: 17060-07-0	
6.065	6.065 (1.096)	65	166634	25.0000	25.410	80.00- 120.00	100.00
6.065	6.065 (1.096)	67	104768			25.51- 85.51	62.87

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.189)	98	513120	25.0000	25.549	80.00- 120.00	100.00
7.627	7.627 (1.189)	70	52981			0.00- 40.39	10.33
7.627	7.627 (1.189)	100	328525			33.97- 93.97	64.02
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.854	9.854 (1.111)	174	298289	25.0000	26.304	80.00- 120.00	100.00
9.847	9.847 (1.111)	95	327997			79.64- 139.64	109.96
9.854	9.854 (1.111)	176	285051			65.80- 125.80	95.56
9 Propylene					CAS #: 115-07-1		
1.524	1.524 (0.275)	41	919247	200.000	190.38	80.00- 120.00	100.00
1.524	1.524 (0.275)	42	600903			37.10- 97.10	65.37
1.524	1.524 (0.275)	39	679121			44.98- 104.98	73.88
11 Freon 12					CAS #: 75-71-8		
1.560	1.560 (0.282)	85	3801856	200.000	194.10	80.00- 120.00	100.00
1.560	1.560 (0.282)	87	1225063			2.33- 62.33	32.22
15 Freon 114					CAS #: 76-14-2		
1.689	1.689 (0.305)	135	2796542	200.000	196.69	80.00- 120.00	100.00
1.689	1.689 (0.305)	137	888072			2.02- 62.02	31.76
17 Chloromethane					CAS #: 74-87-3		
1.775	1.775 (0.321)	50	1193466	200.000	174.13	80.00- 120.00	100.00
1.775	1.775 (0.321)	52	378165			2.35- 62.35	31.69
23 Butane					CAS #: 106-97-8		
1.853	1.853 (0.335)	58	276345	200.000	183.84	80.00- 120.00	100.00
1.853	1.853 (0.335)	43	1846421			657.81- 717.81	668.16
25 Vinyl Chloride					CAS #: 75-01-4		
1.882	1.882 (0.340)	62	1436206	200.000	185.40	80.00- 120.00	100.00
1.882	1.882 (0.340)	64	465429			2.69- 62.69	32.41
26 1,3-Butadiene					CAS #: 106-99-0		
1.911	1.911 (0.345)	54	1017321	200.000	189.28	80.00- 120.00	100.00
1.911	1.911 (0.345)	39	1042975			63.95- 123.95	102.52
29 Bromomethane					CAS #: 74-83-9		
2.269	2.269 (0.410)	94	1357382	200.000	197.83	80.00- 120.00	100.00
2.269	2.269 (0.410)	96	1276332			63.69- 123.69	94.03
30 Chloroethane					CAS #: 75-00-3		
2.383	2.383 (0.431)	64	747974	200.000	190.47	80.00- 120.00	100.00
2.383	2.383 (0.431)	66	240753			1.86- 61.86	32.19

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.383	2.383 (0.431)	49	186549			0.00- 55.51	24.94
31 Isopentane					CAS #: 78-78-4		
2.405	2.405 (0.434)	43	1469976	200.000	192.98	80.00- 120.00	100.00
2.405	2.405 (0.434)	57	1102324			44.35- 104.35	74.99
35 Freon 11					CAS #: 75-69-4		
2.641	2.641 (0.477)	101	3900789	200.000	193.40	80.00- 120.00	100.00
2.641	2.641 (0.477)	103	2521698			35.20- 95.20	64.65
42 Ethanol					CAS #: 64-17-5		
2.992	2.992 (0.541)	45	499571	200.000	184.99	80.00- 120.00	100.00
2.992	2.992 (0.541)	43	104753			0.00- 50.36	20.97
2.992	2.992 (0.541)	46	194077			10.31- 70.31	38.85
49 Freon 113					CAS #: 76-13-1		
3.293	3.293 (0.595)	151	2789089	200.000	194.08	80.00- 120.00	100.00
3.293	3.293 (0.595)	153	1781608			33.72- 93.72	63.88
3.286	3.286 (0.594)	101	3491488			95.23- 155.23	125.18
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.322	3.322 (0.600)	98	1015918	200.000	191.76	80.00- 120.00	100.00
3.322	3.322 (0.600)	96	1602566			130.14- 190.14	157.75
3.322	3.322 (0.600)	61	2514045			218.16- 278.16	247.47
52 Acetone					CAS #: 67-64-1		
3.494	3.494 (0.631)	58	661622	200.000	180.76	80.00- 120.00	100.00
3.494	3.494 (0.631)	43	1995677			266.49- 326.49	301.63
56 Carbon Disulfide					CAS #: 75-15-0		
3.558	3.558 (0.643)	76	4636560	200.000	189.52	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.666	3.666 (0.662)	45	2256892	200.000	198.77	80.00- 120.00	100.00
3.666	3.666 (0.662)	43	446451			0.00- 50.02	19.78
3.666	3.666 (0.662)	59	97659			0.00- 34.32	4.33
58 3-Chloropropene					CAS #: 107-05-1		
3.802	3.802 (0.687)	76	744123	200.000	188.66	80.00- 120.00	100.00
3.802	3.802 (0.687)	41	1649150			185.01- 245.01	221.62
66 Methylene Chloride					CAS #: 75-09-2		
3.988	3.988 (0.720)	49	1617941	200.000	188.58	80.00- 120.00	100.00
3.988	3.988 (0.720)	84	1421255			59.02- 119.02	87.84
3.988	3.988 (0.720)	51	506097			1.78- 61.78	31.28

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.110	4.110 (0.742)	59	3018938	200.000	211.74	80.00- 120.00	100.00(A)
4.110	4.110 (0.742)	41	584898			0.00- 50.26	19.37
4.110	4.110 (0.742)	57	309369			0.00- 40.80	10.25
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.196	4.196 (0.758)	73	4418871	200.000	198.84	80.00- 120.00	100.00
4.196	4.196 (0.758)	57	945450			0.00- 51.46	21.40
4.196	4.196 (0.758)	41	837701			0.00- 49.34	18.96
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.224	4.224 (0.763)	98	1058660	200.000	200.56	80.00- 120.00	100.00(A)
4.224	4.224 (0.763)	61	2276670			184.16- 244.16	215.05
4.224	4.224 (0.763)	96	1658932			127.84- 187.84	156.70
78 Hexane					CAS #: 110-54-3		
4.432	4.432 (0.801)	57	2268518	200.000	188.96	80.00- 120.00	100.00
4.432	4.432 (0.801)	43	1316623			27.64- 87.64	58.04
4.432	4.432 (0.801)	86	393553			0.00- 46.92	17.35
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.719	4.719 (0.852)	63	2838939	200.000	198.80	80.00- 120.00	100.00
4.719	4.719 (0.852)	65	901304			2.04- 62.04	31.75
83 Isopropyl ether					CAS #: 108-20-3		
4.704	4.704 (0.850)	45	4524658	200.000	194.84	80.00- 120.00	100.00
4.704	4.704 (0.850)	87	1398336			1.31- 61.31	30.90
4.704	4.704 (0.850)	59	562487			0.00- 42.69	12.43
86 Vinyl Acetate					CAS #: 108-05-4		
4.754	4.754 (0.859)	86	445907	200.000	204.64	80.00- 120.00	100.00(A)
4.754	4.754 (0.859)	43	4045286			891.41- 951.41	907.20
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.055	5.055 (0.913)	59	4793032	200.000	197.76	80.00- 120.00	100.00
5.055	5.055 (0.913)	87	2062824			13.52- 73.52	43.04
5.055	5.055 (0.913)	41	798988			0.00- 47.26	16.67
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.299	5.299 (0.957)	98	1121948	200.000	197.10	80.00- 120.00	100.00
5.299	5.299 (0.957)	96	1742141			124.38- 184.38	155.28
5.299	5.299 (0.957)	61	2120567			162.07- 222.07	189.01
92 2-Butanone					CAS #: 78-93-3		
5.327	5.327 (0.962)	72	799882	200.000	198.75	80.00- 120.00	100.00
5.327	5.327 (0.962)	43	2687475			306.33- 366.33	335.98

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.327	5.327 (0.962)	57	234709			0.00- 59.26	29.34
99 Tetrahydrofuran					CAS #: 109-99-9		
5.528	5.528 (0.999)	42	1473255	200.000	187.92	80.00- 120.00	100.00
5.528	5.528 (0.999)	71	698851			17.72- 77.72	47.44
5.528	5.528 (0.999)	72	745780			20.99- 80.99	50.62
100 Chloroform					CAS #: 67-66-3		
5.592	5.592 (1.010)	83	3372353	200.000	192.68	80.00- 120.00	100.00
5.592	5.592 (1.010)	85	2179816			34.67- 94.67	64.64
102 Cyclohexane					CAS #: 110-82-7		
5.693	5.693 (1.028)	84	2160628	200.000	198.80	80.00- 120.00	100.00
5.693	5.693 (1.028)	56	2293456			77.09- 137.09	106.15
5.693	5.693 (1.028)	41	1168089			25.87- 85.87	54.06
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.714	5.714 (1.032)	97	3376305	200.000	194.59	80.00- 120.00	100.00
5.714	5.714 (1.032)	99	2156443			34.33- 94.33	63.87
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.829	5.829 (1.053)	119	3438653	200.000	198.35	80.00- 120.00	100.00
5.829	5.829 (1.053)	117	3564489			74.90- 134.90	103.66
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.015	6.015 (1.087)	57	7241328	200.000	197.28	80.00- 120.00	100.00
6.015	6.015 (1.087)	56	2259908			1.80- 61.80	31.21
6.015	6.015 (1.087)	41	1810558			0.00- 55.83	25.00
116 Benzene					CAS #: 71-43-2		
6.044	6.044 (0.942)	78	4871098	200.000	197.40	80.00- 120.00	100.00
6.044	6.044 (0.942)	77	1166986			0.00- 54.08	23.96
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.108	6.108 (1.104)	87	1143040	200.000	196.52	80.00- 120.00	100.00
6.108	6.108 (1.104)	73	4820495			376.57- 436.57	421.73
6.108	6.108 (1.104)	55	1080606			64.52- 124.52	94.54
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.137	6.137 (0.956)	62	2134366	200.000	198.01	80.00- 120.00	100.00
6.137	6.137 (0.956)	64	688293			2.16- 62.16	32.25
121 Heptane					CAS #: 142-82-5		
6.187	6.187 (0.964)	71	1719167	200.000	201.29	80.00- 120.00	100.00(A)
6.187	6.187 (0.964)	43	2382778			110.94- 170.94	138.60

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.187	6.187 (0.964)	57	1428309			53.72- 113.72	83.08
125 Trichloroethene					CAS #: 79-01-6		
6.610	6.610 (1.030)	95	2294567	200.000	197.08	80.00- 120.00	100.00
6.610	6.610 (1.030)	130	2388980			74.97- 134.97	104.11
6.610	6.610 (1.030)	97	1477318			35.33- 95.33	64.38
127 Methylcyclohexane					CAS #: 108-87-2		
6.710	6.710 (1.212)	83	2992232	200.000	199.50	80.00- 120.00	100.00
6.710	6.710 (1.212)	98	1393566			16.41- 76.41	46.57
6.703	6.703 (1.211)	55	2102488			40.41- 100.41	70.26
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.846	6.846 (1.067)	63	1749546	200.000	198.06	80.00- 120.00	100.00
6.846	6.846 (1.067)	62	1200531			38.78- 98.78	68.62
6.846	6.846 (1.067)	41	876135			20.16- 80.16	50.08
136 1,4-Dioxane					CAS #: 123-91-1		
6.939	6.939 (1.081)	88	1144157	200.000	214.06	80.00- 120.00	100.00(A)
6.939	6.939 (1.081)	58	691171			31.02- 91.02	60.41
6.939	6.939 (1.081)	57	234103			0.00- 51.33	20.46
138 Bromodichloromethane					CAS #: 75-27-4		
7.075	7.075 (1.103)	83	3659892	200.000	200.26	80.00- 120.00	100.00(A)
7.075	7.075 (1.103)	85	2336634			34.16- 94.16	63.84
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.448	7.448 (1.161)	75	3104064	200.000	202.20	80.00- 120.00	100.00(A)
7.448	7.448 (1.161)	77	990130			1.57- 61.57	31.90
7.448	7.448 (1.161)	39	1379421			13.98- 73.98	44.44
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.555	7.555 (1.178)	58	1307043	200.000	219.94	80.00- 120.00	100.00(A)
7.555	7.555 (1.178)	43	3096880			205.93- 265.93	236.94
7.555	7.555 (1.178)	85	635240			18.04- 78.04	48.60
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.198)	91	6246781	200.000	201.88	80.00- 120.00	100.00(A)
7.684	7.684 (1.198)	92	3495854			27.24- 87.24	55.96
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.928	7.928 (0.894)	75	2774669	200.000	201.13	80.00- 120.00	100.00(A)
7.928	7.928 (0.894)	77	878648			1.57- 61.57	31.67
7.928	7.928 (0.894)	39	1183190			13.98- 73.98	42.64

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.085	8.085 (0.912)	97	2135621	200.000	196.22	80.00- 120.00	100.00
8.085	8.085 (0.912)	99	1327583			31.05- 91.05	62.16
8.085	8.085 (0.912)	83	1853629			58.29- 118.29	86.80
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.916)	166	3096940	200.000	193.88	80.00- 120.00	100.00
8.121	8.121 (0.916)	129	2244785			42.46- 102.46	72.48
8.121	8.121 (0.916)	131	2163160			40.24- 100.24	69.85
158 2-Hexanone					CAS #: 591-78-6		
8.243	8.243 (0.930)	58	1732046	200.000	225.52	80.00- 120.00	100.00(A)
8.243	8.243 (0.930)	43	2939319			205.93- 265.93	169.70
8.250	8.250 (0.931)	100	398342			11.40- 71.40	23.00
160 Dibromochloromethane					CAS #: 124-48-1		
8.400	8.400 (0.947)	129	4081064	200.000	200.86	80.00- 120.00	100.00(A)
8.400	8.400 (0.947)	127	3148151			47.28- 107.28	77.14
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.515	8.515 (0.960)	107	3445850	200.000	200.26	80.00- 120.00	100.00(A)
8.515	8.515 (0.960)	109	3261024			66.45- 126.45	94.64
165 Chlorobenzene					CAS #: 108-90-7		
8.887	8.887 (1.002)	112	5020685	200.000	201.54	80.00- 120.00	100.00(A)
8.887	8.887 (1.002)	114	1570152			2.06- 62.06	31.27
8.887	8.887 (1.002)	77	2799430			26.47- 86.47	55.76
167 Ethyl Benzene					CAS #: 100-41-4		
8.930	8.930 (1.007)	106	2565661	200.000	211.46	80.00- 120.00	100.00(A)
8.930	8.930 (1.007)	91	8194277			289.94- 349.94	319.38
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	3188268	200.000	211.65	80.00- 120.00	100.00(A)
9.031	9.031 (1.019)	91	6399188			167.83- 227.83	200.71
171 o-Xylene					CAS #: 95-47-6		
9.375	9.375 (1.057)	106	2996604	200.000	214.40	80.00- 120.00	100.00(A)
9.375	9.375 (1.057)	91	6395218			181.11- 241.11	213.42
172 Styrene					CAS #: 100-42-5		
9.396	9.396 (1.060)	104	5292094	200.000	221.98	80.00- 120.00	100.00(A)
9.389	9.389 (1.059)	78	2495349			17.79- 77.79	47.15
174 Bromoform					CAS #: 75-25-2		
9.597	9.597 (1.082)	173	4381082	200.000	213.55	80.00- 120.00	100.00(A)

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.597	9.597 (1.082)	171	2247891			21.45- 81.45	51.31
175 Cumene					CAS #: 98-82-8		
9.661	9.661 (1.090)	105	9602335	200.000	215.07	80.00- 120.00	100.00(A)
9.661	9.661 (1.090)	120	2576450			0.00- 57.47	26.83
9.661	9.661 (1.090)	51	802677			0.00- 38.62	8.36
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.976	9.976 (1.125)	83	4717714	200.000	200.79	80.00- 120.00	100.00(A)
9.976	9.976 (1.125)	85	3053342			34.77- 94.77	64.72
182 Propylbenzene					CAS #: 103-65-1		
10.005	10.005 (1.128)	91	11543105	200.000	215.35	80.00- 120.00	100.00(A)
10.005	10.005 (1.128)	120	2701293			0.00- 53.65	23.40
10.005	10.005 (1.128)	105	407575			0.00- 33.57	3.53
188 4-Ethyltoluene					CAS #: 622-96-8		
10.098	10.098 (1.139)	120	3058850	200.000	215.48	80.00- 120.00	100.00(A)
10.098	10.098 (1.139)	105	10072533			292.89- 352.89	329.29
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.148	10.148 (1.145)	120	4087074	200.000	219.14	80.00- 120.00	100.00(A)
10.148	10.148 (1.145)	105	8385865			175.25- 235.25	205.18
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.478	10.478 (1.182)	120	3716082	200.000	221.95	80.00- 120.00	100.00(A)
10.478	10.478 (1.182)	105	8052152			183.76- 243.76	216.68
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.771	10.771 (1.215)	146	5722594	200.000	212.48	80.00- 120.00	100.00(A)
10.771	10.771 (1.215)	148	3648557			33.69- 93.69	63.76
10.771	10.771 (1.215)	111	2156016			8.12- 68.12	37.68
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.850	10.850 (1.224)	146	5791312	200.000	217.34	80.00- 120.00	100.00(A)
10.850	10.850 (1.224)	148	3698268			33.86- 93.86	63.86
10.850	10.850 (1.224)	111	2091460			6.71- 66.71	36.11
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.965	10.965 (1.237)	91	7519155	200.000	237.32	80.00- 120.00	100.00(A)
10.972	10.972 (1.238)	126	1643895			0.00- 51.95	21.86
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.180	11.180 (1.261)	146	5530413	200.000	216.79	80.00- 120.00	100.00(A)
11.180	11.180 (1.261)	148	3510806			33.90- 93.90	63.48

				AMOUNTS			
				CAL-AMT	ON-COL		
RT	EXP RT (REL RT)	MASS	RESPONSE	(PPBV)	(PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.180	11.180 (1.261)	111	2145563			8.86- 68.86	38.80
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.605	12.605 (1.422)	180	5083373	200.000	229.42	80.00- 120.00	100.00(A)
12.605	12.605 (1.422)	182	4862927			65.21- 125.21	95.66
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.691	12.691 (1.431)	225	4274617	200.000	224.67	80.00- 120.00	100.00(A)
12.691	12.691 (1.431)	223	2665072			33.22- 93.22	62.35

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17092124.d
Lab Smp Id: ICAL Level #8
Analysis Type: VOA
Quant Type: ISTD
Operator: gh
Method File: /chem/msd17.i/21sep15a.b/175q0921a.m
Misc Info: 200ppbv(200ppbv)

Calibration Date: 21-SEP-2015
Calibration Time: 22:55
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	116527	69916	163138	121699	4.44
123 1,4-Difluorobenze	475185	285111	665259	487106	2.51
163 Chlorobenzene-d5	418099	250859	585339	444142	6.23

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.53	5.20	5.86	5.54	0.13
123 1,4-Difluorobenze	6.42	6.09	6.75	6.42	0.00
163 Chlorobenzene-d5	8.87	8.54	9.20	8.87	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/21sep15a.b/17092124.d

Date : 21-SEP-2015 23:54

Client ID:

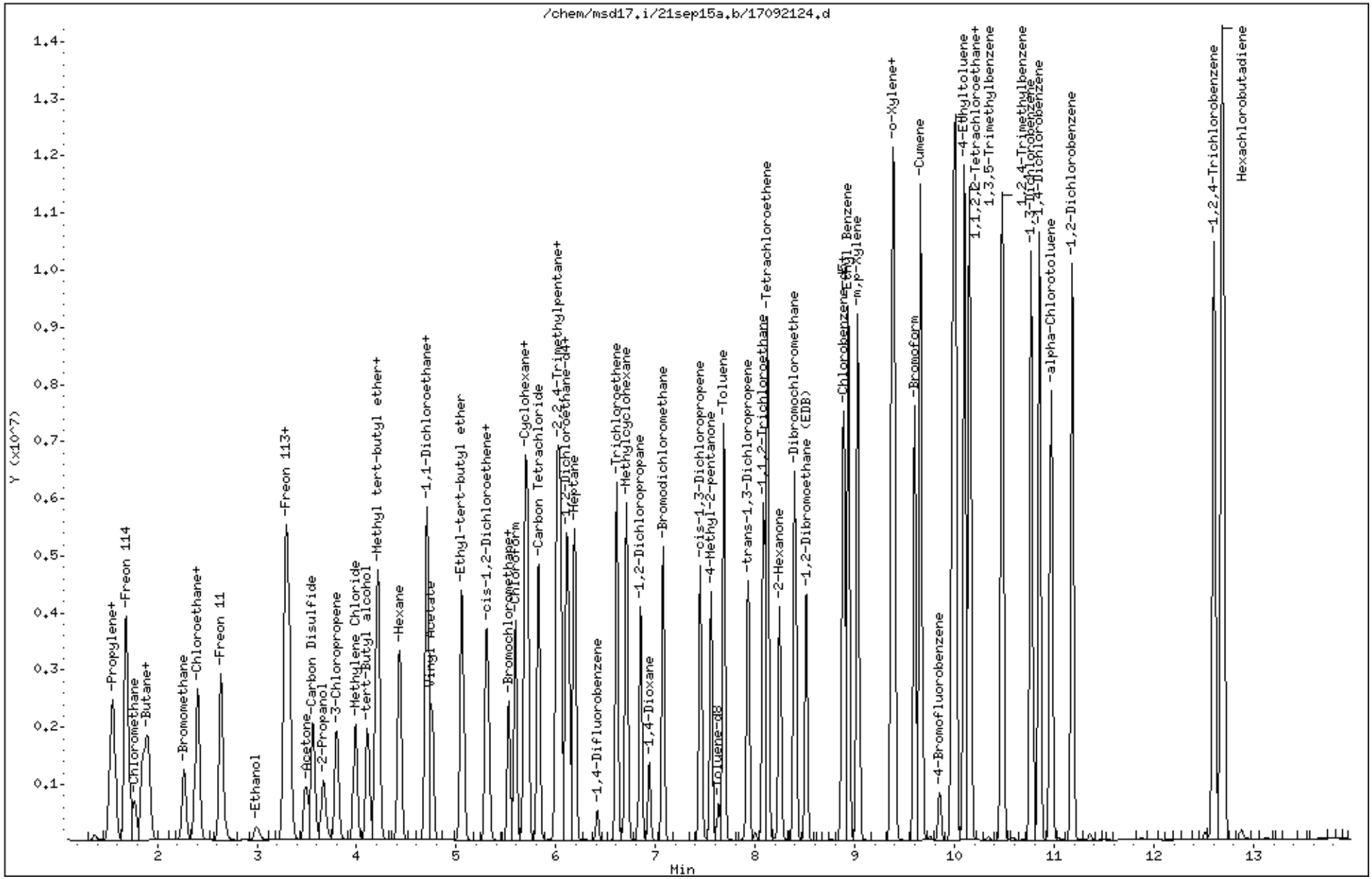
Sample Info: 200ml 2737-240

Column phase: RTX-624

Instrument: msd17.i

Operator: gh

Column diameter: 0.25



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Client Sample ID: CCV

Lab ID#: 1510233-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17101403**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/14/15 01:48 PM**	

Compound	%Recovery
Vinyl Chloride	84
1,1-Dichloroethene	80
Methylene Chloride	92
trans-1,2-Dichloroethene	87
cis-1,2-Dichloroethene	84
Chloroform	87
Benzene	93
1,2-Dichloroethane	94
Trichloroethene	87
Toluene	92
1,1,2-Trichloroethane	84
Tetrachloroethene	79
Ethyl Benzene	86
m,p-Xylene	89
o-Xylene	89
1,2,4-Trimethylbenzene	87

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	113	70-130
1,2-Dichloroethane-d4	109	70-130
4-Bromofluorobenzene	100	70-130

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd17.i Injection Date: 14-OCT-2015 13:48
Lab File ID: 17101403.d Init. Cal. Date(s): 21-SEP-2015 24-SEP-2015
Analysis Type: AIR Init. Cal. Times: 20:32 17:21
Lab Sample ID: CCV Quant Type: ISTD
Method: /var/chem/msd17.i/14oct15.b/175q0921c.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 117 1,2-Dichloroethane-d4	1.34713	1.47012	0.010	-9.12958	30.00000	Averaged
$ 146 Toluene-d8	1.03075	1.16262	0.010	-12.79288	30.00000	Averaged
$ 177 4-Bromofluorobenzene	0.63831	0.63790	0.010	0.06417	30.00000	Averaged
9 Propylene	0.99192	0.83260	0.010	16.06190	40.00000	Averaged
11 Freon 12	4.02374	3.50873	0.010	12.79933	30.00000	Averaged
15 Freon 114	2.92071	2.47307	0.010	15.32628	30.00000	Averaged
17 Chloromethane	1.40795	1.17099	0.010	16.83017	30.00000	Averaged
23 Butane	0.30879	0.24653	0.010	20.16297	40.00000	Averaged
25 Vinyl Chloride	1.59130	1.33303	0.010	16.23056	30.00000	Averaged
26 1,3-Butadiene	1.10408	0.93857	0.010	14.99064	30.00000	Averaged
29 Bromomethane	1.40948	1.34940	0.010	4.26232	30.00000	Averaged
30 Chloroethane	0.80668	0.70598	0.010	12.48377	30.00000	Averaged
31 Isopentane	1.56476	1.35847	0.010	13.18350	40.00000	Averaged
35 Freon 11	4.14328	3.64681	0.010	11.98242	30.00000	Averaged
42 Ethanol	0.55476	0.45688	0.010	17.64315	30.00000	Averaged
49 Freon 113	2.95204	2.41902	0.010	18.05607	30.00000	Averaged
50 1,1-Dichloroethene	1.08829	0.87539	0.010	19.56341	30.00000	Averaged
52 Acetone	0.75188	0.62145	0.010	17.34677	30.00000	Averaged
56 Carbon Disulfide	5.02571	4.44314	0.010	11.59182	30.00000	Averaged
57 2-Propanol	2.33241	2.04915	0.010	12.14448	30.00000	Averaged
58 3-Chloropropene	0.81025	0.66593	0.010	17.81140	30.00000	Averaged
66 Methylene Chloride	1.76244	1.62173	0.010	7.98400	30.00000	Averaged
71 tert-Butyl alcohol	2.92896	2.60001	0.010	11.23108	40.00000	Averaged
72 Methyl tert-butyl ether	4.56525	3.67105	0.010	19.58719	30.00000	Averaged
73 trans-1,2-Dichloroethene	1.08433	0.94427	0.010	12.91659	30.00000	Averaged
78 Hexane	2.46620	1.97898	0.010	19.75598	30.00000	Averaged
82 1,1-Dichloroethane	2.93354	2.68217	0.010	8.56855	30.00000	Averaged
83 Isopropyl ether	4.77043	4.02815	0.010	15.56017	40.00000	Averaged
86 Vinyl Acetate	0.44761	0.37582	0.010	16.03734	30.00000	Averaged
88 Ethyl-tert-butyl ether	4.97869	4.02549	0.010	19.14562	40.00000	Averaged
91 cis-1,2-Dichloroethene	1.16936	0.98908	0.010	15.41689	30.00000	Averaged
92 2-Butanone	0.82674	0.71852	0.010	13.08945	30.00000	Averaged
99 Tetrahydrofuran	1.61049	1.30024	0.010	19.26415	30.00000	Averaged
100 Chloroform	3.59543	3.11876	0.010	13.25764	30.00000	Averaged
102 Cyclohexane	2.23265	1.85896	0.010	16.73751	30.00000	Averaged
103 1,1,1-Trichloroethane	3.56425	3.06689	0.010	13.95426	30.00000	Averaged

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd17.i Injection Date: 14-OCT-2015 13:48
Lab File ID: 17101403.d Init. Cal. Date(s): 21-SEP-2015 24-SEP-2015
Analysis Type: AIR Init. Cal. Times: 20:32 17:21
Lab Sample ID: CCV Quant Type: ISTD
Method: /var/chem/msd17.i/14oct15.b/175q0921c.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
106 Carbon Tetrachloride	3.56123	3.14157	0.010	11.78400	30.00000	Averaged
113 2,2,4-Trimethylpentane	7.54048	6.58855	0.010	12.62420	30.00000	Averaged
116 Benzene	1.26645	1.17408	0.010	7.29359	30.00000	Averaged
119 tert-Amyl methyl ether	1.19486	0.99403	0.010	16.80839	40.00000	Averaged
120 1,2-Dichloroethane	0.55322	0.52093	0.010	5.83692	30.00000	Averaged
121 Heptane	0.43834	0.39718	0.010	9.38951	30.00000	Averaged
125 Trichloroethene	0.59756	0.52265	0.010	12.53574	30.00000	Averaged
127 Methylcyclohexane	3.08103	2.55347	0.010	17.12275	30.00000	Averaged
132 1,2-Dichloropropane	0.45337	0.43898	0.010	3.17310	30.00000	Averaged
136 1,4-Dioxane	0.27432	0.25844	0.010	5.78890	30.00000	Averaged
138 Bromodichloromethane	0.93797	0.88767	0.010	5.36322	30.00000	Averaged
144 cis-1,3-Dichloropropene	0.78791	0.69779	0.010	11.43729	30.00000	Averaged
145 4-Methyl-2-pentanone	0.30499	0.30805	0.010	-1.00322	30.00000	Averaged
147 Toluene	1.58812	1.46762	0.010	7.58736	30.00000	Averaged
150 trans-1,3-Dichloropropene	0.77652	0.65542	0.010	15.59514	30.00000	Averaged
155 1,1,2-Trichloroethane	0.61261	0.51541	0.010	15.86652	30.00000	Averaged
156 Tetrachloroethene	0.89911	0.70826	0.010	21.22638	30.00000	Averaged
158 2-Hexanone	0.43232	0.43211	0.010	0.04693	30.00000	Averaged
160 Dibromochloromethane	1.14369	0.94141	0.010	17.68671	30.00000	Averaged
161 1,2-Dibromoethane (EDB)	0.96853	0.81859	0.010	15.48153	30.00000	Averaged
165 Chlorobenzene	1.40226	1.19220	0.010	14.97998	30.00000	Averaged
167 Ethyl Benzene	0.68294	0.58727	0.010	14.00915	30.00000	Averaged
169 m,p-Xylene	0.84792	0.75229	0.010	11.27838	30.00000	Averaged
171 o-Xylene	0.78674	0.69892	0.010	11.16256	30.00000	Averaged
172 Styrene	1.34196	1.23651	0.010	7.85841	30.00000	Averaged
174 Bromoform	1.15479	0.96317	0.010	16.59355	30.00000	Averaged
175 Cumene	2.51316	2.23274	0.010	11.15811	30.00000	Averaged
181 1,1,2,2-Tetrachloroethane	1.32250	1.23891	0.010	6.32082	30.00000	Averaged
182 Propylbenzene	3.01709	2.75749	0.010	8.60422	30.00000	Averaged
188 4-Ethyltoluene	0.79902	0.68674	0.010	14.05236	30.00000	Averaged
190 1,3,5-Trimethylbenzene	1.04980	1.02013	0.010	2.82581	30.00000	Averaged
196 1,2,4-Trimethylbenzene	0.94244	0.82442	0.010	12.52238	30.00000	Averaged
208 1,3-Dichlorobenzene	1.51596	1.32308	0.010	12.72378	30.00000	Averaged
209 1,4-Dichlorobenzene	1.49984	1.33170	0.010	11.21046	30.00000	Averaged
212 alpha-Chlorotoluene	1.78345	1.82294	0.010	-2.21406	30.00000	Averaged

Eurofins Air Toxics Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: msd17.i Injection Date: 14-OCT-2015 13:48
Lab File ID: 17101403.d Init. Cal. Date(s): 21-SEP-2015 24-SEP-2015
Analysis Type: AIR Init. Cal. Times: 20:32 17:21
Lab Sample ID: CCV Quant Type: ISTD
Method: /var/chem/msd17.i/14oct15.b/175q0921c.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
214 1,2-Dichlorobenzene	1.43593	1.27369	0.010	11.29919	30.00000	Averaged	
226 1,2,4-Trichlorobenzene	1.24723	1.02948	0.010	17.45834	30.00000	Averaged	
227 Hexachlorobutadiene	1.07095	0.88288	0.010	17.56139	30.00000	Averaged	
228 Naphthalene	1.19126	2.27927	0.010	-91.33236	40.00000	Averaged	<-

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /var/chem/msd17.i/14oct15.b/17101403.d
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 14-OCT-2015 13:48
Operator : sab Inst ID: msd17.i
Smp Info : 50mL 2736-289
Misc Info : 50ppbv (200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /var/chem/msd17.i/14oct15.b/175q0921c.m
Meth Date : 14-Oct-2015 15:31 sblack Quant Type: ISTD
Cal Date : 24-SEP-2015 16:22 Cal File: 17092416.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	AMOUNTS ON-COL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.521	5.521 (1.000)	130	91736	25.0000		80.00- 120.00	100.00
5.521	5.521 (1.000)	128	69621			46.54- 106.54	75.89
5.521	5.521 (1.000)	49	112086			83.83- 143.83	122.18
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.409	6.409 (1.000)	114	354085	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	56542			0.00- 44.86	15.97
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.859	8.859 (1.000)	117	343866	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	189284			23.93- 83.93	55.05
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.058	6.058 (1.097)	65	134863	25.0000	27.282	80.00- 120.00	100.00
6.058	6.058 (1.097)	67	76691			25.51- 85.51	56.87

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.190)	98	411665	25.0000	28.198	80.00- 120.00	100.00
7.627	7.627 (1.190)	70	42420			0.00- 40.39	10.30
7.627	7.627 (1.190)	100	257654			33.97- 93.97	62.59
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.854	9.854 (1.112)	174	219351	25.0000	24.984	80.00- 120.00	100.00
9.847	9.847 (1.112)	95	264698			79.64- 139.64	120.67
9.854	9.854 (1.112)	176	209520			65.80- 125.80	95.52
9 Propylene					CAS #: 115-07-1		
1.509	1.509 (0.273)	41	152758	50.0000	41.969	80.00- 120.00	100.00
1.509	1.509 (0.273)	42	101787			37.10- 97.10	66.63
1.509	1.509 (0.273)	39	119485			44.98- 104.98	78.22
11 Freon 12					CAS #: 75-71-8		
1.545	1.545 (0.280)	85	643754	50.0000	43.600	80.00- 120.00	100.00
1.545	1.545 (0.280)	87	205974			2.33- 62.33	32.00
15 Freon 114					CAS #: 76-14-2		
1.660	1.660 (0.301)	135	453739	50.0000	42.337	80.00- 120.00	100.00
1.660	1.660 (0.301)	137	142964			2.02- 62.02	31.51
17 Chloromethane					CAS #: 74-87-3		
1.746	1.746 (0.316)	50	214844	50.0000	41.585	80.00- 120.00	100.00
1.753	1.753 (0.318)	52	72229			2.35- 62.35	33.62
23 Butane					CAS #: 106-97-8		
1.824	1.824 (0.330)	58	45231	50.0000	39.918	80.00- 120.00	100.00
1.824	1.824 (0.330)	43	308473			657.81- 717.81	681.99
25 Vinyl Chloride					CAS #: 75-01-4		
1.860	1.860 (0.337)	62	244573	50.0000	41.885	80.00- 120.00	100.00
1.860	1.860 (0.337)	64	78860			2.69- 62.69	32.24
26 1,3-Butadiene					CAS #: 106-99-0		
1.889	1.889 (0.342)	54	172202	50.0000	42.505	80.00- 120.00	100.00
1.889	1.889 (0.342)	39	168088			63.95- 123.95	97.61
29 Bromomethane					CAS #: 74-83-9		
2.247	2.247 (0.407)	94	247578	50.0000	47.869	80.00- 120.00	100.00
2.247	2.247 (0.407)	96	231010			63.69- 123.69	93.31
30 Chloroethane					CAS #: 75-00-3		
2.362	2.362 (0.428)	64	129527	50.0000	43.758	80.00- 120.00	100.00
2.362	2.362 (0.428)	66	43314			1.86- 61.86	33.44

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.362	2.362 (0.428)	49	33501			0.00- 55.51	25.86
31 Isopentane					CAS #: 78-78-4		
2.383	2.383 (0.432)	43	249241	50.0000	43.408	80.00- 120.00	100.00
2.383	2.383 (0.432)	57	186041			44.35- 104.35	74.64
35 Freon 11					CAS #: 75-69-4		
2.612	2.612 (0.473)	101	669088	50.0000	44.009	80.00- 120.00	100.00
2.612	2.612 (0.473)	103	436415			35.20- 95.20	65.23
42 Ethanol					CAS #: 64-17-5		
2.971	2.971 (0.538)	45	83825	50.0000	41.178	80.00- 120.00	100.00
2.971	2.971 (0.538)	43	19649			0.00- 50.36	23.44
2.971	2.971 (0.538)	46	33593			10.31- 70.31	40.08
49 Freon 113					CAS #: 76-13-1		
3.264	3.264 (0.591)	151	443822	50.0000	40.972	80.00- 120.00	100.00
3.264	3.264 (0.591)	153	290784			33.72- 93.72	65.52
3.264	3.264 (0.591)	101	591720			95.23- 155.23	133.32
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.293	3.293 (0.596)	98	160609	50.0000	40.218	80.00- 120.00	100.00
3.293	3.293 (0.596)	96	259754			130.14- 190.14	161.73
3.293	3.293 (0.596)	61	414849			218.16- 278.16	258.30
52 Acetone					CAS #: 67-64-1		
3.458	3.458 (0.626)	58	114019	50.0000	41.327	80.00- 120.00	100.00
3.458	3.458 (0.626)	43	351715			266.49- 326.49	308.47
56 Carbon Disulfide					CAS #: 75-15-0		
3.529	3.529 (0.639)	76	815192	50.0000	44.204	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.637	3.637 (0.659)	45	375962	50.0000	43.928	80.00- 120.00	100.00
3.637	3.637 (0.659)	43	89288			0.00- 50.02	23.75
3.637	3.637 (0.659)	59	17421			0.00- 34.32	4.63
58 3-Chloropropene					CAS #: 107-05-1		
3.773	3.773 (0.683)	76	122180	50.0000	41.094	80.00- 120.00	100.00
3.773	3.773 (0.683)	41	266624			185.01- 245.01	218.22
66 Methylene Chloride					CAS #: 75-09-2		
3.966	3.966 (0.718)	49	297542	50.0000	46.008	80.00- 120.00	100.00
3.966	3.966 (0.718)	84	246950			59.02- 119.02	83.00
3.966	3.966 (0.718)	51	91760			1.78- 61.78	30.84

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.095	4.095 (0.742)	59	477029	50.0000	44.384	80.00- 120.00	100.00
4.095	4.095 (0.742)	41	113848			0.00- 50.26	23.87
4.088	4.088 (0.740)	57	49137			0.00- 40.80	10.30
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.181	4.181 (0.757)	73	673534	50.0000	40.206	80.00- 120.00	100.00
4.181	4.181 (0.757)	57	144775			0.00- 51.46	21.49
4.181	4.181 (0.757)	41	152445			0.00- 49.34	22.63
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.203	4.203 (0.761)	98	173247	50.0000	43.542	80.00- 120.00	100.00
4.203	4.203 (0.761)	61	381889			184.16- 244.16	220.43
4.203	4.203 (0.761)	96	280270			127.84- 187.84	161.77
78 Hexane					CAS #: 110-54-3		
4.410	4.410 (0.799)	57	363087	50.0000	40.122	80.00- 120.00	100.00
4.410	4.410 (0.799)	43	211274			27.64- 87.64	58.19
4.410	4.410 (0.799)	86	61480			0.00- 46.92	16.93
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.697	4.697 (0.851)	63	492104	50.0000	45.716	80.00- 120.00	100.00
4.697	4.697 (0.851)	65	157833			2.04- 62.04	32.07
83 Isopropyl ether					CAS #: 108-20-3		
4.690	4.690 (0.849)	45	739052	50.0000	42.220	80.00- 120.00	100.00
4.690	4.690 (0.849)	87	221542			1.31- 61.31	29.98
4.690	4.690 (0.849)	59	97061			0.00- 42.69	13.13
86 Vinyl Acetate					CAS #: 108-05-4		
4.747	4.747 (0.860)	86	68953	50.0000	41.981	80.00- 120.00	100.00
4.747	4.747 (0.860)	43	667800			891.41- 951.41	968.49
88 Ethyl-tert-butyl ether					CAS #: 637-92-3		
5.048	5.048 (0.914)	59	738565	50.0000	40.427	80.00- 120.00	100.00
5.048	5.048 (0.914)	87	310102			13.52- 73.52	41.99
5.048	5.048 (0.914)	41	150008			0.00- 47.26	20.31
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.284	5.284 (0.957)	98	181468	50.0000	42.292	80.00- 120.00	100.00
5.284	5.284 (0.957)	96	282866			124.38- 184.38	155.88
5.284	5.284 (0.957)	61	346452			162.07- 222.07	190.92
92 2-Butanone					CAS #: 78-93-3		
5.313	5.313 (0.962)	72	131829	50.0000	43.455	80.00- 120.00	100.00
5.313	5.313 (0.962)	43	463132			306.33- 366.33	351.31

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
92 2-Butanone (continued)							
5.313	5.313 (0.962)	57	39956			0.00- 59.26	30.31
99 Tetrahydrofuran					CAS #: 109-99-9		
5.521	5.521 (1.000)	42	238558	50.0000	40.368	80.00- 120.00	100.00
5.521	5.521 (1.000)	71	110684			17.72- 77.72	46.40
5.521	5.521 (1.000)	72	117152			20.99- 80.99	49.11
100 Chloroform					CAS #: 67-66-3		
5.585	5.585 (1.012)	83	572206	50.0000	43.371	80.00- 120.00	100.00
5.585	5.585 (1.012)	85	375204			34.67- 94.67	65.57
102 Cyclohexane					CAS #: 110-82-7		
5.678	5.678 (1.029)	84	341067	50.0000	41.631	80.00- 120.00	100.00
5.678	5.678 (1.029)	56	364535			77.09- 137.09	106.88
5.678	5.678 (1.029)	41	201112			25.87- 85.87	58.97
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.700	5.700 (1.032)	97	562688	50.0000	43.023	80.00- 120.00	100.00
5.700	5.700 (1.032)	99	362919			34.33- 94.33	64.50
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.814	5.814 (1.053)	119	576391	50.0000	44.108	80.00- 120.00	100.00
5.814	5.814 (1.053)	117	594540			74.90- 134.90	103.15
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.008	6.008 (1.088)	57	1208815	50.0000	43.688	80.00- 120.00	100.00
6.008	6.008 (1.088)	56	385411			1.80- 61.80	31.88
6.008	6.008 (1.088)	41	307592			0.00- 55.83	25.45
116 Benzene					CAS #: 71-43-2		
6.036	6.036 (0.942)	78	831447	50.0000	46.353	80.00- 120.00	100.00
6.036	6.036 (0.942)	77	204458			0.00- 54.08	24.59
119 tert-Amyl methyl ether					CAS #: 994-05-8		
6.101	6.101 (1.105)	87	182376	50.0000	41.596	80.00- 120.00	100.00
6.101	6.101 (1.105)	73	762723			376.57- 436.57	418.21
6.101	6.101 (1.105)	55	207188			64.52- 124.52	113.60
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.129	6.129 (0.956)	62	368909	50.0000	47.082	80.00- 120.00	100.00
6.129	6.129 (0.956)	64	119788			2.16- 62.16	32.47
121 Heptane					CAS #: 142-82-5		
6.180	6.180 (0.964)	71	281270	50.0000	45.305	80.00- 120.00	100.00
6.180	6.180 (0.964)	43	398054			110.94- 170.94	141.52

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
121 Heptane (continued)							
6.180	6.180 (0.964)	57	250112			53.72- 113.72	88.92
125 Trichloroethene					CAS #: 79-01-6		
6.602	6.602 (1.030)	95	370128	50.0000	43.732	80.00- 120.00	100.00
6.602	6.602 (1.030)	130	371955			74.97- 134.97	100.49
6.602	6.602 (1.030)	97	237669			35.33- 95.33	64.21
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.214)	83	468491	50.0000	41.439	80.00- 120.00	100.00
6.703	6.703 (1.214)	98	216857			16.41- 76.41	46.29
6.703	6.703 (1.214)	55	346729			40.41- 100.41	74.01
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.846	6.846 (1.068)	63	310873	50.0000	48.413	80.00- 120.00	100.00
6.846	6.846 (1.068)	62	213463			38.78- 98.78	68.67
6.839	6.839 (1.067)	41	153309			20.16- 80.16	49.32
136 1,4-Dioxane					CAS #: 123-91-1		
6.932	6.932 (1.082)	88	183019	50.0000	47.106	80.00- 120.00	100.00
6.932	6.932 (1.082)	58	120371			31.02- 91.02	65.77
6.932	6.932 (1.082)	57	39825			0.00- 51.33	21.76
138 Bromodichloromethane					CAS #: 75-27-4		
7.068	7.068 (1.103)	83	628619	50.0000	47.318	80.00- 120.00	100.00
7.068	7.068 (1.103)	85	405297			34.16- 94.16	64.47
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.447	7.447 (1.162)	75	494154	50.0000	44.281	80.00- 120.00	100.00
7.447	7.447 (1.162)	77	159188			1.57- 61.57	32.21
7.447	7.447 (1.162)	39	220942			13.98- 73.98	44.71
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.555	7.555 (1.179)	58	218154	50.0000	50.502	80.00- 120.00	100.00
7.555	7.555 (1.179)	43	534452			205.93- 265.93	244.99
7.555	7.555 (1.179)	85	102920			18.04- 78.04	47.18
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.199)	91	1039327	50.0000	46.206	80.00- 120.00	100.00
7.684	7.684 (1.199)	92	577484			27.24- 87.24	55.56
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.927	7.927 (0.895)	75	450753	50.0000	42.202	80.00- 120.00	100.00
7.927	7.927 (0.895)	77	144481			1.57- 61.57	32.05
7.920	7.920 (0.894)	39	186992			13.98- 73.98	41.48

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.078	8.078 (0.912)	97	354466	50.0000	42.067	80.00- 120.00	100.00
8.078	8.078 (0.912)	99	221611			31.05- 91.05	62.52
8.078	8.078 (0.912)	83	318718			58.29- 118.29	89.91
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.917)	166	487093	50.0000	39.387	80.00- 120.00	100.00
8.121	8.121 (0.917)	129	356759			42.46- 102.46	73.24
8.121	8.121 (0.917)	131	343002			40.24- 100.24	70.42
158 2-Hexanone					CAS #: 591-78-6		
8.243	8.243 (0.930)	58	297178	50.0000	49.976	80.00- 120.00	100.00
8.243	8.243 (0.930)	43	507529			205.93- 265.93	170.78
8.243	8.243 (0.930)	100	61034			11.40- 71.40	20.54
160 Dibromochloromethane					CAS #: 124-48-1		
8.393	8.393 (0.947)	129	647435	50.0000	41.157	80.00- 120.00	100.00
8.393	8.393 (0.947)	127	501197			47.28- 107.28	77.41
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.508	8.508 (0.960)	107	562968	50.0000	42.259	80.00- 120.00	100.00
8.508	8.508 (0.960)	109	537891			66.45- 126.45	95.55
165 Chlorobenzene					CAS #: 108-90-7		
8.887	8.887 (1.003)	112	819917	50.0000	42.510	80.00- 120.00	100.00
8.887	8.887 (1.003)	114	260308			2.06- 62.06	31.75
8.887	8.887 (1.003)	77	473876			26.47- 86.47	57.80
167 Ethyl Benzene					CAS #: 100-41-4		
8.930	8.930 (1.008)	106	403884	50.0000	42.995	80.00- 120.00	100.00
8.930	8.930 (1.008)	91	1299847			289.94- 349.94	321.84
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	517375	50.0000	44.361	80.00- 120.00	100.00
9.031	9.031 (1.019)	91	1036281			167.83- 227.83	200.30
171 o-Xylene					CAS #: 95-47-6		
9.374	9.374 (1.058)	106	480667	50.0000	44.419	80.00- 120.00	100.00
9.374	9.374 (1.058)	91	1031317			181.11- 241.11	214.56
172 Styrene					CAS #: 100-42-5		
9.396	9.396 (1.061)	104	850386	50.0000	46.071	80.00- 120.00	100.00
9.389	9.389 (1.060)	78	412187			17.79- 77.79	48.47
174 Bromoform					CAS #: 75-25-2		
9.596	9.596 (1.083)	173	662405	50.0000	41.703	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
174 Bromoform (continued)							
9.596	9.596 (1.083)	171	340196			21.45- 81.45	51.36
175 Cumene					CAS #: 98-82-8		
9.661	9.661 (1.091)	105	1535524	50.0000	44.421	80.00- 120.00	100.00
9.661	9.661 (1.091)	120	403805			0.00- 57.47	26.30
9.661	9.661 (1.091)	51	138249			0.00- 38.62	9.00
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.976	9.976 (1.126)	83	852039	50.0000	46.840	80.00- 120.00	100.00
9.976	9.976 (1.126)	85	545558			34.77- 94.77	64.03
182 Propylbenzene					CAS #: 103-65-1		
10.005	10.005 (1.129)	91	1896417	50.0000	45.698	80.00- 120.00	100.00
10.005	10.005 (1.129)	120	424885			0.00- 53.65	22.40
10.005	10.005 (1.129)	105	64488			0.00- 33.57	3.40
188 4-Ethyltoluene					CAS #: 622-96-8		
10.098	10.098 (1.140)	120	472293	50.0000	42.974	80.00- 120.00	100.00
10.098	10.098 (1.140)	105	1522851			292.89- 352.89	322.44
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.155	10.155 (1.146)	120	701578	50.0000	48.587	80.00- 120.00	100.00(H)
10.155	10.155 (1.146)	105	1535970			175.25- 235.25	218.93
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.477	10.477 (1.183)	120	566983	50.0000	43.739	80.00- 120.00	100.00
10.477	10.477 (1.183)	105	1240130			183.76- 243.76	218.72
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.771	10.771 (1.216)	146	909922	50.0000	43.638	80.00- 120.00	100.00
10.771	10.771 (1.216)	148	582905			33.69- 93.69	64.06
10.771	10.771 (1.216)	111	359899			8.12- 68.12	39.55
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.850	10.850 (1.225)	146	915855	50.0000	44.395	80.00- 120.00	100.00
10.850	10.850 (1.225)	148	587680			33.86- 93.86	64.17
10.850	10.850 (1.225)	111	353697			6.71- 66.71	38.62
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.965	10.965 (1.238)	91	1253691	50.0000	51.107	80.00- 120.00	100.00
10.972	10.972 (1.239)	126	262931			0.00- 51.95	20.97
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.179	11.179 (1.262)	146	875954	50.0000	44.350	80.00- 120.00	100.00
11.179	11.179 (1.262)	148	554177			33.90- 93.90	63.27

RT	EXP RT (REL RT)	MASS	RESPONSE	AMOUNTS CAL-AMT (PPBV)	ON-COL (PPBV)	TARGET RANGE	RATIO
214 1,2-Dichlorobenzene (continued)							
11.179	11.179 (1.262)	111	360107			8.86- 68.86	41.11
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.605	12.605 (1.423)	180	708007	50.0000	41.271	80.00- 120.00	100.00
12.605	12.605 (1.423)	182	682267			65.21- 125.21	96.36
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.691	12.691 (1.433)	225	607182	50.0000	41.219	80.00- 120.00	100.00
12.691	12.691 (1.433)	223	385516			33.22- 93.22	63.49
228 Naphthalene					CAS #: 91-20-3		
12.877	12.877 (1.454)	128	156753	5.00000	9.567	0.00- 30.00	100.00
12.877	12.877 (1.454)	127	20249			0.00- 30.00	12.92

QC Flag Legend

H - Operator selected an alternate compound hit.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17101403.d
Lab Smp Id: CCV
Analysis Type: VOA
Quant Type: ISTD
Operator: sab
Method File: /var/chem/msd17.i/14oct15.b/175q0921c.m
Misc Info: 50ppbv (200ppbv)

Calibration Date: 14-OCT-2015
Calibration Time: 12:09
Client Smp ID: CCV
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	88434	53060	123808	91736	3.73
123 1,4-Difluorobenze	351373	210824	491922	354085	0.77
163 Chlorobenzene-d5	335209	201125	469293	343866	2.58

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.52	0.00
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/14oct15.b/17101403.d

Date : 14-OCT-2015 13:48

Client ID: CCV

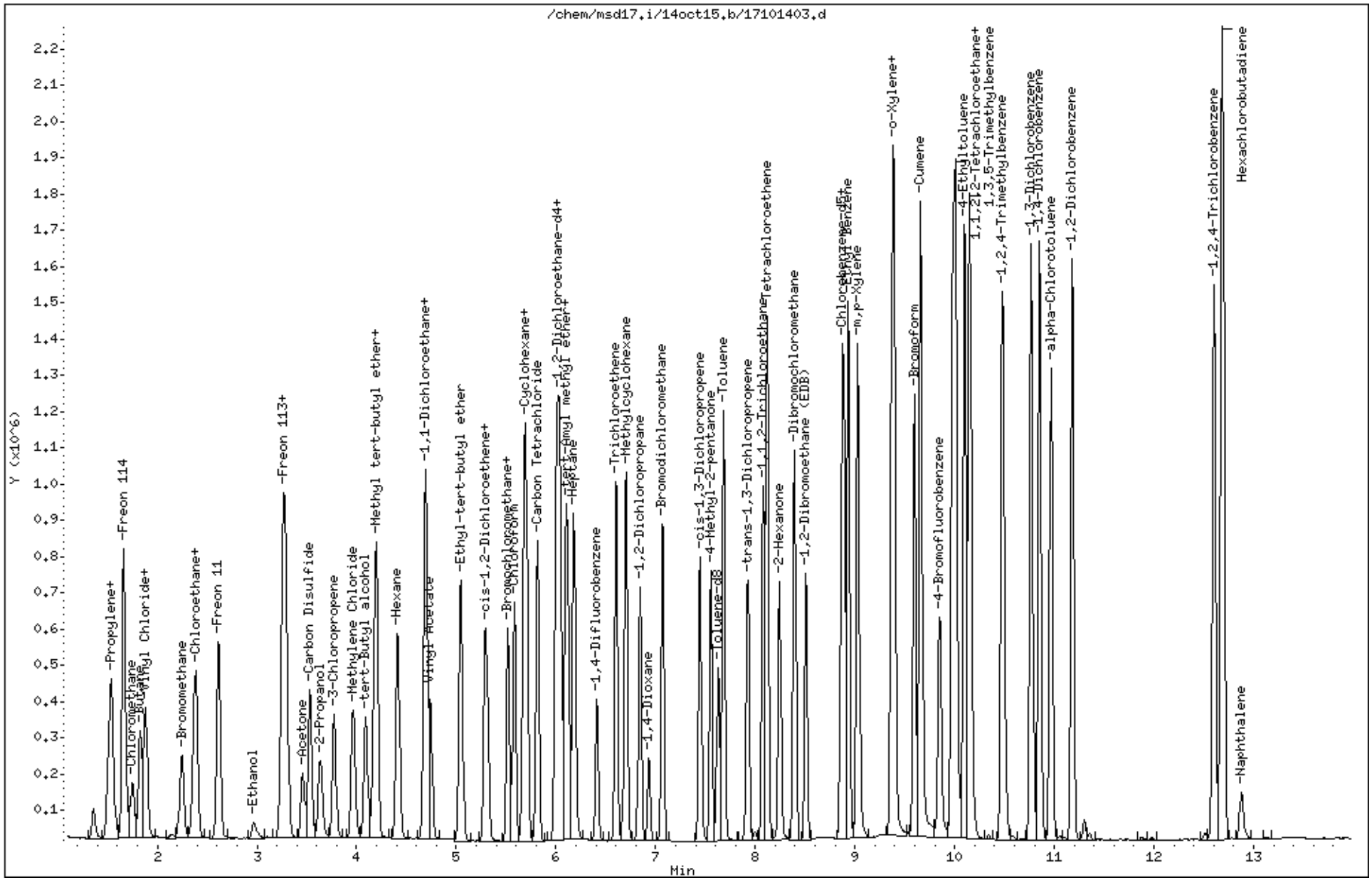
Sample Info: 50mL 2736-289

Column phase: RTX-624

Instrument: msd17.i

Operator: sab

Column diameter: 0.25



eurofins | Air Toxics

Client Sample ID: LCS

Lab ID#: 1510233-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17101404**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/14/15 02:27 PM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	104	70-130
1,1-Dichloroethene	96	70-130
Methylene Chloride	107	70-130
trans-1,2-Dichloroethene	91	70-130
cis-1,2-Dichloroethene	108	70-130
Chloroform	102	70-130
Benzene	109	70-130
1,2-Dichloroethane	105	70-130
Trichloroethene	102	70-130
Toluene	109	70-130
1,1,2-Trichloroethane	103	70-130
Tetrachloroethene	93	70-130
Ethyl Benzene	105	70-130
m,p-Xylene	106	70-130
o-Xylene	107	70-130
1,2,4-Trimethylbenzene	105	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	109	70-130
1,2-Dichloroethane-d4	105	70-130
4-Bromofluorobenzene	97	70-130

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 14oct15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCS Client Smp ID: LCS
Level: LOW Operator: sab
Data Type: MS DATA SampleType: LCS
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: AT12.sub
Method File: /var/chem/msd17.i/14oct15.b/175q0921c.m
Misc Info: 50ppbv(200ppbv)

	SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9	Propylene	50.000	49.317	98.63	70-130
11	Freon 12	50.000	53.517	107.03	70-130
15	Freon 114	50.000	52.891	105.78	70-130
17	Chloromethane	50.000	50.906	101.81	70-130
23	Butane	50.000	48.490	96.98	70-130
25	Vinyl Chloride	50.000	52.228	104.46	70-130
26	1,3-Butadiene	50.000	49.302	98.60	70-130
29	Bromomethane	50.000	55.444	110.89	70-130
30	Chloroethane	50.000	53.601	107.20	70-130
31	Isopentane	50.000	51.492	102.98	70-130
35	Freon 11	50.000	52.858	105.72	70-130
42	Ethanol	50.000	50.482	100.96	70-130
49	Freon 113	50.000	47.591	95.18	70-130
50	1,1-Dichloroethene	50.000	48.216	96.43	70-130
52	Acetone	50.000	49.533	99.07	70-130
56	Carbon Disulfide	50.000	45.539	91.08	70-130
57	2-Propanol	50.000	52.919	105.84	70-130
58	3-Chloropropene	50.000	46.260	92.52	70-130
66	Methylene Chloride	50.000	53.574	107.15	70-130
72	Methyl tert-butyl	50.000	46.067	92.13	70-130
73	trans-1,2-Dichloro	50.000	45.415	90.83	70-130
78	Hexane	50.000	48.269	96.54	70-130
82	1,1-Dichloroethane	50.000	52.995	105.99	70-130
86	Vinyl Acetate	50.000	48.713	97.43	70-130
91	cis-1,2-Dichloroet	50.000	54.052	108.10	70-130
92	2-Butanone	50.000	50.791	101.58	70-130
99	Tetrahydrofuran	50.000	46.588	93.18	70-130
100	Chloroform	50.000	50.772	101.54	70-130
103	1,1,1-Trichloroeth	50.000	50.531	101.06	70-130
106	Carbon Tetrachlori	50.000	50.947	101.89	70-130
102	Cyclohexane	50.000	48.758	97.52	70-130
113	2,2,4-Trimethylpen	50.000	53.373	106.75	70-130
116	Benzene	50.000	54.556	109.11	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	50.000	52.639	105.28	70-130
121 Heptane	50.000	53.520	107.04	70-130
125 Trichloroethene	50.000	51.102	102.20	70-130
127 Methylcyclohexane	50.000	50.285	100.57	70-130
132 1,2-Dichloropropan	50.000	55.860	111.72	70-130
136 1,4-Dioxane	50.000	54.330	108.66	70-130
138 Bromodichlorometha	50.000	56.019	112.04	70-130
144 cis-1,3-Dichloropr	50.000	49.282	98.56	70-130
145 4-Methyl-2-pentano	50.000	59.925	119.85	70-130
147 Toluene	50.000	54.562	109.12	70-130
150 trans-1,3-Dichloro	50.000	51.389	102.78	70-130
155 1,1,2-Trichloroeth	50.000	51.352	102.70	70-130
156 Tetrachloroethene	50.000	46.488	92.98	70-130
158 2-Hexanone	50.000	59.249	118.50	70-130
160 Dibromochlorometha	50.000	49.903	99.81	70-130
161 1,2-Dibromoethane	50.000	51.207	102.41	70-130
165 Chlorobenzene	50.000	49.683	99.37	70-130
167 Ethyl Benzene	50.000	52.506	105.01	70-130
169 m,p-Xylene	50.000	53.110	106.22	70-130
171 o-Xylene	50.000	53.732	107.46	70-130
172 Styrene	50.000	54.950	109.90	70-130
174 Bromoform	50.000	49.972	99.94	70-130
175 Cumene	50.000	53.181	106.36	70-130
181 1,1,2,2-Tetrachlor	50.000	56.535	113.07	70-130
182 Propylbenzene	50.000	56.228	112.46	70-130
188 4-Ethyltoluene	50.000	52.462	104.92	70-130
190 1,3,5-Trimethylben	50.000	57.718	115.44	70-130
196 1,2,4-Trimethylben	50.000	52.514	105.03	70-130
208 1,3-Dichlorobenzen	50.000	52.572	105.14	70-130
209 1,4-Dichlorobenzen	50.000	53.608	107.22	70-130
212 alpha-Chlorotoluen	50.000	63.120	126.24	70-130
214 1,2-Dichlorobenzen	50.000	53.276	106.55	70-130
226 1,2,4-Trichloroben	50.000	45.267	90.53	70-130
227 Hexachlorobutadien	50.000	44.528	89.06	70-130
228 Naphthalene	5.000	8.424	168.48*	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	26.292	105.17	70-130
$ 146 Toluene-d8	25.000	27.235	108.94	70-130
$ 177 4-Bromofluorobenze	25.000	24.224	96.90	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /var/chem/msd17.i/14oct15.b/17101404.d
Lab Smp Id: LCS Client Smp ID: LCS
Inj Date : 14-OCT-2015 14:27
Operator : sab Inst ID: msd17.i
Smp Info : 50ml #2736-270
Misc Info : 50ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /var/chem/msd17.i/14oct15.b/175q0921c.m
Meth Date : 14-Oct-2015 15:31 sblack Quant Type: ISTD
Cal Date : 24-SEP-2015 16:22 Cal File: 17092416.d
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.521	5.521 (1.000)	130	93042	25.0000		80.00- 120.00	100.00
5.521	5.521 (1.000)	128	71917			46.54- 106.54	77.30
5.521	5.521 (1.000)	49	112117			83.83- 143.83	120.50
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.409	6.409 (1.000)	114	365163	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	57182			0.00- 44.86	15.66
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.859	8.859 (1.000)	117	346953	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	192441			23.93- 83.93	55.47
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.058	6.058 (1.097)	65	131819	26.2923	26.292	80.00- 120.00	100.00
6.058	6.058 (1.097)	67	71041			25.51- 85.51	53.89

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.190)	98	410039	27.2348	27.235	80.00- 120.00	100.00
7.627	7.627 (1.190)	70	45557			0.00- 40.39	11.11
7.627	7.627 (1.190)	100	259536			33.97- 93.97	63.30
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.854	9.854 (1.112)	174	214589	24.2241	24.224	80.00- 120.00	100.00
9.847	9.847 (1.112)	95	260550			79.64- 139.64	121.42
9.847	9.854 (1.112)	176	214894			65.80- 125.80	100.14
9 Propylene					CAS #: 115-07-1		
1.510	1.509 (0.273)	41	182059	49.3172	49.317	80.00- 120.00	100.00
1.510	1.509 (0.273)	42	118861			37.10- 97.10	65.29
1.510	1.509 (0.273)	39	134774			44.98- 104.98	74.03
11 Freon 12					CAS #: 75-71-8		
1.538	1.545 (0.279)	85	801419	53.5168	53.517	80.00- 120.00	100.00
1.538	1.545 (0.279)	87	262150			2.33- 62.33	32.71
15 Freon 114					CAS #: 76-14-2		
1.660	1.660 (0.301)	135	574925	52.8913	52.891	80.00- 120.00	100.00
1.660	1.660 (0.301)	137	184324			2.02- 62.02	32.06
17 Chloromethane					CAS #: 74-87-3		
1.746	1.746 (0.316)	50	266747	50.9065	50.906	80.00- 120.00	100.00
1.746	1.753 (0.316)	52	88579			2.35- 62.35	33.21
23 Butane					CAS #: 106-97-8		
1.825	1.824 (0.330)	58	55725	48.4896	48.490	80.00- 120.00	100.00
1.825	1.824 (0.330)	43	388143			657.81- 717.81	696.53
25 Vinyl Chloride					CAS #: 75-01-4		
1.860	1.860 (0.337)	62	309311	52.2280	52.228	80.00- 120.00	100.00
1.860	1.860 (0.337)	64	98592			2.69- 62.69	31.87
26 1,3-Butadiene					CAS #: 106-99-0		
1.889	1.889 (0.342)	54	202586	49.3025	49.302	80.00- 120.00	100.00
1.889	1.889 (0.342)	39	188884			63.95- 123.95	93.24
29 Bromomethane					CAS #: 74-83-9		
2.240	2.247 (0.406)	94	290840	55.4442	55.444	80.00- 120.00	100.00
2.247	2.247 (0.407)	96	273043			63.69- 123.69	93.88
30 Chloroethane					CAS #: 75-00-3		
2.362	2.362 (0.428)	64	160922	53.6012	53.601	80.00- 120.00	100.00
2.362	2.362 (0.428)	66	54321			1.86- 61.86	33.76

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.362	2.362 (0.428)	49	41806			0.00- 55.51	25.98
31 Isopentane					CAS #: 78-78-4		
2.383	2.383 (0.432)	43	299868	51.4925	51.492	80.00- 120.00	100.00
2.383	2.383 (0.432)	57	217568			44.35- 104.35	72.55
35 Freon 11					CAS #: 75-69-4		
2.613	2.612 (0.473)	101	815071	52.8582	52.858	80.00- 120.00	100.00
2.613	2.612 (0.473)	103	520189			35.20- 95.20	63.82
42 Ethanol					CAS #: 64-17-5		
2.971	2.971 (0.538)	45	104226	50.4816	50.482	80.00- 120.00	100.00
2.971	2.971 (0.538)	43	24233			0.00- 50.36	23.25
2.971	2.971 (0.538)	46	40163			10.31- 70.31	38.53
49 Freon 113					CAS #: 76-13-1		
3.264	3.264 (0.591)	151	522858	47.5907	47.591	80.00- 120.00	100.00
3.264	3.264 (0.591)	153	340505			33.72- 93.72	65.12
3.264	3.264 (0.591)	101	692097			95.23- 155.23	132.37
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.300	3.293 (0.598)	98	195290	48.2164	48.216	80.00- 120.00	100.00
3.293	3.293 (0.596)	96	307510			130.14- 190.14	157.46
3.293	3.293 (0.596)	61	490749			218.16- 278.16	251.29
52 Acetone					CAS #: 67-64-1		
3.458	3.458 (0.626)	58	138606	49.5331	49.533	80.00- 120.00	100.00
3.458	3.458 (0.626)	43	418228			266.49- 326.49	301.74
56 Carbon Disulfide					CAS #: 75-15-0		
3.529	3.529 (0.639)	76	851766	45.5390	45.539	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.630	3.637 (0.657)	45	459361	52.9188	52.919	80.00- 120.00	100.00
3.630	3.637 (0.657)	43	110611			0.00- 50.02	24.08
3.630	3.637 (0.657)	59	19675			0.00- 34.32	4.28
58 3-Chloropropene					CAS #: 107-05-1		
3.780	3.773 (0.685)	76	139497	46.2602	46.260	80.00- 120.00	100.00
3.773	3.773 (0.683)	41	301742			185.01- 245.01	216.31
66 Methylene Chloride					CAS #: 75-09-2		
3.966	3.966 (0.718)	49	351409	53.5746	53.574	80.00- 120.00	100.00
3.966	3.966 (0.718)	84	291750			59.02- 119.02	83.02
3.966	3.966 (0.718)	51	107089			1.78- 61.78	30.47

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
71 tert-Butyl alcohol					CAS #: 75-65-0		
4.095	4.095 (0.742)	59	22623	2.07538	2.075	80.00- 120.00	100.00
4.103	4.095 (0.743)	41	7295			0.00- 50.26	32.25
4.103	4.088 (0.743)	57	4048			0.00- 40.80	17.89
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.181	4.181 (0.757)	73	782696	46.0670	46.067	80.00- 120.00	100.00
4.181	4.181 (0.757)	57	170625			0.00- 51.46	21.80
4.181	4.181 (0.757)	41	174852			0.00- 49.34	22.34
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.203	4.203 (0.761)	98	183272	45.4147	45.415	80.00- 120.00	100.00
4.203	4.203 (0.761)	61	383183			184.16- 244.16	209.08
4.203	4.203 (0.761)	96	290256			127.84- 187.84	158.37
78 Hexane					CAS #: 110-54-3		
4.411	4.410 (0.799)	57	443030	48.2687	48.269	80.00- 120.00	100.00
4.411	4.410 (0.799)	43	263114			27.64- 87.64	59.39
4.411	4.410 (0.799)	86	73999			0.00- 46.92	16.70
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.697	4.697 (0.851)	63	578580	52.9948	52.995	80.00- 120.00	100.00
4.697	4.697 (0.851)	65	184738			2.04- 62.04	31.93
83 Isopropyl ether					CAS #: 108-20-3		
4.181	4.690 (0.757)	45	35941	2.02439	2.024	80.00- 120.00	100.00
4.411	4.690 (0.799)	87	4864			1.31- 61.31	13.53
4.203	4.690 (0.761)	59	16649			0.00- 42.69	46.32
86 Vinyl Acetate					CAS #: 108-05-4		
4.747	4.747 (0.860)	86	81149	48.7132	48.713	80.00- 120.00	100.00
4.747	4.747 (0.860)	43	735559			891.41- 951.41	906.43
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.284	5.284 (0.957)	98	235234	54.0523	54.052	80.00- 120.00	100.00
5.284	5.284 (0.957)	96	367796			124.38- 184.38	156.35
5.284	5.284 (0.957)	61	451511			162.07- 222.07	191.94
92 2-Butanone					CAS #: 78-93-3		
5.313	5.313 (0.962)	72	156278	50.7914	50.791	80.00- 120.00	100.00
5.313	5.313 (0.962)	43	539946			306.33- 366.33	345.50
5.313	5.313 (0.962)	57	46849			0.00- 59.26	29.98
99 Tetrahydrofuran					CAS #: 109-99-9		
5.521	5.521 (1.000)	42	279235	46.5879	46.588	80.00- 120.00	100.00
5.521	5.521 (1.000)	71	131843			17.72- 77.72	47.22

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
99 Tetrahydrofuran (continued)							
5.521	5.521 (1.000)	72	141488			20.99- 80.99	50.67
100 Chloroform					CAS #: 67-66-3		
5.585	5.585 (1.012)	83	679384	50.7721	50.772	80.00- 120.00	100.00
5.578	5.585 (1.010)	85	439254			34.67- 94.67	64.65
102 Cyclohexane					CAS #: 110-82-7		
5.678	5.678 (1.029)	84	405144	48.7585	48.758	80.00- 120.00	100.00
5.678	5.678 (1.029)	56	442078			77.09- 137.09	109.12
5.678	5.678 (1.029)	41	239116			25.87- 85.87	59.02
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.700	5.700 (1.032)	97	670300	50.5314	50.531	80.00- 120.00	100.00
5.700	5.700 (1.032)	99	429279			34.33- 94.33	64.04
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.814	5.814 (1.053)	119	675238	50.9469	50.947	80.00- 120.00	100.00
5.814	5.814 (1.053)	117	706603			74.90- 134.90	104.65
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.008	6.008 (1.088)	57	1497831	53.3734	53.373	80.00- 120.00	100.00
6.008	6.008 (1.088)	56	489318			1.80- 61.80	32.67
6.008	6.008 (1.088)	41	400603			0.00- 55.83	26.75
116 Benzene					CAS #: 71-43-2		
6.037	6.036 (0.942)	78	1009191	54.5556	54.556	80.00- 120.00	100.00
6.037	6.036 (0.942)	77	245461			0.00- 54.08	24.32
119 tert-Amyl methyl ether					CAS #: 994-05-8		
5.585	6.101 (1.012)	87	73394	16.5045	16.504	80.00- 120.00	100.00
5.664	6.101 (1.026)	73	451			376.57- 436.57	0.61
5.592	6.101 (1.013)	55	600			64.52- 124.52	0.82
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.130	6.129 (0.956)	62	425362	52.6394	52.639	80.00- 120.00	100.00
6.130	6.129 (0.956)	64	143221			2.16- 62.16	33.67
121 Heptane					CAS #: 142-82-5		
6.180	6.180 (0.964)	71	342664	53.5198	53.520	80.00- 120.00	100.00
6.180	6.180 (0.964)	43	484269			110.94- 170.94	141.32
6.180	6.180 (0.964)	57	308725			53.72- 113.72	90.10
125 Trichloroethene					CAS #: 79-01-6		
6.602	6.602 (1.030)	95	446036	51.1022	51.102	80.00- 120.00	100.00
6.602	6.602 (1.030)	130	448815			74.97- 134.97	100.62

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
125 Trichloroethene (continued)							
6.602	6.602 (1.030)	97	283706			35.33- 95.33	63.61
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.214)	83	576598	50.2849	50.285	80.00- 120.00	100.00
6.703	6.703 (1.214)	98	264979			16.41- 76.41	45.96
6.703	6.703 (1.214)	55	427861			40.41- 100.41	74.20
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.839	6.846 (1.067)	63	369911	55.8600	55.860	80.00- 120.00	100.00
6.839	6.846 (1.067)	62	251737			38.78- 98.78	68.05
6.839	6.839 (1.067)	41	184647			20.16- 80.16	49.92
136 1,4-Dioxane					CAS #: 123-91-1		
6.932	6.932 (1.082)	88	217692	54.3299	54.330	80.00- 120.00	100.00
6.932	6.932 (1.082)	58	141376			31.02- 91.02	64.94
6.932	6.932 (1.082)	57	46926			0.00- 51.33	21.56
138 Bromodichloromethane					CAS #: 75-27-4		
7.068	7.068 (1.103)	83	767484	56.0186	56.019	80.00- 120.00	100.00
7.068	7.068 (1.103)	85	495328			34.16- 94.16	64.54
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.448	7.447 (1.162)	75	567165	49.2821	49.282	80.00- 120.00	100.00
7.448	7.447 (1.162)	77	180587			1.57- 61.57	31.84
7.448	7.447 (1.162)	39	246227			13.98- 73.98	43.41
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.555	7.555 (1.179)	58	266958	59.9247	59.925	80.00- 120.00	100.00
7.555	7.555 (1.179)	43	650013			205.93- 265.93	243.49
7.555	7.555 (1.179)	85	124495			18.04- 78.04	46.63
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.199)	91	1265680	54.5624	54.562	80.00- 120.00	100.00
7.684	7.684 (1.199)	92	705388			27.24- 87.24	55.73
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.928	7.927 (0.895)	75	553799	51.3889	51.389	80.00- 120.00	100.00
7.928	7.927 (0.895)	77	171495			1.57- 61.57	30.97
7.920	7.920 (0.894)	39	234678			13.98- 73.98	42.38
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.078	8.078 (0.912)	97	436589	51.3518	51.352	80.00- 120.00	100.00
8.078	8.078 (0.912)	99	267766			31.05- 91.05	61.33
8.078	8.078 (0.912)	83	391582			58.29- 118.29	89.69

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.917)	166	580075	46.4881	46.488	80.00- 120.00	100.00
8.114	8.121 (0.916)	129	439001			42.46- 102.46	75.68
8.121	8.121 (0.917)	131	416172			40.24- 100.24	71.74
158 2-Hexanone					CAS #: 591-78-6		
8.243	8.243 (0.930)	58	355479	59.2491	59.249	80.00- 120.00	100.00
8.243	8.243 (0.930)	43	616440			205.93- 265.93	173.41
8.243	8.243 (0.930)	100	76993			11.40- 71.40	21.66
160 Dibromochloromethane					CAS #: 124-48-1		
8.393	8.393 (0.947)	129	792069	49.9029	49.903	80.00- 120.00	100.00
8.393	8.393 (0.947)	127	615404			47.28- 107.28	77.70
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.508	8.508 (0.960)	107	688288	51.2067	51.207	80.00- 120.00	100.00
8.508	8.508 (0.960)	109	656464			66.45- 126.45	95.38
165 Chlorobenzene					CAS #: 108-90-7		
8.887	8.887 (1.003)	112	966864	49.6827	49.683	80.00- 120.00	100.00
8.887	8.887 (1.003)	114	316415			2.06- 62.06	32.73
8.887	8.887 (1.003)	77	571428			26.47- 86.47	59.10
167 Ethyl Benzene					CAS #: 100-41-4		
8.930	8.930 (1.008)	106	497649	52.5058	52.506	80.00- 120.00	100.00
8.930	8.930 (1.008)	91	1592148			289.94- 349.94	319.93
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	624976	53.1100	53.110	80.00- 120.00	100.00
9.031	9.031 (1.019)	91	1278402			167.83- 227.83	204.55
171 o-Xylene					CAS #: 95-47-6		
9.375	9.374 (1.058)	106	586673	53.7324	53.732	80.00- 120.00	100.00
9.375	9.374 (1.058)	91	1263611			181.11- 241.11	215.39
172 Styrene					CAS #: 100-42-5		
9.396	9.396 (1.061)	104	1023392	54.9503	54.950	80.00- 120.00	100.00
9.389	9.389 (1.060)	78	496521			17.79- 77.79	48.52
174 Bromoform					CAS #: 75-25-2		
9.597	9.596 (1.083)	173	800873	49.9722	49.972	80.00- 120.00	100.00
9.597	9.596 (1.083)	171	411134			21.45- 81.45	51.34
175 Cumene					CAS #: 98-82-8		
9.661	9.661 (1.091)	105	1854836	53.1809	53.181	80.00- 120.00	100.00
9.661	9.661 (1.091)	120	497303			0.00- 57.47	26.81

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
175 Cumene (continued)							
9.661	9.661 (1.091)	51	170465			0.00- 38.62	9.19
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.976	9.976 (1.126)	83	1037630	56.5346	56.535	80.00- 120.00	100.00
9.976	9.976 (1.126)	85	677614			34.77- 94.77	65.30
182 Propylbenzene					CAS #: 103-65-1		
10.005	10.005 (1.129)	91	2354354	56.2280	56.228	80.00- 120.00	100.00
10.005	10.005 (1.129)	120	520975			0.00- 53.65	22.13
10.005	10.005 (1.129)	105	80422			0.00- 33.57	3.42
188 4-Ethyltoluene					CAS #: 622-96-8		
10.098	10.098 (1.140)	120	581747	52.4620	52.462	80.00- 120.00	100.00
10.098	10.098 (1.140)	105	1862420			292.89- 352.89	320.14
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.155	10.155 (1.146)	120	840915	57.7186	57.718	80.00- 120.00	100.00
10.148	10.155 (1.146)	105	1821189			175.25- 235.25	216.57
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.478	10.477 (1.183)	120	686841	52.5136	52.514	80.00- 120.00	100.00
10.478	10.477 (1.183)	105	1502994			183.76- 243.76	218.83
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.771	10.771 (1.216)	146	1106048	52.5720	52.572	80.00- 120.00	100.00
10.771	10.771 (1.216)	148	714073			33.69- 93.69	64.56
10.771	10.771 (1.216)	111	434460			8.12- 68.12	39.28
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.850	10.850 (1.225)	146	1115849	53.6079	53.608	80.00- 120.00	100.00
10.850	10.850 (1.225)	148	726848			33.86- 93.86	65.14
10.850	10.850 (1.225)	111	423455			6.71- 66.71	37.95
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.965	10.965 (1.238)	91	1562274	63.1198	63.120	80.00- 120.00	100.00
10.965	10.972 (1.238)	126	324813			0.00- 51.95	20.79
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.180	11.179 (1.262)	146	1061697	53.2765	53.276	80.00- 120.00	100.00
11.180	11.179 (1.262)	148	677844			33.90- 93.90	63.85
11.180	11.179 (1.262)	111	435162			8.86- 68.86	40.99
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.605	12.605 (1.423)	180	783533	45.2670	45.267	80.00- 120.00	100.00
12.605	12.605 (1.423)	182	745032			65.21- 125.21	95.09

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.691	12.691 (1.433)	225	661805	44.5277	44.528	80.00- 120.00	100.00
12.691	12.691 (1.433)	223	413669			33.22- 93.22	62.51
228 Naphthalene					CAS #: 91-20-3		
12.877	12.877 (1.454)	128	139268	8.42389	8.424	0.00- 30.00	100.00(R)
12.877	12.877 (1.454)	127	18428			0.00- 30.00	13.23

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 14-Oct-2015 18:44

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17101404.d
Lab Smp Id: LCS
Analysis Type: VOA
Quant Type: ISTD
Operator: sab
Method File: /var/chem/msd17.i/14oct15.b/175q0921c.m
Misc Info: 50ppbv(200ppbv)

Calibration Date: 14-OCT-2015
Calibration Time: 13:48
Client Smp ID: LCS
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	91736	55042	128430	93042	1.42
123 1,4-Difluorobenze	354085	212451	495719	365163	3.13
163 Chlorobenzene-d5	343866	206320	481412	346953	0.90

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.52	0.00
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/14oct15.b/17101404.d

Date : 14-OCT-2015 14:27

Client ID: LCS

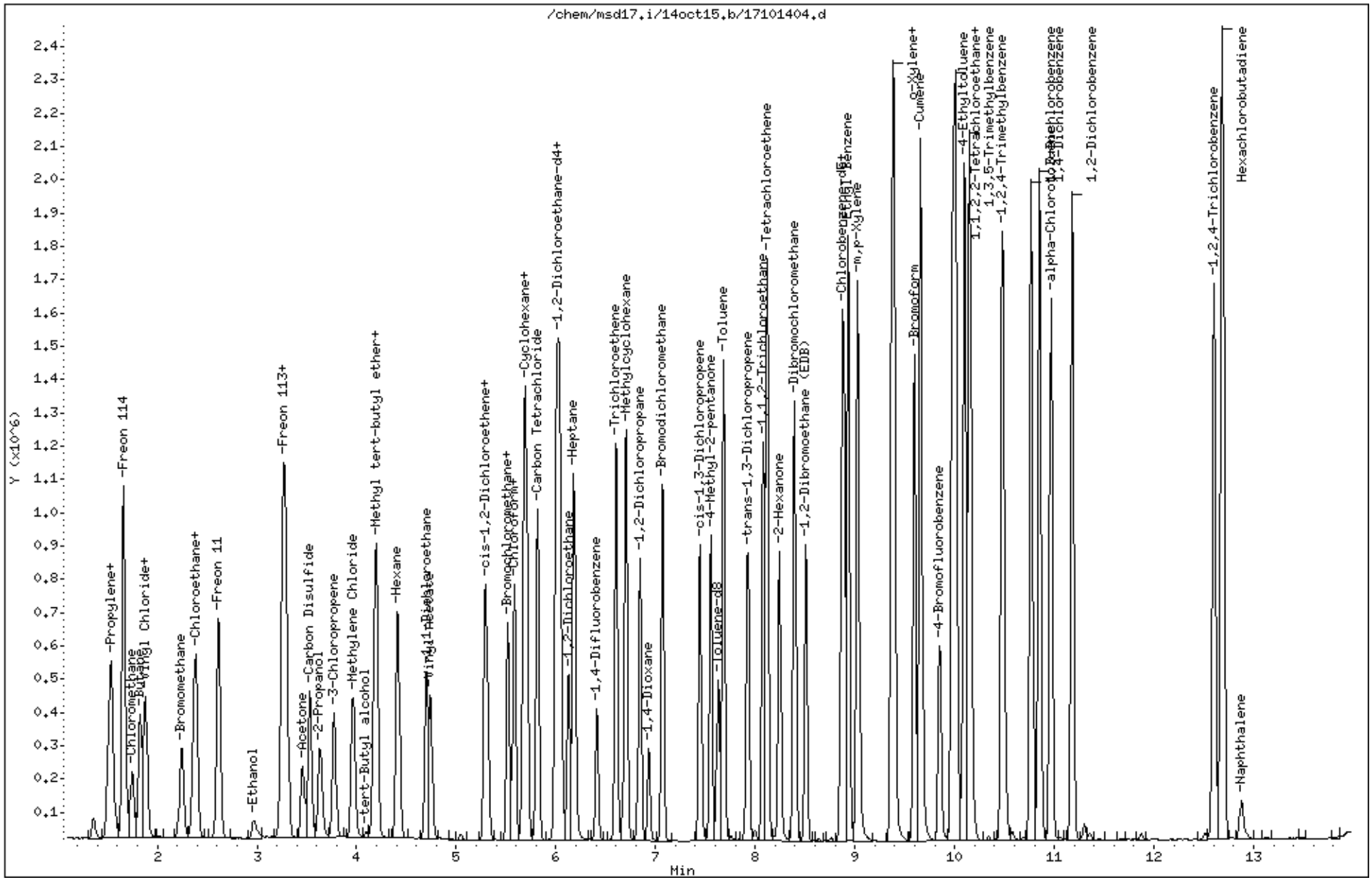
Sample Info: 50ml #2736-270

Column phase: RTX-624

Instrument: msd17.i

Operator: sab

Column diameter: 0.25



eurofins | Air Toxics

Client Sample ID: LCSD

Lab ID#: 1510233-06AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**17101405**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 10/14/15 03:03 PM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	100	70-130
1,1-Dichloroethene	91	70-130
Methylene Chloride	100	70-130
trans-1,2-Dichloroethene	86	70-130
cis-1,2-Dichloroethene	102	70-130
Chloroform	96	70-130
Benzene	109	70-130
1,2-Dichloroethane	106	70-130
Trichloroethene	103	70-130
Toluene	110	70-130
1,1,2-Trichloroethane	100	70-130
Tetrachloroethene	92	70-130
Ethyl Benzene	103	70-130
m,p-Xylene	106	70-130
o-Xylene	107	70-130
1,2,4-Trimethylbenzene	105	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	110	70-130
1,2-Dichloroethane-d4	101	70-130
4-Bromofluorobenzene	99	70-130

Eurofins Air Toxics Inc.

RECOVERY REPORT

Client Name: Client SDG: 14oct15
Sample Matrix: GAS Fraction: VOA
Lab Smp Id: LCSD Client Smp ID: LCSD
Level: LOW Operator: sab
Data Type: MS DATA SampleType: LCSD
SpikeList File: 2926Spectra.spk Quant Type: ISTD
Sublist File: AT12.sub
Method File: /chem/msd17.i/14oct15.b/175q0921c.m
Misc Info: 50ppbv(200ppbv)

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
9 Propylene	50.000	47.819	95.64	70-130
11 Freon 12	50.000	50.286	100.57	70-130
15 Freon 114	50.000	50.740	101.48	70-130
17 Chloromethane	50.000	48.458	96.92	70-130
23 Butane	50.000	44.260	88.52	70-130
25 Vinyl Chloride	50.000	49.898	99.80	70-130
26 1,3-Butadiene	50.000	47.572	95.14	70-130
29 Bromomethane	50.000	53.715	107.43	70-130
30 Chloroethane	50.000	52.417	104.83	70-130
31 Isopentane	50.000	47.360	94.72	70-130
35 Freon 11	50.000	50.221	100.44	70-130
42 Ethanol	50.000	46.507	93.01	70-130
49 Freon 113	50.000	46.320	92.64	70-130
50 1,1-Dichloroethene	50.000	45.720	91.44	70-130
52 Acetone	50.000	46.097	92.19	70-130
56 Carbon Disulfide	50.000	43.355	86.71	70-130
57 2-Propanol	50.000	51.001	102.00	70-130
58 3-Chloropropene	50.000	45.334	90.67	70-130
66 Methylene Chloride	50.000	50.195	100.39	70-130
72 Methyl tert-butyl	50.000	44.044	88.09	70-130
73 trans-1,2-Dichloro	50.000	43.192	86.38	70-130
78 Hexane	50.000	46.656	93.31	70-130
82 1,1-Dichloroethane	50.000	50.474	100.95	70-130
86 Vinyl Acetate	50.000	46.668	93.34	70-130
91 cis-1,2-Dichloroet	50.000	51.173	102.35	70-130
92 2-Butanone	50.000	50.201	100.40	70-130
99 Tetrahydrofuran	50.000	44.245	88.49	70-130
100 Chloroform	50.000	48.253	96.51	70-130
103 1,1,1-Trichloroeth	50.000	47.885	95.77	70-130
106 Carbon Tetrachlori	50.000	49.540	99.08	70-130
102 Cyclohexane	50.000	46.810	93.62	70-130
113 2,2,4-Trimethylpen	50.000	50.130	100.26	70-130
116 Benzene	50.000	54.388	108.78	70-130

SPIKE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
120 1,2-Dichloroethane	50.000	52.787	105.57	70-130
121 Heptane	50.000	55.689	111.38	70-130
125 Trichloroethene	50.000	51.406	102.81	70-130
127 Methylcyclohexane	50.000	47.778	95.56	70-130
132 1,2-Dichloropropan	50.000	56.532	113.06	70-130
136 1,4-Dioxane	50.000	55.625	111.25	70-130
138 Bromodichlorometha	50.000	56.021	112.04	70-130
144 cis-1,3-Dichloropr	50.000	49.237	98.47	70-130
145 4-Methyl-2-pentano	50.000	61.668	123.34	70-130
147 Toluene	50.000	54.938	109.88	70-130
150 trans-1,3-Dichloro	50.000	50.003	100.01	70-130
155 1,1,2-Trichloroeth	50.000	49.819	99.64	70-130
156 Tetrachloroethene	50.000	45.928	91.86	70-130
158 2-Hexanone	50.000	59.186	118.37	70-130
160 Dibromochlorometha	50.000	49.207	98.41	70-130
161 1,2-Dibromoethane	50.000	50.290	100.58	70-130
165 Chlorobenzene	50.000	49.355	98.71	70-130
167 Ethyl Benzene	50.000	51.717	103.43	70-130
169 m,p-Xylene	50.000	52.774	105.55	70-130
171 o-Xylene	50.000	53.636	107.27	70-130
172 Styrene	50.000	53.976	107.95	70-130
174 Bromoform	50.000	49.460	98.92	70-130
175 Cumene	50.000	52.363	104.73	70-130
181 1,1,2,2-Tetrachlor	50.000	55.396	110.79	70-130
182 Propylbenzene	50.000	55.585	111.17	70-130
188 4-Ethyltoluene	50.000	51.548	103.10	70-130
190 1,3,5-Trimethylben	50.000	57.396	114.79	70-130
196 1,2,4-Trimethylben	50.000	52.594	105.19	70-130
208 1,3-Dichlorobenzen	50.000	52.567	105.13	70-130
209 1,4-Dichlorobenzen	50.000	53.831	107.66	70-130
212 alpha-Chlorotoluen	50.000	61.822	123.64	70-130
214 1,2-Dichlorobenzen	50.000	52.718	105.44	70-130
226 1,2,4-Trichloroben	50.000	50.149	100.30	70-130
227 Hexachlorobutadien	50.000	48.994	97.99	70-130
228 Naphthalene	5.000	9.657	193.13*	60-140

SURROGATE COMPOUND	CONC ADDED PPBV	CONC RECOVERED PPBV	% RECOVERED	LIMITS
$ 117 1,2-Dichloroethane	25.000	25.167	100.67	70-130
$ 146 Toluene-d8	25.000	27.636	110.54	70-130
$ 177 4-Bromofluorobenze	25.000	24.745	98.98	70-130

Eurofins Air Toxics Inc.

EPA TO-15/MODIFIED EPA TO14A

Data file : /var/chem/msd17.i/14oct15.b/17101405.d
Lab Smp Id: LCSD Client Smp ID: LCSD
Inj Date : 14-OCT-2015 15:03
Operator : sab Inst ID: msd17.i
Smp Info : 50ml #2736-270
Misc Info : 50ppbv(200ppbv)
Comment : STANDARD LEVEL GC/MS
Method : /chem/msd17.i/14oct15.b/175q0921c.m
Meth Date : 14-Oct-2015 15:31 sblack Quant Type: ISTD
Cal Date : 24-SEP-2015 16:22 Cal File: 17092416.d
Als bottle: 14 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: AT12.sub
Target Version: 3.50 Sample Matrix: AIR
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
* 98 Bromochloromethane					CAS #: 74-97-5		
5.521	5.521 (1.000)	130	98572	25.0000		80.00- 120.00	100.00
5.521	5.521 (1.000)	128	74567			46.54- 106.54	75.65
5.521	5.521 (1.000)	49	111671			83.83- 143.83	113.29
* 123 1,4-Difluorobenzene					CAS #: 540-36-3		
6.409	6.409 (1.000)	114	365629	25.0000		80.00- 120.00	100.00
6.409	6.409 (1.000)	88	57060			0.00- 44.86	15.61
* 163 Chlorobenzene-d5					CAS #: 3114-55-4		
8.859	8.859 (1.000)	117	356567	25.0000		80.00- 120.00	100.00
8.859	8.859 (1.000)	82	189030			23.93- 83.93	53.01
$ 117 1,2-Dichloroethane-d4					CAS #: 17060-07-0		
6.058	6.058 (1.097)	65	133676	25.1669	25.167	80.00- 120.00	100.00
6.058	6.058 (1.097)	67	72565			25.51- 85.51	54.28

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
$ 146 Toluene-d8					CAS #: 2037-26-5		
7.627	7.627 (1.190)	98	416607	27.6357	27.636	80.00- 120.00	100.00
7.627	7.627 (1.190)	70	43261			0.00- 40.39	10.38
7.627	7.627 (1.190)	100	262644			33.97- 93.97	63.04
$ 177 4-Bromofluorobenzene					CAS #: 460-00-4		
9.854	9.854 (1.112)	174	225276	24.7448	24.745	80.00- 120.00	100.00
9.847	9.847 (1.112)	95	258867			79.64- 139.64	114.91
9.854	9.854 (1.112)	176	213087			65.80- 125.80	94.59
9 Propylene					CAS #: 115-07-1		
1.502	1.509 (0.272)	41	187022	47.8194	47.819	80.00- 120.00	100.00
1.502	1.509 (0.272)	42	122895			37.10- 97.10	65.71
1.502	1.509 (0.272)	39	140953			44.98- 104.98	75.37
11 Freon 12					CAS #: 75-71-8		
1.538	1.545 (0.279)	85	797798	50.2862	50.286	80.00- 120.00	100.00
1.538	1.545 (0.279)	87	261654			2.33- 62.33	32.80
15 Freon 114					CAS #: 76-14-2		
1.660	1.660 (0.301)	135	584322	50.7401	50.740	80.00- 120.00	100.00
1.660	1.660 (0.301)	137	182466			2.02- 62.02	31.23
17 Chloromethane					CAS #: 74-87-3		
1.746	1.746 (0.316)	50	269010	48.4582	48.458	80.00- 120.00	100.00
1.746	1.753 (0.316)	52	89061			2.35- 62.35	33.11
23 Butane					CAS #: 106-97-8		
1.825	1.824 (0.330)	58	53888	44.2605	44.260	80.00- 120.00	100.00
1.825	1.824 (0.330)	43	387215			657.81- 717.81	718.56
25 Vinyl Chloride					CAS #: 75-01-4		
1.861	1.860 (0.337)	62	313073	49.8975	49.898	80.00- 120.00	100.00
1.861	1.860 (0.337)	64	102633			2.69- 62.69	32.78
26 1,3-Butadiene					CAS #: 106-99-0		
1.882	1.889 (0.341)	54	207092	47.5716	47.572	80.00- 120.00	100.00
1.882	1.889 (0.341)	39	196235			63.95- 123.95	94.76
29 Bromomethane					CAS #: 74-83-9		
2.240	2.247 (0.406)	94	298516	53.7149	53.715	80.00- 120.00	100.00
2.240	2.247 (0.406)	96	285295			63.69- 123.69	95.57
30 Chloroethane					CAS #: 75-00-3		
2.362	2.362 (0.428)	64	166720	52.4170	52.417	80.00- 120.00	100.00
2.362	2.362 (0.428)	66	51101			1.86- 61.86	30.65

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	CONCENTRATIONS FINAL (PPBV)	TARGET RANGE	RATIO
30 Chloroethane (continued)							
2.362	2.362 (0.428)	49	43990			0.00- 55.51	26.39
31 Isopentane					CAS #: 78-78-4		
2.383	2.383 (0.432)	43	292193	47.3597	47.360	80.00- 120.00	100.00
2.383	2.383 (0.432)	57	220395			44.35- 104.35	75.43
35 Freon 11					CAS #: 75-69-4		
2.613	2.612 (0.473)	101	820429	50.2208	50.221	80.00- 120.00	100.00
2.613	2.612 (0.473)	103	528626			35.20- 95.20	64.43
42 Ethanol					CAS #: 64-17-5		
2.971	2.971 (0.538)	45	101727	46.5070	46.507	80.00- 120.00	100.00
2.971	2.971 (0.538)	43	25651			0.00- 50.36	25.22
2.971	2.971 (0.538)	46	37706			10.31- 70.31	37.07
49 Freon 113					CAS #: 76-13-1		
3.264	3.264 (0.591)	151	539138	46.3195	46.320	80.00- 120.00	100.00
3.264	3.264 (0.591)	153	338483			33.72- 93.72	62.78
3.264	3.264 (0.591)	101	695778			95.23- 155.23	129.05
50 1,1-Dichloroethene					CAS #: 75-35-4		
3.293	3.293 (0.596)	98	196186	45.7202	45.720	80.00- 120.00	100.00
3.293	3.293 (0.596)	96	314598			130.14- 190.14	160.36
3.293	3.293 (0.596)	61	492314			218.16- 278.16	250.94
52 Acetone					CAS #: 67-64-1		
3.458	3.458 (0.626)	58	136659	46.0975	46.097	80.00- 120.00	100.00
3.458	3.458 (0.626)	43	423933			266.49- 326.49	310.21
56 Carbon Disulfide					CAS #: 75-15-0		
3.530	3.529 (0.639)	76	859122	43.3554	43.355	80.00- 120.00	100.00
57 2-Propanol					CAS #: 67-63-0		
3.630	3.637 (0.657)	45	469030	51.0014	51.001	80.00- 120.00	100.00
3.630	3.637 (0.657)	43	110736			0.00- 50.02	23.61
3.630	3.637 (0.657)	59	20452			0.00- 34.32	4.36
58 3-Chloropropene					CAS #: 107-05-1		
3.773	3.773 (0.683)	76	144828	45.3336	45.334	80.00- 120.00	100.00
3.773	3.773 (0.683)	41	302411			185.01- 245.01	208.81
66 Methylene Chloride					CAS #: 75-09-2		
3.959	3.966 (0.717)	49	348812	50.1953	50.195	80.00- 120.00	100.00
3.966	3.966 (0.718)	84	298375			59.02- 119.02	85.54
3.959	3.966 (0.717)	51	112738			1.78- 61.78	32.32

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
72 Methyl tert-butyl ether					CAS #: 1634-04-4		
4.181	4.181 (0.757)	73	792796	44.0437	44.044	80.00- 120.00	100.00
4.181	4.181 (0.757)	57	174117			0.00- 51.46	21.96
4.181	4.181 (0.757)	41	176019			0.00- 49.34	22.20
73 trans-1,2-Dichloroethene					CAS #: 156-60-5		
4.203	4.203 (0.761)	98	184663	43.1922	43.192	80.00- 120.00	100.00
4.203	4.203 (0.761)	61	397756			184.16- 244.16	215.40
4.203	4.203 (0.761)	96	287289			127.84- 187.84	155.57
78 Hexane					CAS #: 110-54-3		
4.411	4.410 (0.799)	57	453679	46.6559	46.656	80.00- 120.00	100.00
4.411	4.410 (0.799)	43	260582			27.64- 87.64	57.44
4.418	4.410 (0.800)	86	76015			0.00- 46.92	16.76
82 1,1-Dichloroethane					CAS #: 75-34-3		
4.697	4.697 (0.851)	63	583807	50.4736	50.474	80.00- 120.00	100.00
4.697	4.697 (0.851)	65	184489			2.04- 62.04	31.60
83 Isopropyl ether					CAS #: 108-20-3		
4.181	4.690 (0.757)	45	40160	2.13512	2.135	80.00- 120.00	100.00
4.418	4.690 (0.800)	87	5531			1.31- 61.31	13.77
4.203	4.690 (0.761)	59	15597			0.00- 42.69	38.84
86 Vinyl Acetate					CAS #: 108-05-4		
4.747	4.747 (0.860)	86	82362	46.6677	46.668	80.00- 120.00	100.00
4.740	4.747 (0.859)	43	740148			891.41- 951.41	898.65
91 cis-1,2-Dichloroethene					CAS #: 156-59-2		
5.284	5.284 (0.957)	98	235942	51.1735	51.173	80.00- 120.00	100.00
5.284	5.284 (0.957)	96	370288			124.38- 184.38	156.94
5.284	5.284 (0.957)	61	463838			162.07- 222.07	196.59
92 2-Butanone					CAS #: 78-93-3		
5.313	5.313 (0.962)	72	163643	50.2013	50.201	80.00- 120.00	100.00
5.313	5.313 (0.962)	43	544209			306.33- 366.33	332.56
5.313	5.313 (0.962)	57	47579			0.00- 59.26	29.07
99 Tetrahydrofuran					CAS #: 109-99-9		
5.521	5.521 (1.000)	42	280953	44.2448	44.245	80.00- 120.00	100.00
5.521	5.521 (1.000)	71	137767			17.72- 77.72	49.04
5.521	5.521 (1.000)	72	144097			20.99- 80.99	51.29
100 Chloroform					CAS #: 67-66-3		
5.578	5.585 (1.010)	83	684059	48.2535	48.253	80.00- 120.00	100.00
5.578	5.585 (1.010)	85	445485			34.67- 94.67	65.12

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
102 Cyclohexane					CAS #: 110-82-7		
5.678	5.678 (1.029)	84	412070	46.8098	46.810	80.00- 120.00	100.00
5.678	5.678 (1.029)	56	448100			77.09- 137.09	108.74
5.678	5.678 (1.029)	41	242293			25.87- 85.87	58.80
103 1,1,1-Trichloroethane					CAS #: 71-55-6		
5.700	5.700 (1.032)	97	672945	47.8848	47.885	80.00- 120.00	100.00
5.700	5.700 (1.032)	99	434264			34.33- 94.33	64.53
106 Carbon Tetrachloride					CAS #: 56-23-5		
5.815	5.814 (1.053)	119	695620	49.5403	49.540	80.00- 120.00	100.00
5.815	5.814 (1.053)	117	723174			74.90- 134.90	103.96
113 2,2,4-Trimethylpentane					CAS #: 540-84-1		
6.008	6.008 (1.088)	57	1490412	50.1296	50.130	80.00- 120.00	100.00
6.008	6.008 (1.088)	56	488456			1.80- 61.80	32.77
6.008	6.008 (1.088)	41	395243			0.00- 55.83	26.52
116 Benzene					CAS #: 71-43-2		
6.037	6.036 (0.942)	78	1007383	54.3885	54.388	80.00- 120.00	100.00
6.037	6.036 (0.942)	77	247048			0.00- 54.08	24.52
119 tert-Amyl methyl ether					CAS #: 994-05-8		
5.585	6.101 (1.012)	87	72003	15.2834	15.283	80.00- 120.00	100.00
5.578	6.101 (1.010)	73	232			376.57- 436.57	0.32
5.678	6.101 (1.029)	55	166040			64.52- 124.52	230.60
120 1,2-Dichloroethane					CAS #: 107-06-2		
6.130	6.129 (0.956)	62	427102	52.7874	52.787	80.00- 120.00	100.00
6.130	6.129 (0.956)	64	140270			2.16- 62.16	32.84
121 Heptane					CAS #: 142-82-5		
6.180	6.180 (0.964)	71	357009	55.6892	55.689	80.00- 120.00	100.00
6.180	6.180 (0.964)	43	481709			110.94- 170.94	134.93
6.180	6.180 (0.964)	57	302643			53.72- 113.72	84.77
125 Trichloroethene					CAS #: 79-01-6		
6.602	6.602 (1.030)	95	449261	51.4061	51.406	80.00- 120.00	100.00
6.602	6.602 (1.030)	130	454789			74.97- 134.97	101.23
6.602	6.602 (1.030)	97	293596			35.33- 95.33	65.35
127 Methylcyclohexane					CAS #: 108-87-2		
6.703	6.703 (1.214)	83	580418	47.7784	47.778	80.00- 120.00	100.00
6.703	6.703 (1.214)	98	269380			16.41- 76.41	46.41
6.703	6.703 (1.214)	55	422921			40.41- 100.41	72.86

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
132 1,2-Dichloropropane					CAS #: 78-87-5		
6.839	6.846 (1.067)	63	374839	56.5320	56.532	80.00- 120.00	100.00
6.839	6.846 (1.067)	62	262319			38.78- 98.78	69.98
6.839	6.839 (1.067)	41	185312			20.16- 80.16	49.44
136 1,4-Dioxane					CAS #: 123-91-1		
6.932	6.932 (1.082)	88	223165	55.6249	55.625	80.00- 120.00	100.00
6.932	6.932 (1.082)	58	142776			31.02- 91.02	63.98
6.932	6.932 (1.082)	57	50945			0.00- 51.33	22.83
138 Bromodichloromethane					CAS #: 75-27-4		
7.068	7.068 (1.103)	83	768495	56.0209	56.021	80.00- 120.00	100.00
7.068	7.068 (1.103)	85	499350			34.16- 94.16	64.98
144 cis-1,3-Dichloropropene					CAS #: 10061-01-5		
7.448	7.447 (1.162)	75	567370	49.2370	49.237	80.00- 120.00	100.00
7.448	7.447 (1.162)	77	183291			1.57- 61.57	32.31
7.448	7.447 (1.162)	39	246458			13.98- 73.98	43.44
145 4-Methyl-2-pentanone					CAS #: 108-10-1		
7.555	7.555 (1.179)	58	275077	61.6685	61.668	80.00- 120.00	100.00
7.555	7.555 (1.179)	43	653734			205.93- 265.93	237.65
7.555	7.555 (1.179)	85	128160			18.04- 78.04	46.59
147 Toluene					CAS #: 108-88-3		
7.684	7.684 (1.199)	91	1276027	54.9384	54.938	80.00- 120.00	100.00
7.684	7.684 (1.199)	92	724205			27.24- 87.24	56.75
150 trans-1,3-Dichloropropene					CAS #: 10061-02-6		
7.928	7.927 (0.895)	75	553796	50.0031	50.003	80.00- 120.00	100.00
7.928	7.927 (0.895)	77	178610			1.57- 61.57	32.25
7.920	7.920 (0.894)	39	236214			13.98- 73.98	42.65
155 1,1,2-Trichloroethane					CAS #: 79-00-5		
8.078	8.078 (0.912)	97	435291	49.8187	49.819	80.00- 120.00	100.00
8.078	8.078 (0.912)	99	269920			31.05- 91.05	62.01
8.078	8.078 (0.912)	83	391078			58.29- 118.29	89.84
156 Tetrachloroethene					CAS #: 127-18-4		
8.121	8.121 (0.917)	166	588964	45.9278	45.928	80.00- 120.00	100.00
8.114	8.121 (0.916)	129	447037			42.46- 102.46	75.90
8.114	8.121 (0.916)	131	425235			40.24- 100.24	72.20
158 2-Hexanone					CAS #: 591-78-6		
8.243	8.243 (0.930)	58	364937	59.1855	59.186	80.00- 120.00	100.00
8.243	8.243 (0.930)	43	626303			205.93- 265.93	171.62

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
158 2-Hexanone (continued)							
8.243	8.243 (0.930)	100	77669			11.40- 71.40	21.28
160 Dibromochloromethane					CAS #: 124-48-1		
8.393	8.393 (0.947)	129	802669	49.2072	49.207	80.00- 120.00	100.00
8.393	8.393 (0.947)	127	622902			47.28- 107.28	77.60
161 1,2-Dibromoethane (EDB)					CAS #: 106-93-4		
8.508	8.508 (0.960)	107	694703	50.2904	50.290	80.00- 120.00	100.00
8.508	8.508 (0.960)	109	656021			66.45- 126.45	94.43
165 Chlorobenzene					CAS #: 108-90-7		
8.887	8.887 (1.003)	112	987101	49.3550	49.355	80.00- 120.00	100.00
8.887	8.887 (1.003)	114	313268			2.06- 62.06	31.74
8.887	8.887 (1.003)	77	576221			26.47- 86.47	58.38
167 Ethyl Benzene					CAS #: 100-41-4		
8.930	8.930 (1.008)	106	503754	51.7169	51.717	80.00- 120.00	100.00
8.930	8.930 (1.008)	91	1616227			289.94- 349.94	320.84
169 m,p-Xylene					CAS #: 108-38-3		
9.031	9.031 (1.019)	106	638230	52.7739	52.774	80.00- 120.00	100.00
9.031	9.031 (1.019)	91	1312639			167.83- 227.83	205.67
171 o-Xylene					CAS #: 95-47-6		
9.375	9.374 (1.058)	106	601852	53.6364	53.636	80.00- 120.00	100.00
9.375	9.374 (1.058)	91	1294037			181.11- 241.11	215.01
172 Styrene					CAS #: 100-42-5		
9.396	9.396 (1.061)	104	1033094	53.9756	53.976	80.00- 120.00	100.00
9.389	9.389 (1.060)	78	497105			17.79- 77.79	48.12
174 Bromoform					CAS #: 75-25-2		
9.597	9.596 (1.083)	173	814638	49.4605	49.460	80.00- 120.00	100.00
9.597	9.596 (1.083)	171	414000			21.45- 81.45	50.82
175 Cumene					CAS #: 98-82-8		
9.661	9.661 (1.091)	105	1876911	52.3628	52.363	80.00- 120.00	100.00
9.661	9.661 (1.091)	120	501379			0.00- 57.47	26.71
9.661	9.661 (1.091)	51	168876			0.00- 38.62	9.00
181 1,1,2,2-Tetrachloroethane					CAS #: 79-34-5		
9.976	9.976 (1.126)	83	1044897	55.3956	55.396	80.00- 120.00	100.00
9.976	9.976 (1.126)	85	679576			34.77- 94.77	65.04
182 Propylbenzene					CAS #: 103-65-1		
10.005	10.005 (1.129)	91	2391908	55.5846	55.585	80.00- 120.00	100.00

RT	EXP RT (REL RT)	MASS	RESPONSE	CONCENTRATIONS ON-COL (PPBV)	FINAL (PPBV)	TARGET RANGE	RATIO
182 Propylbenzene (continued)							
10.005	10.005 (1.129)	120	531547			0.00- 53.65	22.22
10.005	10.005 (1.129)	105	85843			0.00- 33.57	3.59
188 4-Ethyltoluene					CAS #: 622-96-8		
10.105	10.098 (1.141)	120	587452	51.5481	51.548	80.00- 120.00	100.00
10.098	10.098 (1.140)	105	1898909			292.89- 352.89	323.24
190 1,3,5-Trimethylbenzene					CAS #: 108-67-8		
10.148	10.155 (1.146)	120	859388	57.3961	57.396	80.00- 120.00	100.00
10.148	10.155 (1.146)	105	1868944			175.25- 235.25	217.47
196 1,2,4-Trimethylbenzene					CAS #: 95-63-6		
10.478	10.477 (1.183)	120	706958	52.5943	52.594	80.00- 120.00	100.00
10.478	10.477 (1.183)	105	1567808			183.76- 243.76	221.77
208 1,3-Dichlorobenzene					CAS #: 541-73-1		
10.771	10.771 (1.216)	146	1136594	52.5672	52.567	80.00- 120.00	100.00
10.771	10.771 (1.216)	148	719515			33.69- 93.69	63.30
10.771	10.771 (1.216)	111	459564			8.12- 68.12	40.43
209 1,4-Dichlorobenzene					CAS #: 106-46-7		
10.850	10.850 (1.225)	146	1151539	53.8309	53.831	80.00- 120.00	100.00
10.850	10.850 (1.225)	148	730498			33.86- 93.86	63.44
10.850	10.850 (1.225)	111	439889			6.71- 66.71	38.20
212 alpha-Chlorotoluene					CAS #: 100-44-7		
10.965	10.965 (1.238)	91	1572562	61.8224	61.822	80.00- 120.00	100.00
10.965	10.972 (1.238)	126	336065			0.00- 51.95	21.37
214 1,2-Dichlorobenzene					CAS #: 95-50-1		
11.180	11.179 (1.262)	146	1079691	52.7186	52.718	80.00- 120.00	100.00
11.180	11.179 (1.262)	148	696720			33.90- 93.90	64.53
11.180	11.179 (1.262)	111	438431			8.86- 68.86	40.61
226 1,2,4-Trichlorobenzene					CAS #: 120-82-1		
12.605	12.605 (1.423)	180	892095	50.1493	50.149	80.00- 120.00	100.00
12.605	12.605 (1.423)	182	852880			65.21- 125.21	95.60
227 Hexachlorobutadiene					CAS #: 87-68-3		
12.691	12.691 (1.433)	225	748370	48.9944	48.994	80.00- 120.00	100.00
12.691	12.691 (1.433)	223	465666			33.22- 93.22	62.22
228 Naphthalene					CAS #: 91-20-3		
12.877	12.877 (1.454)	128	164074	9.65674	9.657	0.00- 30.00	100.00(R)
12.877	12.877 (1.454)	127	21802			0.00- 30.00	13.29

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Eurofins Air Toxics Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd17.i
Lab File ID: 17101405.d
Lab Smp Id: LCSD
Analysis Type: VOA
Quant Type: ISTD
Operator: sab
Method File: /chem/msd17.i/14oct15.b/175q0921c.m
Misc Info: 50ppbv(200ppbv)

Calibration Date: 14-OCT-2015
Calibration Time: 13:48
Client Smp ID: LCSD
Level: LOW
Sample Type: AIR

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	91736	55042	128430	98572	7.45
123 1,4-Difluorobenze	354085	212451	495719	365629	3.26
163 Chlorobenzene-d5	343866	206320	481412	356567	3.69

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
98 Bromochloromethan	5.52	5.19	5.85	5.52	0.00
123 1,4-Difluorobenze	6.41	6.08	6.74	6.41	0.00
163 Chlorobenzene-d5	8.86	8.53	9.19	8.86	0.00

AREA UPPER LIMIT = + 40% of internal standard area.
AREA LOWER LIMIT = - 40% of internal standard area.
RT UPPER LIMIT = + 0.33 minutes of internal standard RT.
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Data File: /chem/msd17.i/14oct15.b/17101405.d

Date : 14-OCT-2015 15:03

Client ID: LCSD

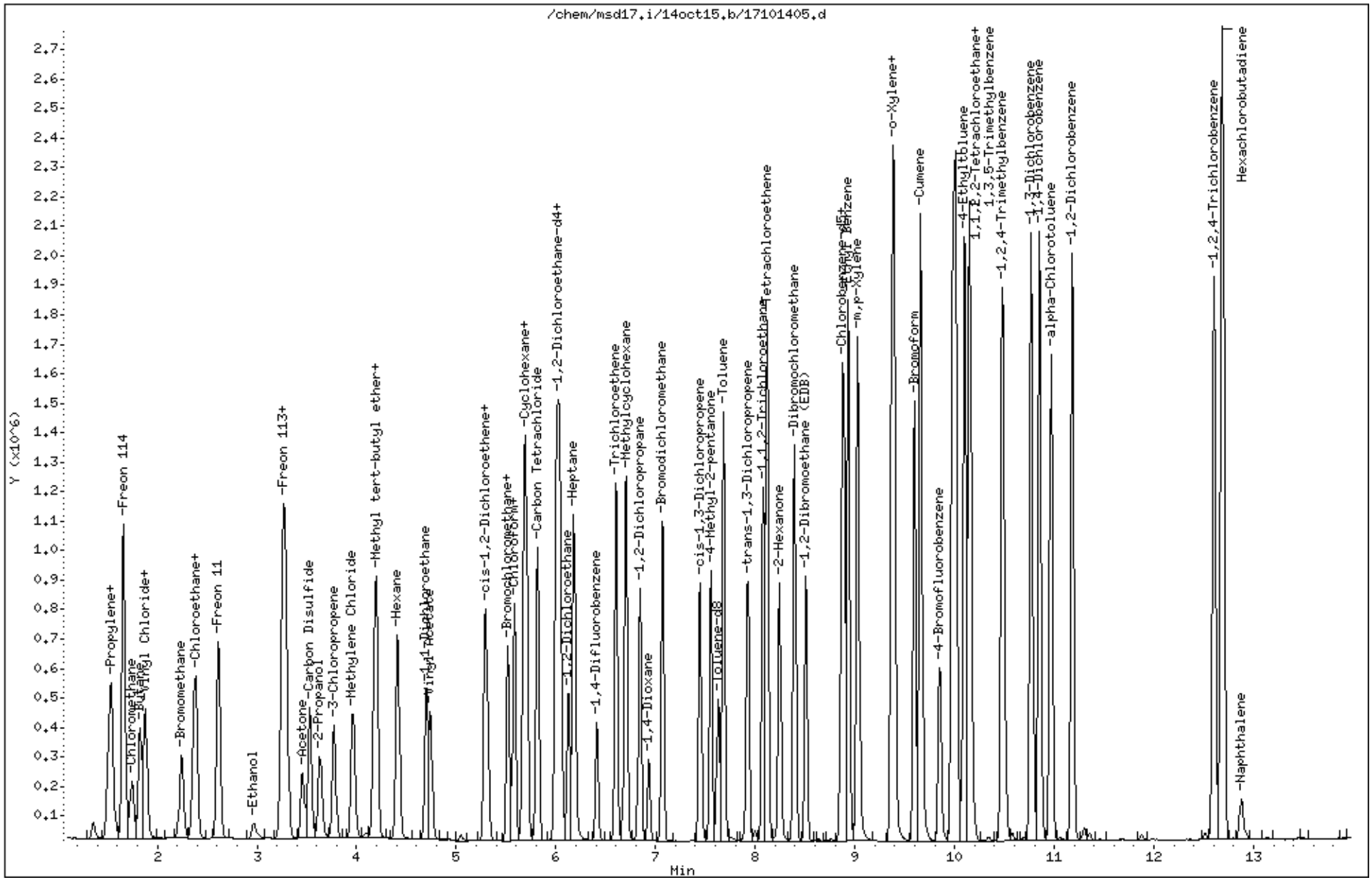
Sample Info: 50ml #2736-270

Column phase: RTX-624

Instrument: msd17.i

Operator: sab

Column diameter: 0.25



MSD17

BFB verification of 176/174 ratio:	(68365/71013)*100=96.27		
	2736-294	Exp. Date:	1/7/2016
BCM	91,736		
1,4-DFB	354,085		
CB-d5	343,866		

Method TO-15/TO-14			
SOP# 6			
Vacuum:	na		
Please check all standards			
Surrogate#	2736-294	Exp. Date:	1/7/2016
Surrogate#	NA	Exp. Date:	NA

Verified CCV vs ICAL mid-point (-40%): sab

Method: 175Q0921C.m

Use	File #	Enter/Scan Sample IDs	Canister#	Cart Pos.	Pressure	Amount	DF	Verify Load	Loaded By	Date Analyzed	Time Analyzed	Review Init	Comments
√	17101401	BFB Tune Check	2736-191	12	36ng	1.0mL	1.00	sab	sab	10/14/15	1135	sab	
X	17101402	CCV	2759-1	3	50ppbv(200ppbv)	50mL	1.00	sab	sab	10/14/15	1209	sab	Exp. 11/20/15; Naph >40%
√	17101403	CCV	2736-289	3	50ppbv(200ppbv)	50mL	1.00	sab	sab	10/14/15	1348	sab	Exp. 11/20/15; No Naph analysis;
√	17101404	LCS	2736-270	14	50ppbv(200ppbv)	50mL	1.00	sab	sab	10/14/15	1427	sab	Exp. 10/30/15; Naph expired CAR#F9A2A2185;
√	17101405	LCSD	2736-270	14	50ppbv(200ppbv)	50mL	1.00	sab	sab	10/14/15	1503	sab	Exp. 10/30/15
X	17101406	Lab Blank	403	12	humid	200ml	1.00	sab	sab	10/14/15	1539	sab	
X	17101407	Lab Blank	403	12	humid	200ml	1.00	sab	sab	10/14/15	1623	sab	\\atlfs1\Shared_Screeningseq\MSD1
√	17101408	Lab Blank	403	12	humid	200ml	1.00	sn	sab	10/14/15	1700	sn	
√	17101409	1510233-03A	37363	1	7.0 Hg->15 psi	200ml	2.64	sn	sn	10/14/15	1819	sn	
√	17101410	1510193-01A	n2180	2	3.9 Hg->15.2 psi	200ml	2.34	sn	sn	10/14/15	1855	sn	
√	17101411	1510233-02A	36508	3	7.5 Hg->15 psi	200ml	2.69	sn	sn	10/14/15	1918	sn	
√	17101412	1510193-02A	37732	4	3.9 Hg->14.4 psi	200ml	2.28	sn	sn	10/14/15	1954	sn	
√	17101413	1510233-01A	n2140	5	7.0 Hg->15 psi	200ml	2.64	sn	sn	10/14/15	2017	sn	
	17101414	1510193-03A	1349	6	2.2 Hg->15.1 psi	200ml	2.19		sn	10/14/15			
	17101415	1510193-04A	IL1799	7	1.2 Hg->14.6 psi	200ml	2.08		sn	10/14/15			
	17101416	1510201-01A	36567	8	5.3 Hg->14.9 psi	200ml	2.44		sn	10/14/15			
	17101417	1510201-02A	22959	9	4.5 Hg->14.8 psi	200ml	2.36		sn	10/14/15			
	17101418	1510193-02A	37732	4	3.9 Hg->14.4 psi	200ml	2.28		sn	10/14/15			confirmation run for field dup.
	17101419	1510201-03A	36565	1	2.4 Hg->15.2 psi	100ml	4.42		sn	10/14/15			DIL TC.
	17101420	1510201-04A	37431	2	4.7 Hg->15 psi	200ml	2.40		sn	10/14/15			
	17101421	1510201-05A	36465	3	4.3 Hg->15 psi	200ml	2.36		sn	10/14/15			
	17101422	1510201-06A	37369	5	4.1 Hg->14.7 psi	200ml	2.32		sn	10/14/15			
	17101423	1510201-07A	37777	10	4.9 Hg->15 psi	200ml	2.41		sn	10/14/15			
	17101424	1510201-09A	34093	11	5.5 Hg->15 psi	200ml	2.47		sn	10/14/15			

10/14/15

10/14/15

Eurofins Air Toxics Inc.

Data file : /var/chem/msd17.i/21sep15a.b/17092117.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 21-SEP-2015 19:45
Operator : gh Inst ID: msd17.i
Smp Info : 1.0ml #2736-191; BFB Tune Check
Misc Info : 36ng
Comment :
Method : /var/chem/msd17.i/21sep15a.b/bfb30.m
Meth Date : 21-Sep-2015 20:08 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.847	9.840	0.007	95	133394			100.00- 100.00	100.00
9.847	9.840	0.007	50	22984			8.00- 40.00	17.23
9.847	9.840	0.007	75	65309			30.00- 66.00	48.96
9.847	9.840	0.007	96	8927			5.00- 9.00	6.69
9.847	9.840	0.007	173	1358			0.00- 1.99	1.17
9.847	9.840	0.007	174	116408			50.00- 120.00	87.27
9.847	9.840	0.007	175	8713			4.00- 9.00	7.48
9.847	9.840	0.007	176	111461			93.00- 101.00	95.75
9.847	9.840	0.007	177	7739			5.00- 9.00	6.94

Data File: /var/chem/msd17.i/21sep15a.b/17092117.d

Date : 21-SEP-2015 19:45

Client ID: BFB

Instrument: msd17.i

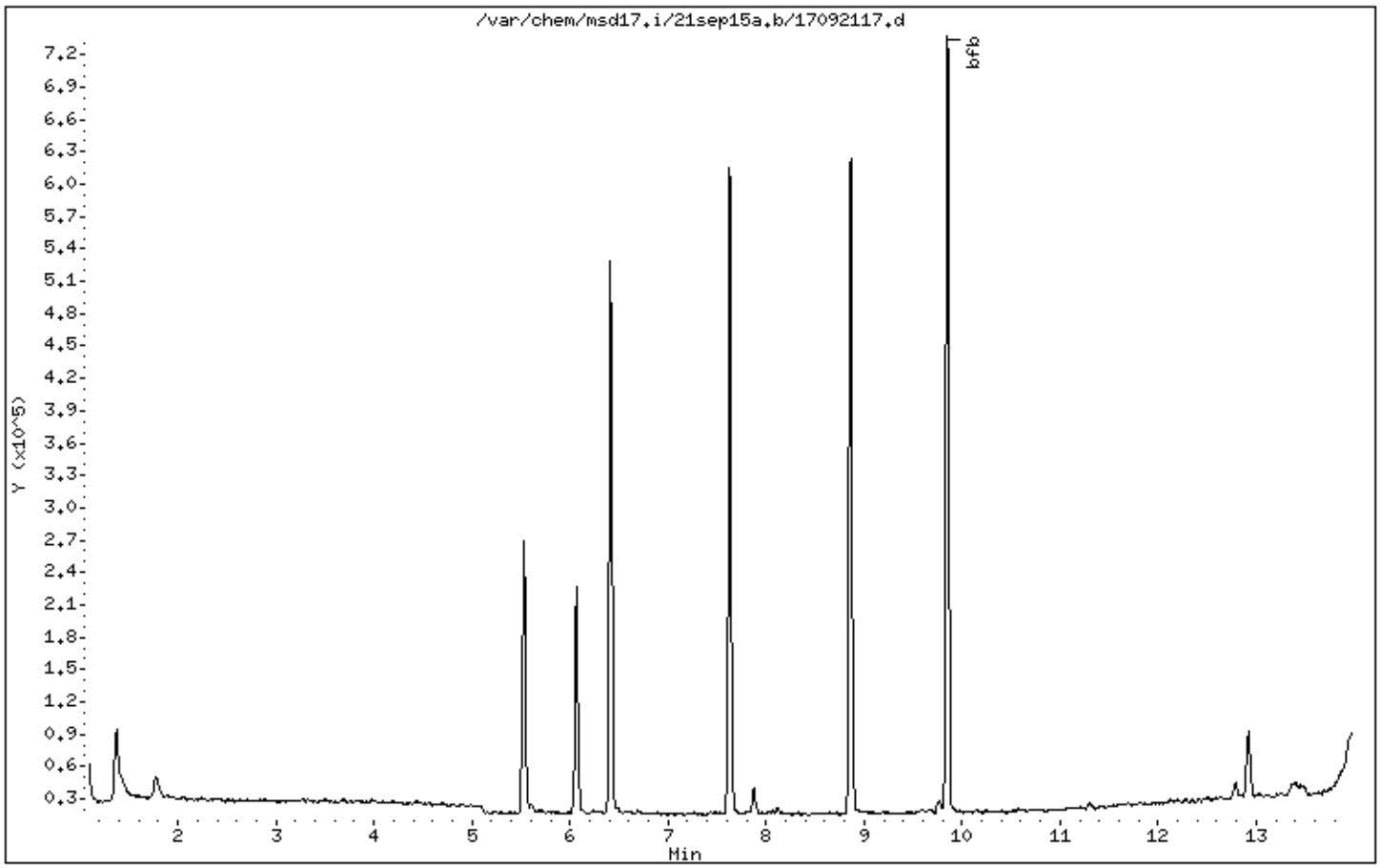
Sample Info: 1.0ml #2736-191; BFB Tune Check

Volume Injected (uL): 1.0

Operator: gh

Column phase:

Column diameter: 2.00



Data File: /var/chem/msd17.i/21sep15a.b/17092117.d

Date : 21-SEP-2015 19:45

Client ID: BFB

Instrument: msd17.i

Sample Info: 1.0ml #2736-191; BFB Tune Check

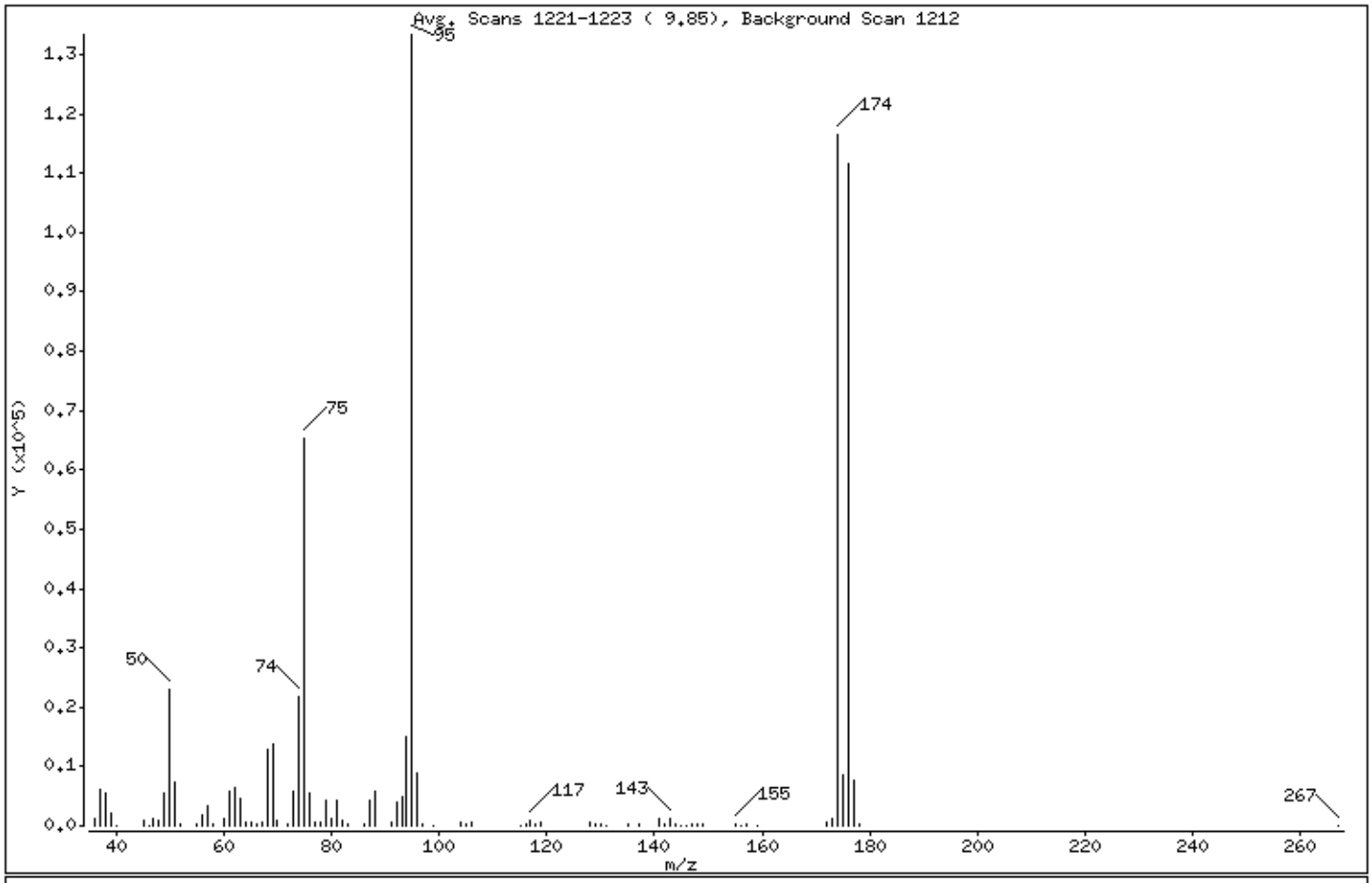
Volume Injected (uL): 1.0

Operator: gh

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	17.23
75	30.00 - 66.00% of mass 95	48.96
96	5.00 - 9.00% of mass 95	6.69
173	Less than 1.99% of mass 174	1.02 (1.17)
174	50.00 - 120.00% of mass 95	87.27
175	4.00 - 9.00% of mass 174	6.53 (7.48)
176	93.00 - 101.00% of mass 174	83.56 (95.75)
177	5.00 - 9.00% of mass 176	5.80 (6.94)

Date : 21-SEP-2015 19:45

Client ID: BFB Instrument: msd17.i

Sample Info: 1.0ml #2736-191; BFB Tune Check

Volume Injected (uL): 1.0 Operator: gh

Column phase: Column diameter: 2.00

Data File: 17092117.d
Spectrum: Avg. Scans 1221-1223 (9.85), Background Scan 1212
Location of Maximum: 95.00
Number of points: 86

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1166	65.00	502	92.00	3901	142.00	184
37.00	6052	66.00	184	93.00	4930	143.00	1288
38.00	5382	67.00	517	94.00	15091	144.00	193
39.00	2013	68.00	12905	95.00	133376	145.00	118
40.00	77	69.00	13645	96.00	8927	146.00	53
45.00	842	70.00	1022	97.00	282	147.00	222
46.00	120	72.00	402	99.00	113	148.00	428
47.00	1147	73.00	5680	104.00	614	149.00	192
48.00	785	74.00	21896	105.00	240	155.00	385
49.00	5384	75.00	65304	106.00	540	156.00	59
50.00	22984	76.00	5657	115.00	55	157.00	225
51.00	7225	77.00	660	116.00	390	159.00	124
52.00	360	78.00	675	117.00	915	172.00	621
55.00	439	79.00	4187	118.00	440	173.00	1358
56.00	1851	80.00	1113	119.00	690	174.00	116408
57.00	3479	81.00	4272	128.00	488	175.00	8713
58.00	220	82.00	925	129.00	175	176.00	111456
60.00	1294	83.00	231	130.00	430	177.00	7739
61.00	5681	86.00	215	131.00	106	178.00	242
62.00	6313	87.00	4320	135.00	336	267.00	60
63.00	4513	88.00	5852	137.00	207		
64.00	550	91.00	480	141.00	1141		

Eurofins Air Toxics Inc.

Data file : /var/chem/msd17.i/24sep15.b/17092401.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 24-SEP-2015 08:06
Operator : cb Inst ID: msd17.i
Smp Info : 1.0ml #2736-191; BFB Tune Check
Misc Info : 36ng
Comment :
Method : /var/chem/msd17.i/24sep15.b/bfb30.m
Meth Date : 24-Sep-2015 08:29 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
9.847	9.840	0.007	95	109586			100.00- 100.00	100.00
9.847	9.840	0.007	50	19917			8.00- 40.00	18.17
9.847	9.840	0.007	75	52941			30.00- 66.00	48.31
9.847	9.840	0.007	96	7333			5.00- 9.00	6.69
9.847	9.840	0.007	173	1068			0.00- 1.99	1.12
9.847	9.840	0.007	174	95330			50.00- 120.00	86.99
9.847	9.840	0.007	175	7436			4.00- 9.00	7.80
9.847	9.840	0.007	176	90802			93.00- 101.00	95.25
9.847	9.840	0.007	177	6254			5.00- 9.00	6.89

Data File: /var/chem/msd17.i/24sep15.b/17092401.d

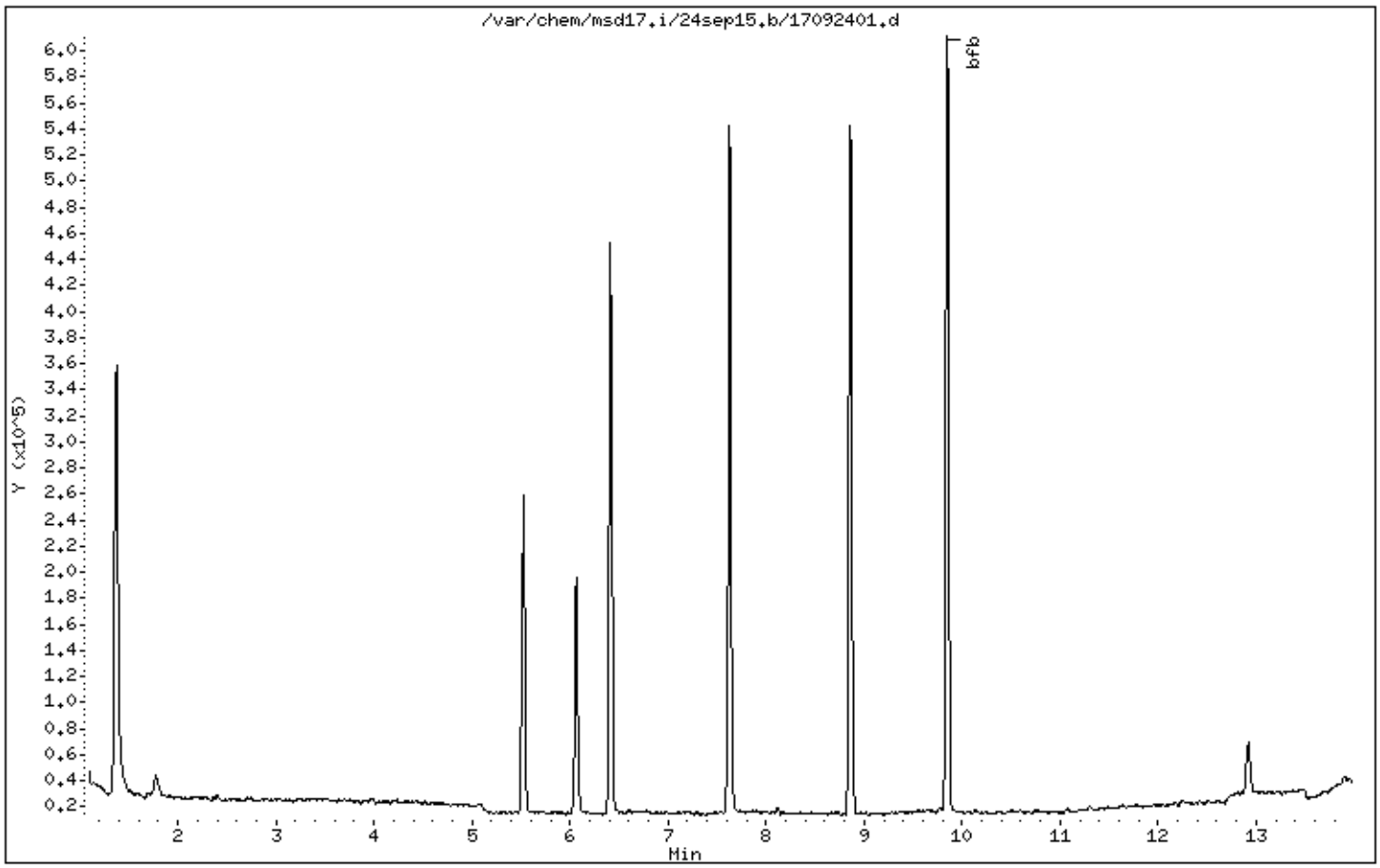
Date : 24-SEP-2015 08:06

Client ID: BFB Instrument: msd17.i

Sample Info: 1.0ml #2736-191; BFB Tune Check

Volume Injected (uL): 1.0 Operator: cb

Column phase: Column diameter: 2.00



Data File: /var/chem/msd17.i/24sep15.b/17092401.d

Date : 24-SEP-2015 08:06

Client ID: BFB

Instrument: msd17.i

Sample Info: 1.0ml #2736-191; BFB Tune Check

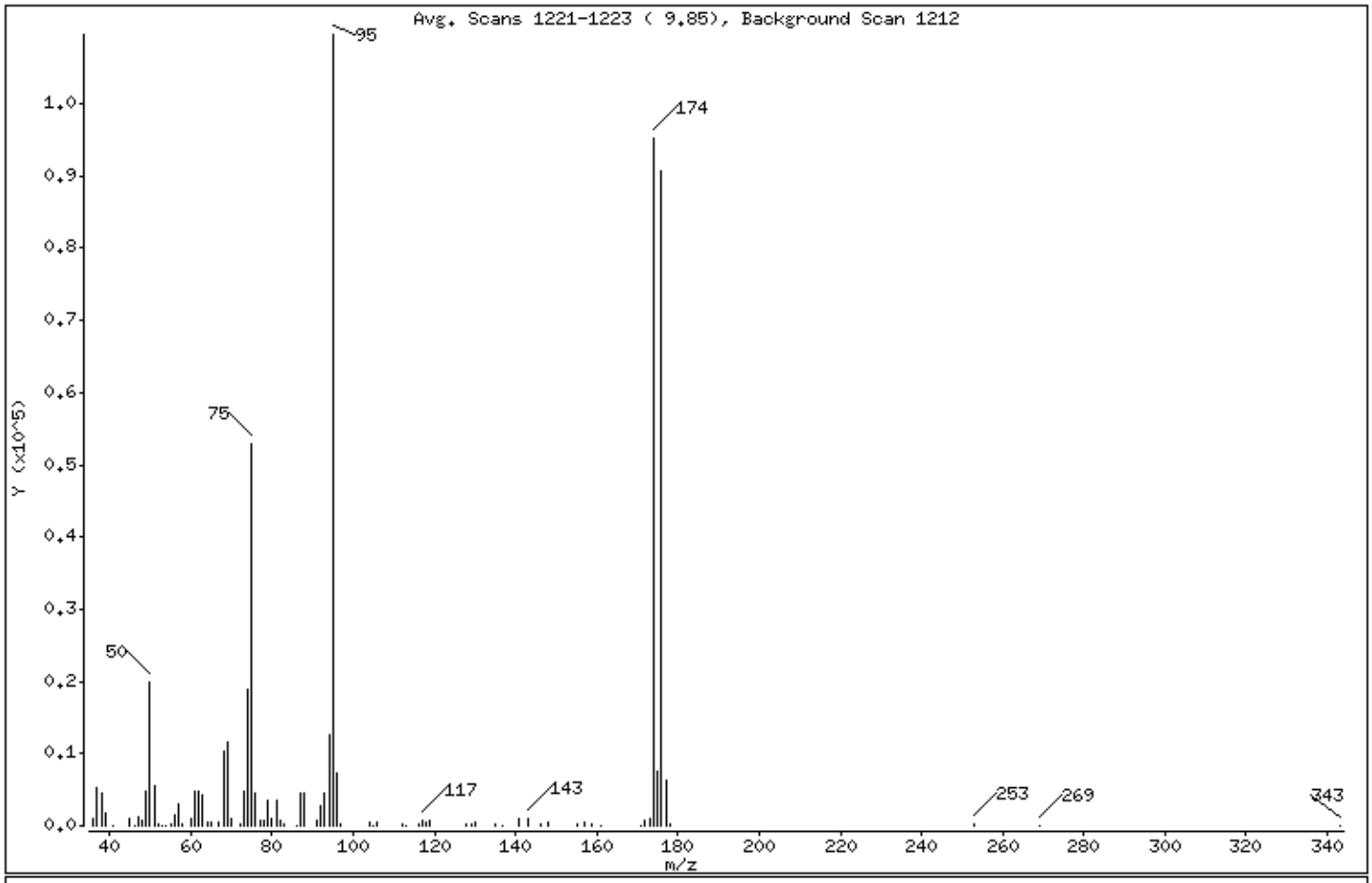
Volume Injected (uL): 1.0

Operator: cb

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	18.17
75	30.00 - 66.00% of mass 95	48.31
96	5.00 - 9.00% of mass 95	6.69
173	Less than 1.99% of mass 174	0.97 (1.12)
174	50.00 - 120.00% of mass 95	86.99
175	4.00 - 9.00% of mass 174	6.79 (7.80)
176	93.00 - 101.00% of mass 174	82.86 (95.25)
177	5.00 - 9.00% of mass 176	5.71 (6.89)

Date : 24-SEP-2015 08:06

Client ID: BFB Instrument: msd17.i

Sample Info: 1.0ml #2736-191; BFB Tune Check

Volume Injected (uL): 1.0 Operator: cb

Column phase: Column diameter: 2.00

Data File: 17092401.d
Spectrum: Avg. Scans 1221-1223 (9.85), Background Scan 1212
Location of Maximum: 95.00
Number of points: 84

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1043	63.00	4291	91.00	641	143.00	1022
37.00	5235	64.00	444	92.00	2886	146.00	207
38.00	4465	65.00	434	93.00	4486	148.00	388
39.00	1650	67.00	390	94.00	12669	155.00	377
41.00	63	68.00	10419	95.00	109584	157.00	388
45.00	1032	69.00	11626	96.00	7333	159.00	134
46.00	58	70.00	951	97.00	217	161.00	124
47.00	1321	72.00	365	104.00	503	171.00	51
48.00	803	73.00	4815	105.00	124	172.00	723
49.00	4716	74.00	18912	106.00	406	173.00	1068
50.00	19912	75.00	52936	112.00	136	174.00	95328
51.00	5661	76.00	4447	113.00	125	175.00	7436
52.00	275	77.00	679	116.00	361	176.00	90800
53.00	63	78.00	652	117.00	765	177.00	6254
54.00	62	79.00	3640	118.00	626	178.00	285
55.00	199	80.00	1096	119.00	633	253.00	164
56.00	1451	81.00	3621	128.00	338	269.00	29
57.00	3014	82.00	785	129.00	163	343.00	84
58.00	214	83.00	129	130.00	482		
60.00	1044	86.00	68	135.00	219		
61.00	4911	87.00	4504	137.00	105		
62.00	4833	88.00	4449	141.00	968		

Eurofins Air Toxics Inc.

Data file : /var/chem/msd17.i/25sep15.b/17092501.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 25-SEP-2015 09:06
Operator : cb Inst ID: msd17.i
Smp Info : 1.0ml #2736-191; BFB Tune Check
Misc Info : 36ng
Comment :
Method : /var/chem/msd17.i/25sep15.b/bfb30.m
Meth Date : 25-Sep-2015 09:29 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.847	9.840	0.007	95	100624			100.00- 100.00	100.00
9.847	9.840	0.007	50	18834			8.00- 40.00	18.72
9.847	9.840	0.007	75	49080			30.00- 66.00	48.78
9.847	9.840	0.007	96	6659			5.00- 9.00	6.62
9.847	9.840	0.007	173	1028			0.00- 1.99	1.18
9.847	9.840	0.007	174	86792			50.00- 120.00	86.25
9.847	9.840	0.007	175	6317			4.00- 9.00	7.28
9.847	9.840	0.007	176	82816			93.00- 101.00	95.42
9.847	9.840	0.007	177	5784			5.00- 9.00	6.98

Data File: /var/chem/msd17.i/25sep15.b/17092501.d

Date : 25-SEP-2015 09:06

Client ID: BFB

Instrument: msd17.i

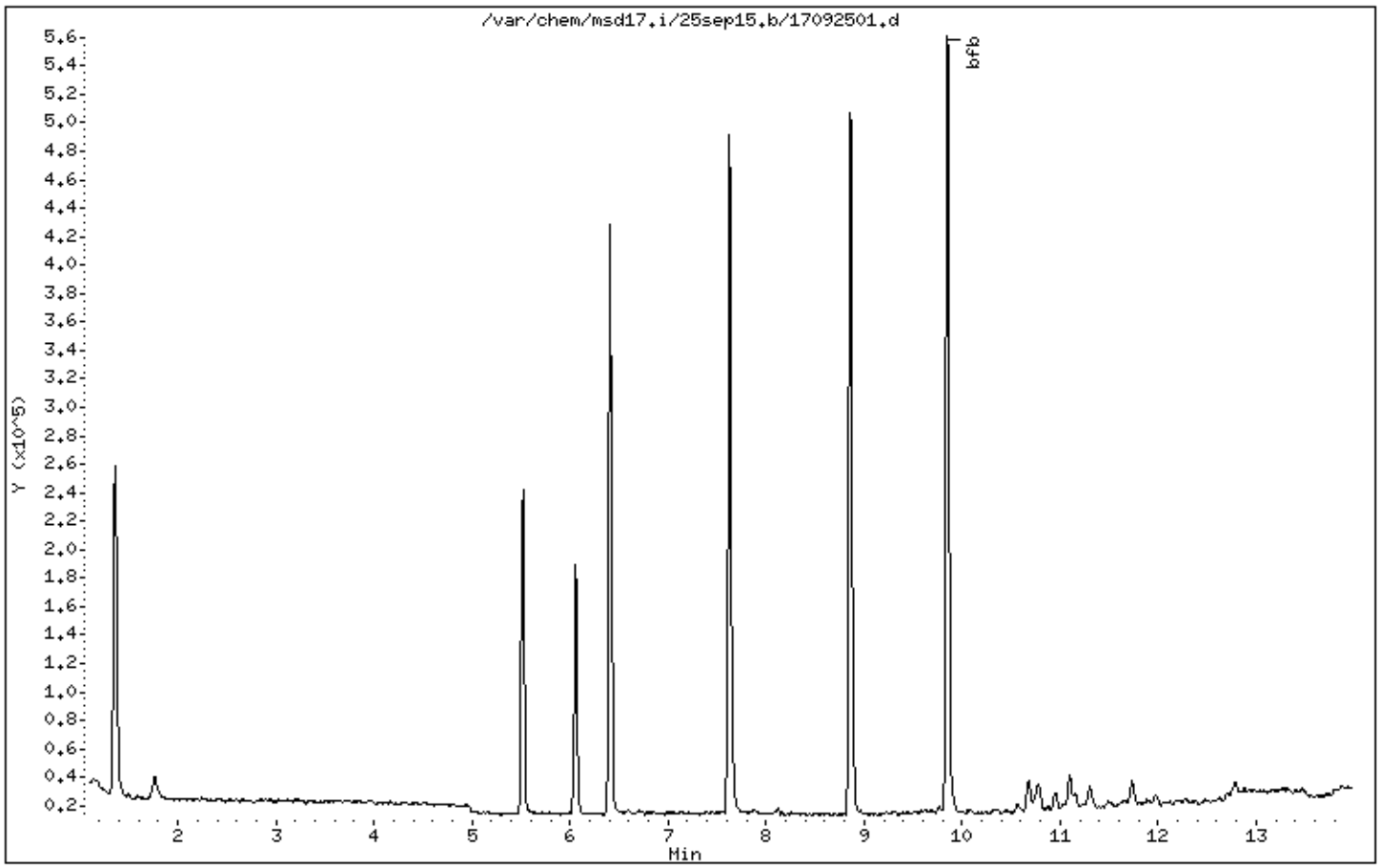
Sample Info: 1.0ml #2736-191; BFB Tune Check

Volume Injected (uL): 1.0

Operator: cb

Column phase:

Column diameter: 2.00



Data File: /var/chem/msd17.i/25sep15.b/17092501.d

Date : 25-SEP-2015 09:06

Client ID: BFB

Instrument: msd17.i

Sample Info: 1.0ml #2736-191; BFB Tune Check

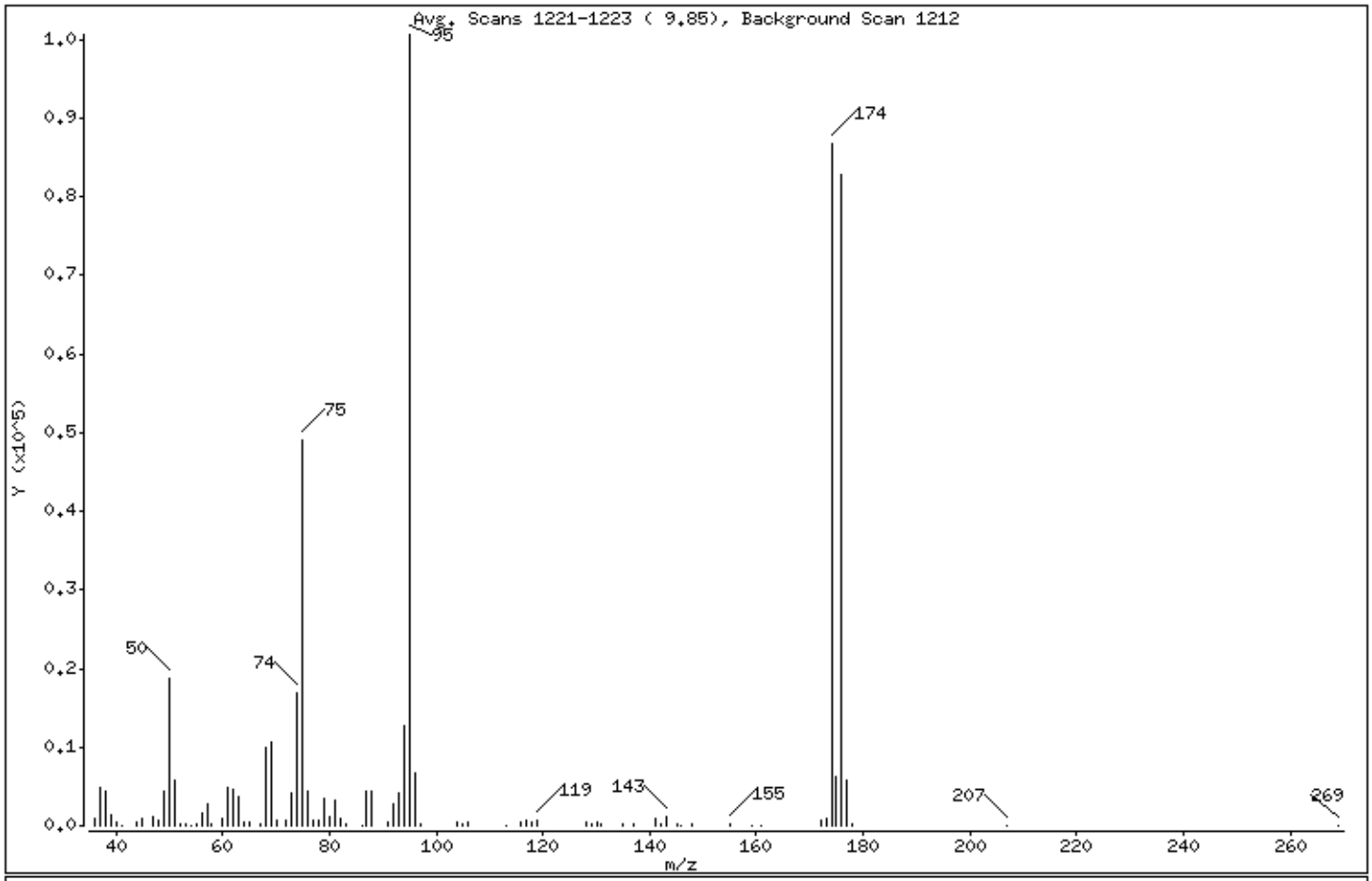
Volume Injected (uL): 1.0

Operator: cb

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	18.72
75	30.00 - 66.00% of mass 95	48.78
96	5.00 - 9.00% of mass 95	6.62
173	Less than 1.99% of mass 174	1.02 (1.18)
174	50.00 - 120.00% of mass 95	86.25
175	4.00 - 9.00% of mass 174	6.28 (7.28)
176	93.00 - 101.00% of mass 174	82.30 (95.42)
177	5.00 - 9.00% of mass 176	5.75 (6.98)

Date : 25-SEP-2015 09:06

Client ID: BFB Instrument: msd17.i

Sample Info: 1.0ml #2736-191; BFB Tune Check

Volume Injected (uL): 1.0 Operator: cb

Column phase: Column diameter: 2.00

Data File: 17092501.d
Spectrum: Avg. Scans 1221-1223 (9.85), Background Scan 1212
Location of Maximum: 95.00
Number of points: 84

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1006	62.00	4713	88.00	4309	141.00	1025
37.00	4776	63.00	3607	91.00	390	142.00	141
38.00	4329	64.00	401	92.00	2745	143.00	1223
39.00	1285	65.00	490	93.00	4054	145.00	237
40.00	462	67.00	333	94.00	12814	146.00	110
41.00	33	68.00	10012	95.00	100624	148.00	124
44.00	428	69.00	10707	96.00	6659	155.00	283
45.00	961	70.00	691	97.00	317	159.00	109
47.00	1184	72.00	718	104.00	454	161.00	50
48.00	737	73.00	4143	105.00	216	172.00	764
49.00	4411	74.00	16880	106.00	384	173.00	1028
50.00	18832	75.00	49080	113.00	54	174.00	86792
51.00	5727	76.00	4449	116.00	398	175.00	6317
52.00	263	77.00	744	117.00	601	176.00	82816
53.00	128	78.00	626	118.00	484	177.00	5784
54.00	58	79.00	3423	119.00	710	178.00	136
55.00	179	80.00	1184	128.00	429	207.00	81
56.00	1523	81.00	3354	129.00	191	269.00	61
57.00	2788	82.00	913	130.00	386		
58.00	228	83.00	236	131.00	242		
60.00	1000	86.00	107	135.00	123		
61.00	4830	87.00	4349	137.00	179		

Eurofins Air Toxics Inc.

Data file : /var/chem/msd17.i/14oct15.b/17101401.d
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 14-OCT-2015 11:35
Operator : sab Inst ID: msd17.i
Smp Info : 1.0ml #2736-294; BFB Tune Check
Misc Info : 36ng
Comment :
Method : /var/chem/msd17.i/14oct15.b/bfb30.m
Meth Date : 14-Oct-2015 11:58 Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vf	1.00000	Volumetric correction factor
Vi	1.00000	Injection Volume

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
9.847	9.840	0.007	95	87997			100.00- 100.00	100.00
9.847	9.840	0.007	50	16704			8.00- 40.00	18.98
9.847	9.840	0.007	75	42786			30.00- 66.00	48.62
9.847	9.840	0.007	96	6282			5.00- 9.00	7.14
9.847	9.840	0.007	173	1031			0.00- 1.99	1.45
9.847	9.840	0.007	174	71013			50.00- 120.00	80.70
9.847	9.840	0.007	175	5650			4.00- 9.00	7.96
9.847	9.840	0.007	176	68365			93.00- 101.00	96.27
9.847	9.840	0.007	177	4434			5.00- 9.00	6.49

Data File: /var/chem/msd17.i/14oct15.b/17101401.d

Date : 14-OCT-2015 11:35

Client ID: BFB

Instrument: msd17.i

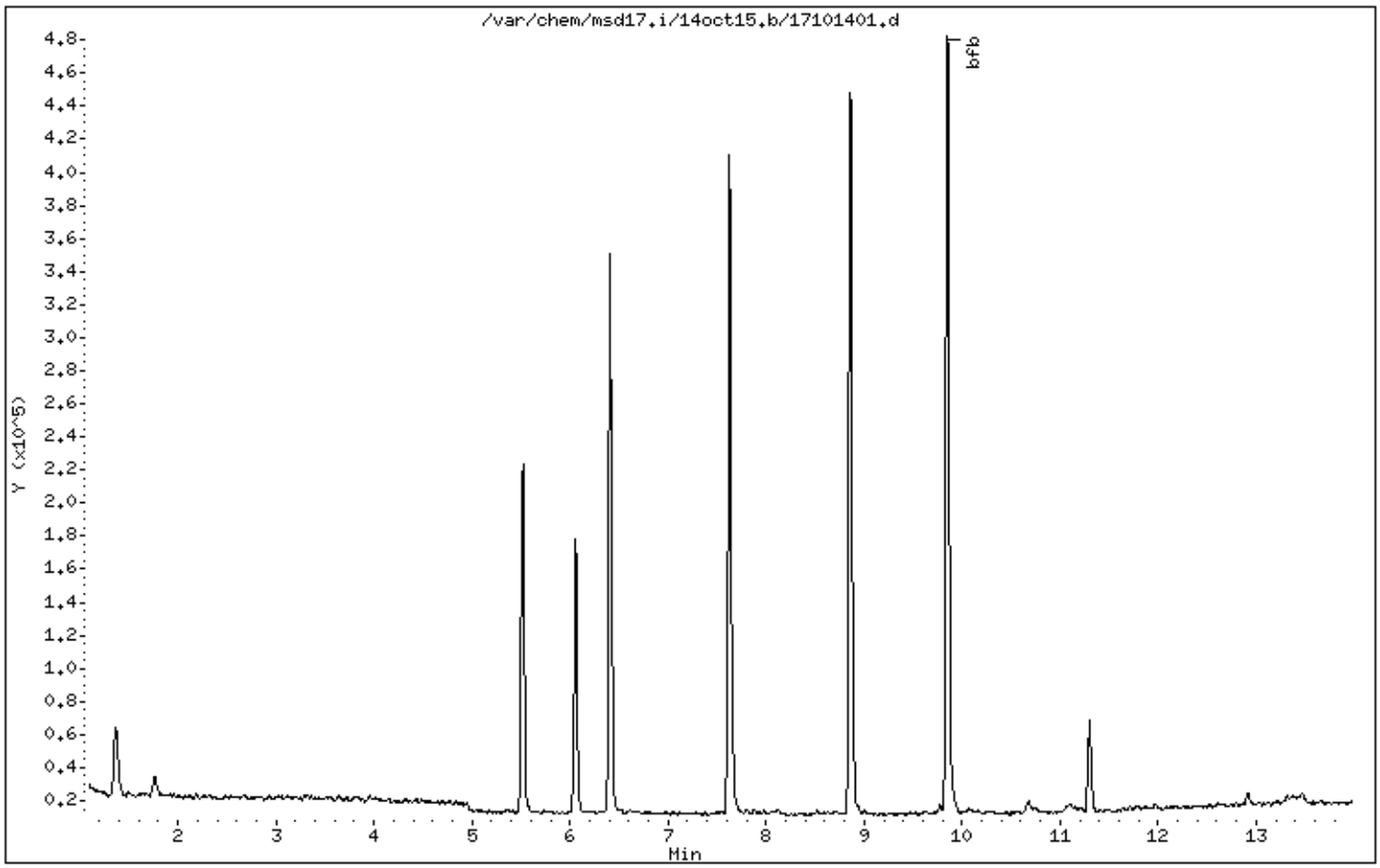
Sample Info: 1.0ml #2736-294; BFB Tune Check

Volume Injected (uL): 1.0

Operator: sab

Column phase:

Column diameter: 2.00



Data File: /var/chem/msd17.i/14oct15.b/17101401.d

Date : 14-OCT-2015 11:35

Client ID: BFB

Instrument: msd17.i

Sample Info: 1.0ml #2736-294; BFB Tune Check

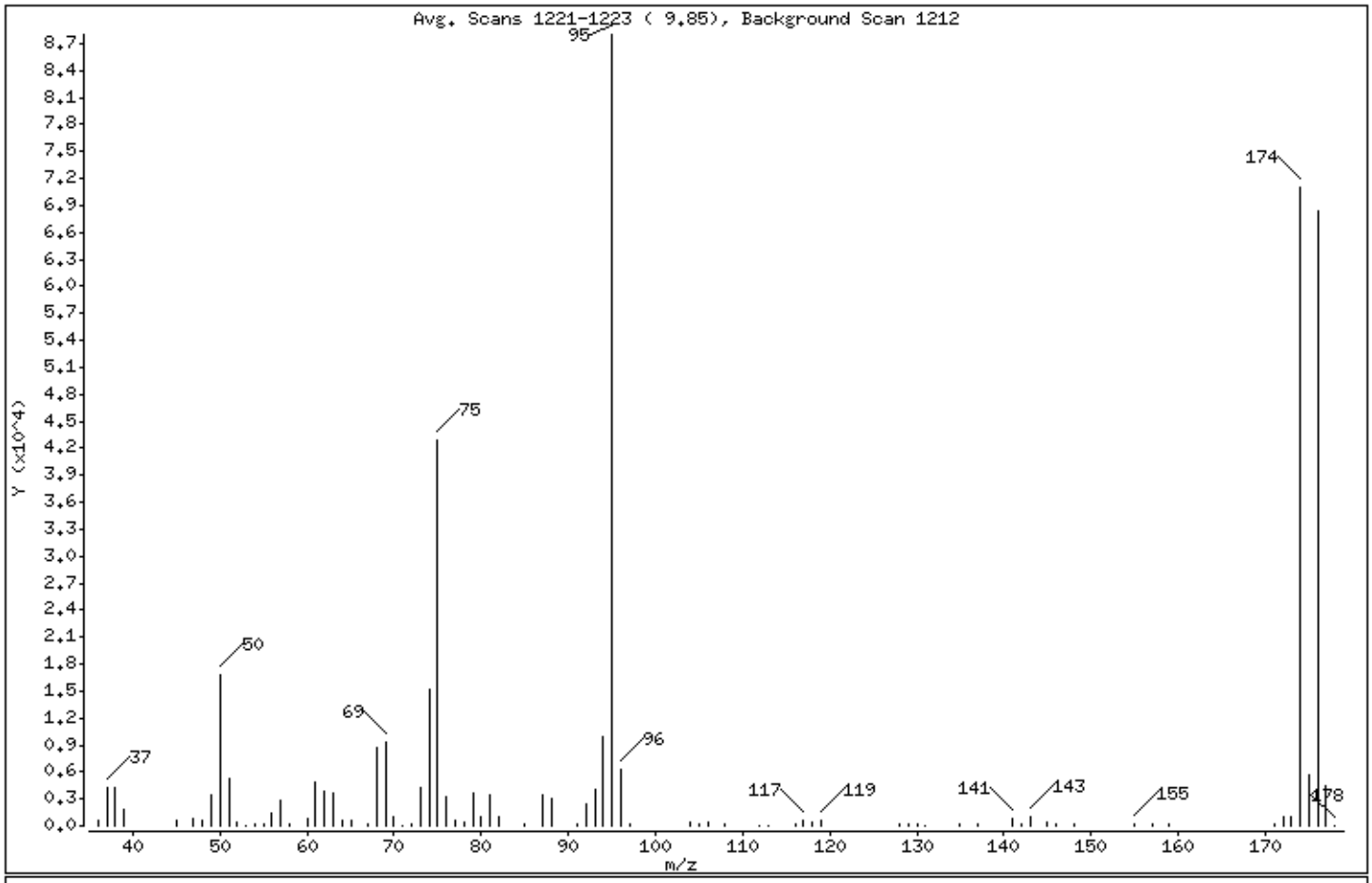
Volume Injected (uL): 1.0

Operator: sab

Column phase:

Column diameter: 2.00

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	8.00 - 40.00% of mass 95	18.98
75	30.00 - 66.00% of mass 95	48.62
96	5.00 - 9.00% of mass 95	7.14
173	Less than 1.99% of mass 174	1.17 (1.45)
174	50.00 - 120.00% of mass 95	80.70
175	4.00 - 9.00% of mass 174	6.42 (7.96)
176	93.00 - 101.00% of mass 174	77.69 (96.27)
177	5.00 - 9.00% of mass 176	5.04 (6.49)

Date : 14-OCT-2015 11:35

Client ID: BFB Instrument: msd17.i

Sample Info: 1.0ml #2736-294; BFB Tune Check

Volume Injected (uL): 1.0 Operator: sab

Column phase: Column diameter: 2.00

Data File: 17101401.d
Spectrum: Avg. Scans 1221-1223 (9.85), Background Scan 1212
Location of Maximum: 95.00
Number of points: 82

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	627	64.00	527	91.00	184	135.00	147
37.00	4216	65.00	604	92.00	2467	137.00	236
38.00	4204	67.00	102	93.00	4120	141.00	786
39.00	1814	68.00	8764	94.00	9966	142.00	123
45.00	578	69.00	9298	95.00	87992	143.00	1005
47.00	902	70.00	1014	96.00	6282	145.00	304
48.00	637	71.00	50	97.00	298	146.00	192
49.00	3410	72.00	237	104.00	439	148.00	135
50.00	16704	73.00	4188	105.00	264	155.00	202
51.00	5327	74.00	15115	106.00	358	157.00	159
52.00	317	75.00	42784	108.00	118	159.00	124
53.00	63	76.00	3249	112.00	53	171.00	177
54.00	190	77.00	683	113.00	52	172.00	1076
55.00	223	78.00	378	116.00	298	173.00	1031
56.00	1435	79.00	3657	117.00	610	174.00	71008
57.00	2818	80.00	1036	118.00	385	175.00	5650
58.00	183	81.00	3476	119.00	612	176.00	68360
60.00	832	82.00	979	128.00	263	177.00	4434
61.00	4824	85.00	169	129.00	161	178.00	52
62.00	3908	87.00	3390	130.00	291		
63.00	3633	88.00	2993	131.00	61		

Shipping/ Receiving Documents

Eurofins Air Toxics, Inc. Sample Receipt Confirmation Cover Page

Thank you for choosing Eurofins Air Toxics, Inc. (EATL). We have received your samples and have listed any Sample Receipt Descrepancies below.

In order to expedite analysis and reporting, please review the attached information for accuracy.

For corrections call: **Ausha Scott at 916-985-1000**

EATL will proceed with the analysis as specified on the Chain of Custody (COC) and Sample Receipt Summary page.

Please note : The Sample Receipt Confirmation, including the total workorder charge, is subject to change upon secondary review. Our aim is to provide a confirmation to you in a timely manner. Sample Receipt Discrepancies, if any, may not include discrepancies regarding sample receipt pressure(s). Additionally, the COC will be provided with the final report.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630

(916) 985-1000 .FAX (916) 985-1020
Hours 6:30 A.M to 5:30 P.M. PST

eurofins | Air Toxics

Sample Transportation Notice
Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager Rick Mellano / Mark Hall
Collected by: (Print and sign) Kenneth Hamm
Company: AECOM Email: Mark.Hall@aecom.com
Address: 1321 E. Washington St Ste 600 City: Indianapolis State: IN Zip: 46204
Phone: 317-231-6500 Fax: 317-231-6519

Project Info:
P.O. # LA003307.0001.00004
Project # LA003307.0001.00004
Project Name: Galena Mountain

Turn Around Time:
☒ Normal
☐ Rush
☐ (specify)

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt (psig)	Final (psig)
01A	SG-4 (100715)	B2140	10-7-15	1506-1530	TO-15, Project List	30	5.0		
02A	SG-7 (100715)	3650X	10-7-15	1528-1541	TO-15, Project List	30	5.25		
03A	SG-8 (100715)	3736	10-7-15	1533-1548	TO-15, Project List	30	6.0		

Relinquished by: (signature) Date/Time: 10-9-15/0820
Received by: (signature) Date/Time: 1020 10/12/15
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:

Notes: Re-samples Due to Ice Break

Lab Use Only
Shipper Name: Fedex
Air Bill #:
Temp (°C): n/a
Condition: Good
Custody Seals intact? Yes No (None)
Work Order #: 1510233

Form 1290 rev 1

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SAMPLE RECEIPT SUMMARY

WORKORDER 1510233

Client

Ms. Marie Heap
Arcadis U.S., Inc.
132 East Washington St., Suite 600
Indianapolis, IN 46204

Phone

317-231-6500

Fax

317-231-6514

Sales Rep: N/A

Date Promised: 10/15/15 3:00 pm
Date Completed: 10/15/15
Date Received: 10/12/15
PO#: LA003307.0001.00004
Project#: LA003307.0001.00004 GRENADA MANUFACTURING
Total $: $ 545.00
Logged By: CC

Fraction	Sample #	Analysis	Collected	Receipt Vac./Pres.	Amount$
01A	SG-4 (100715)	TO-15	10/7/2015	7.0 "Hg	$110.00
02A	SG-7 (100715)	TO-15	10/7/2015	7.5 "Hg	$110.00
03A	SG-8 (100715)	TO-15	10/7/2015	7.0 "Hg	$110.00
04A	Lab Blank	TO-15	NA	NA	$0.00
05A	CCV	TO-15	NA	NA	$0.00
06A	LCS	TO-15	NA	NA	$0.00
06AA	LCSD	TO-15	NA	NA	$0.00

Misc. Charges	1 Liter Summa Canister (100% Certified) (4) @ $40.00 each., Shipment 10	$160.00
	Blue Body Flow Controller (100% Certified) (4) @ $10.00 each., Shipmen	$40.00
	eCVP (3) @ $5.00 each.	$15.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: Grenada/20635

BILL TO: Accounts Payable
Arcadis U.S., Inc.
630 Plaza Drive
Suite 600
Highlands Ranch, CO 80129

Analysis Code: TO-14A

REMARKS: A 50% surcharge is applied for a 72 hour turnaround time.

TERMS:

Reporting Method: TO-15 (Sh)-Arcadis (Grenada)

Other Records

Dilution Factor = $\frac{\text{Final Pressure}}{\text{Initial Vacuum}} = \frac{14.7\text{psi} + \text{Final Pressure (psi)}}{14.7\text{psi} - [\text{Init. Pressure (“Hg)})*(14.7\text{psi}/30\text{”Hg})]}$

Dilution Factor = $\frac{\text{Final Pressure}}{\text{Initial Pressure}} = \frac{14.7\text{psi} + \text{Final Pressure (psi)}}{14.7\text{psi} + \text{Initial Pressure (psi)}}$

Initial Vacuum (" of Hg)	5 psi Final Pressure Dilution Factor	15 psi Final Pressure Dilution Factor
0.0	1.34	2.02
0.2	1.35	2.03
0.4	1.36	2.05
0.5	1.36	2.05
0.6	1.37	2.06
0.8	1.38	2.08
1.0	1.39	2.09
1.2	1.40	2.10
1.4	1.40	2.12
1.5	1.41	2.13
1.6	1.42	2.13
1.8	1.42	2.15
2.0	1.44	2.16
2.2	1.45	2.18
2.4	1.46	2.20
2.5	1.46	2.20
2.6	1.47	2.21
2.8	1.48	2.23
3.0	1.49	2.24
3.2	1.50	2.26
3.4	1.51	2.28
3.5	1.52	2.29
3.6	1.52	2.30
3.8	1.53	2.31
4.0	1.55	2.33
4.2	1.56	2.35
4.4	1.57	2.37
4.5	1.58	2.38
4.6	1.58	2.39
4.8	1.60	2.40
5.0	1.61	2.42
5.2	1.62	2.44
5.4	1.63	2.46
5.5	1.64	2.47
5.6	1.65	2.48
5.8	1.66	2.50
6.0	1.68	2.52
6.2	1.69	2.55
6.4	1.70	2.57
6.5	1.71	2.58
6.6	1.72	2.59
6.8	1.73	2.61
7.0	1.75	2.64
7.2	1.76	2.66
7.4	1.78	2.68
7.5	1.79	2.69
7.6	1.79	2.70

Initial Vacuum (" of Hg)	5 psi Final Pressure Dilution Factor	15 psi Final Pressure Dilution Factor
7.7	1.80	2.72
7.8	1.81	2.73
8.0	1.83	2.76
8.2	1.84	2.78
8.4	1.86	2.81
8.5	1.87	2.82
8.6	1.88	2.83
8.8	1.90	2.86
9.0	1.91	2.89
9.2	1.93	2.91
9.4	1.95	2.94
9.5	1.96	2.96
9.6	1.97	2.97
9.8	1.99	3.00
10.0	2.01	3.03
10.2	2.03	3.06
10.4	2.05	3.09
10.5	2.06	3.11
10.6	2.07	3.12
10.8	2.09	3.16
11.0	2.12	3.19
11.2	2.14	3.22
11.4	2.16	3.26
11.5	2.17	3.28
11.6	2.18	3.29
11.8	2.21	3.33
12.0	2.23	3.37
12.2	2.26	3.40
12.4	2.28	3.44
12.5	2.30	3.46
12.6	2.31	3.48
12.8	2.34	3.52
13.0	2.36	3.56
13.2	2.39	3.61
13.4	2.42	3.65
13.5	2.44	3.67
13.6	2.45	3.70
13.8	2.48	3.74
14.0	2.51	3.79
14.2	2.54	3.84
14.4	2.58	3.88
14.5	2.59	3.91
14.6	2.61	3.94
14.8	2.64	3.99
15.0	2.68	4.04
15.2	2.72	4.10
15.4	2.75	4.15

Initial Vacuum (" of Hg)	5 psi Final Pressure Dilution Factor	15 psi Final Pressure Dilution Factor
15.5	2.77	4.18
15.6	2.79	4.21
15.8	2.83	4.27
16.0	2.87	4.33
16.2	2.91	4.39
16.4	2.96	4.46
16.5	2.98	4.49
16.6	3.00	4.52
16.8	3.05	4.59
17.0	3.09	4.66
17.2	3.14	4.74
17.4	3.19	4.81
17.5	3.22	4.85
17.6	3.24	4.89
17.8	3.30	4.97
18.0	3.35	5.05
18.2	3.41	5.14
18.4	3.47	5.22
18.5	3.50	5.27
18.6	3.53	5.32
18.8	3.59	5.41
19.0	3.65	5.51
19.2	3.72	5.61
19.4	3.79	5.72
19.5	3.83	5.77
19.6	3.87	5.83
19.8	3.94	5.94
20.0	4.02	6.06
20.2	4.10	6.18
20.4	4.19	6.31
20.5	4.23	6.38
20.6	4.28	6.45
20.8	4.37	6.59
21.0	4.47	6.73
21.2	4.57	6.89
21.4	4.67	7.05
21.5	4.73	7.13
21.6	4.79	7.22
21.8	4.90	7.39
22.0	5.03	7.58
22.4	5.29	7.98

Initial Vacuum (" of Hg)	5 psi Final Pressure Dilution Factor	15 psi Final Pressure Dilution Factor
22.5	5.36	8.08
22.6	5.43	8.19
22.8	5.58	8.42
23.0	5.74	8.66
23.2	5.91	8.91
23.4	6.09	9.18
23.5	6.19	9.32
23.6	6.28	9.47
23.8	6.48	9.78
24.0	6.70	10.10
24.2	6.93	10.45
24.4	7.18	10.82
24.5	7.31	11.02
24.6	7.45	11.22
24.8	7.73	11.66
25.0	8.04	12.12
25.2	8.38	12.63
25.4	8.74	13.18
25.5	8.93	13.47
25.6	9.14	13.78
25.8	9.57	14.43
26.0	10.05	15.15
26.2	10.58	15.95
26.4	11.17	16.84
26.5	11.49	17.32
26.6	11.82	17.83
26.8	12.56	18.94
27.0	13.40	20.20
27.2	14.36	21.65
27.4	15.46	23.31
27.5	16.08	24.24
27.6	16.75	25.26
27.8	18.27	27.55
28.0	20.10	30.31
28.2	22.34	33.67
28.4	25.13	37.88
28.5	26.80	40.41
28.6	28.72	43.29
28.8	33.50	50.51
29.0	40.20	60.61

Compound Listing

TO-15 (Sh)-Arcadis (Grenada)

CAS Number	Compound	Detection Limit ppbv	Type
75-01-4	Vinyl Chloride	0.50	
75-35-4	1,1-Dichloroethene	0.50	
75-09-2	Methylene Chloride	5.0	
156-60-5	trans-1,2-Dichloroethene	0.50	
156-59-2	cis-1,2-Dichloroethene	0.50	
67-66-3	Chloroform	0.50	
107-06-2	1,2-Dichloroethane	0.50	
108-38-3	m,p-Xylene	0.50	
95-47-6	o-Xylene	0.50	
79-01-6	Trichloroethene	0.50	
108-88-3	Toluene	0.50	
79-00-5	1,1,2-Trichloroethane	0.50	
127-18-4	Tetrachloroethene	0.50	
100-41-4	Ethyl Benzene	0.50	
95-63-6	1,2,4-Trimethylbenzene	0.50	
2037-26-5	Toluene-d8		
17060-07-0	1,2-Dichloroethane-d4		
460-00-4	4-Bromofluorobenzene		
71-43-2	Benzene	0.50	

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Media Certification Report

Canister Number: 1L#2140 w/Batch
Can#: 103867-2140
Date : 10/05/15 13:19
Data File: i100508.d

www.airtoxics.com
1-800-985-5955

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.01	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.01	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.05	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.01	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Benzene	71-43-2	0.03	ND	ppbv
Benzene	71-43-2	0.25	ND	ppbv
Chloroform	67-66-3	0.01	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.01	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.01	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.02	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	0.10	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.01	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.01	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.01	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.05	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.01	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.01	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		106.00	% Recovery
4-Bromofluorobenzene	460-00-4		99.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	99.00	% Recovery
Toluene-d8	2037-26-5		100.00	% Recovery
Toluene-d8	2037-26-5	0.25	100.00	% Recovery

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Media Certification Report

Canister Number: 1L#36508 w/Batch
Can#: 103867-36508
Date : 10/05/15 12:42
Data File: i100507.d

www.airtoxics.com
1-800-985-5955

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.01	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.01	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.05	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.01	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Benzene	71-43-2	0.03	ND	ppbv
Benzene	71-43-2	0.25	ND	ppbv
Chloroform	67-66-3	0.01	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.01	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.01	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.02	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	0.10	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.01	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.01	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.01	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.05	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.01	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.01	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		108.00	% Recovery
4-Bromofluorobenzene	460-00-4		101.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	101.00	% Recovery
Toluene-d8	2037-26-5		101.00	% Recovery
Toluene-d8	2037-26-5	0.25	101.00	% Recovery

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www.airtoxics.com
1-800-985-5955

Media Certification Report

Canister Number: 1L# 37363
Can#: 103867-37363
Date : 10/05/15 16:23
Data File: i100513.d

Name	CAS	Cert RL	Conc.	Units
1,1,2-Trichloroethane	79-00-5	0.01	ND	ppbv
1,1,2-Trichloroethane	79-00-5	0.25	ND	ppbv
1,1-Dichloroethene	75-35-4	0.01	ND	ppbv
1,1-Dichloroethene	75-35-4	0.25	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.05	ND	ppbv
1,2,4-Trimethylbenzene	95-63-6	0.25	ND	ppbv
1,2-Dichloroethane	107-06-2	0.01	ND	ppbv
1,2-Dichloroethane	107-06-2	0.25	ND	ppbv
Benzene	71-43-2	0.03	ND	ppbv
Benzene	71-43-2	0.25	ND	ppbv
Chloroform	67-66-3	0.01	ND	ppbv
Chloroform	67-66-3	0.25	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.01	ND	ppbv
cis-1,2-Dichloroethene	156-59-2	0.25	ND	ppbv
Ethyl Benzene	100-41-4	0.01	ND	ppbv
Ethyl Benzene	100-41-4	0.25	ND	ppbv
m,p-Xylene	108-38-3	0.02	ND	ppbv
m,p-Xylene	108-38-3	0.25	ND	ppbv
Methylene Chloride	75-09-2	0.10	ND	ppbv
Methylene Chloride	75-09-2	2.50	ND	ppbv
o-Xylene	95-47-6	0.01	ND	ppbv
o-Xylene	95-47-6	0.25	ND	ppbv
Tetrachloroethene	127-18-4	0.01	ND	ppbv
Tetrachloroethene	127-18-4	0.25	ND	ppbv
Toluene	108-88-3	0.01	ND	ppbv
Toluene	108-88-3	0.25	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.05	ND	ppbv
trans-1,2-Dichloroethene	156-60-5	0.25	ND	ppbv
Trichloroethene	79-01-6	0.01	ND	ppbv
Trichloroethene	79-01-6	0.25	ND	ppbv
Vinyl Chloride	75-01-4	0.01	ND	ppbv
Vinyl Chloride	75-01-4	0.25	ND	ppbv
1,2-Dichloroethane-d4	17060-07-0		102.00	% Recovery
4-Bromofluorobenzene	460-00-4		95.00	% Recovery
4-Bromofluorobenzene	460-00-4	0.25	95.00	% Recovery
Toluene-d8	2037-26-5		100.00	% Recovery
Toluene-d8	2037-26-5	0.25	100.00	% Recovery

Eurofins Air Toxics, Inc.	Data Review Checklist			Release Date: 03/26/15
Workorder # 1510233	Form F1.27	Revision #11	Revision date: 03/26/15	Page 1 of 2

S1	S2	S3	S4	D	*Section 1* – Spec Out				
					Initials/Instrument/Date	S1: SS /17/10-14-15	S2:	S3:	S4:
✓				■	Project Identification (PID), Project Requirements Table (PRT), Daily QC and ICAL met Criteria				
✓				■	Lumen QC and ICAL evaluation (ref. SOP/Method) report initialed and in folder				
NA				■	Manual Integrations included and approved				
✓				✓	Chain of Custody verified for special comments (add comments below)				
✓				■	Non-standard Target sublist printed				

Profile, analyses, reporting, special notes and unusual circumstances:

S1: Out QC

A1	A2	A3	A4	D	*Section 2* – Sample Analysis				
					Initials/Date	A1: SS 10/19/15	A2:	A3:	A4:
✓				✓	Internal Standard/Surrogate Recoveries, Dilution Factors, Load Volumes, Initial/Final Pressures, and Canister #s Verified				
NA				NA	a) Tedlar Bag IDs verified against COC b) Tedlar Bag ID confirmed with loading sequence/leg of instrument				
✓				NA	Manual Integrations/Bag or Can Dilution Forms/Re-pressurization Forms/Bag-Can Transfer Forms present (circle all that apply)				
✓				■	12/24 Hr clock time & Hold Time met for all samples				
NA				NA	Re-analysis of sample(s) have been evaluated for comparability and/or samples have been checked for trends (Inf/Eff).				
✓				✓	All runs have been evaluated for potential carry-over (TPHg/non-Target/over-range compounds etc)				

Analytical and special notes: A1. 01A-03A OK FOR LCS

D1	D2	D3	D4	T	3T	*Section 3* – Target Data Reduction	Technical Review Needed? Circle one: Yes/No	T:		
						Initials/Instrument/ Date	D1: ME 10/16/15	D2:	D3:	D4:
NA					■	CAR # (if applicable)				
✓					■	Spectra Verified (documentation of spectral defense included if applicable)				
NA					■	TICs resemble reference spectra/ TICs between sample dups. are consistent (if applicable)				
✓						Lab Narrative is correct				
NA					■	TPH/NMOC calculations complete and included in folder				

Special notes: No analytical discrepancies

A	3T	*Section 4*- Atlas Data Entry	Lumen verified and included in folder	Circle one: Yes/No
		Initials/Date: ME 10/16/15	3rd Tier: (needed only for DOD or per client request)	
NA		Sample Discrepancy Report (SDR) complete and approved (if applicable)		
NA		Manually entered results are checked		
✓		At least one result per sample is verified against Target quant sheets		
✓		Appropriate data qualifier flags are applied		
✓		Final Invoice is correct/ Final PDF report, COC and EDD reviewed and correct		

Special Notes:

Note (1) *Please check all the appropriate boxes. Indicate "NA" for any statement that doesn't apply*
Note (2) 3rd Tier Report Reviewer and Write Up Reviewer must be separate individuals for DoD & Client Specific Projects

Workorder # :	Reason for Reissue:

W	T	3T	Q	
				Reissue Request form Present
				Client or QA or Lab contact present with reason for reissue
				Review all affected data
				Report header has correct R1, R2 etc
				The Lab Narrative clearly explains the reissue (Date, Reason and whether client requested)
				Date for Reissue in Report Header matches date in Lab Narrative
				Check Project Profile for correct reporting instructions (multiple clients, # hardcopies, etc)
				Corrective Action issued - #
				The reissued workorder has been approved by QA Manager or a Technical Director

Additional Comments:

Write Up (Initials/Date)	Tech Review (Initials/Date)	*3rd Tier Review ** 3rd Tier Report Review is for DoD & Client Specific projects only* (Initials/Date)	QA Review (Initials/Date)

Workorder # :	Reason for Reissue:

W	T	3T	Q	
				Reissue Request form Present
				Client or QA or Lab contact present with reason for reissue
				Review all affected data
				Report header has correct R1, R2 etc
				The Lab Narrative clearly explains the reissue (Date, Reason and whether client requested)
				Date for Reissue in Report Header matches date in Lab Narrative
				Check Project Profile for correct reporting instructions (multiple clients, # hardcopies, etc)
				Corrective Action issued - #
				The reissued workorder has been approved by QA Manager or a Technical Director

Additional Comments:

Write Up (Initials/Date)	Tech Review (Initials/Date)	*3rd Tier Review ** 3rd Tier Report Review is for DoD & Client Specific projects only* (Initials/Date)	QA Review (Initials/Date)

Note (1) *Please check all the appropriate boxes. Indicate "NA" for any statement that doesn't apply*
Note (2) 3rd Tier Report Reviewer and Write Up Reviewer must be separate individuals for DoD & Client Specific Projects

Not Applicable

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Sample Transportation Notice

Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Air Toxics Limited assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Air Toxics Limited against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager Rob Uppencamp / Marie Heap
Collected by: (Print and Sign) Randall Woodruff [signature]
Company ARCADIS Email Marie Heap
Address 132 E. Washington St Ste 600 City Indianapolis State IN Zip 46204
Phone 317-231-6500 Fax 317-231-6514

Project Info:
P.O. # LA 003307.0001.00004
Project # LA003307.0001.00004
Project Name Grenada Manufacturing

Turn Around Time:
☒ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas: N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
01A	SG-4 (100715)	n 2140	10-7-15	1506-1520	TO-15, Project List	30	5.0		
02A	SG-7 (100715)	36508	10-7-15	1528-1541	TO-15, Project List	30	5.25		
03A	SG-8 (100715)	37363	10-7-15	1533-1546	TO-15, Project List	30	6.0		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	10-9-15/0820	Candice H Cortney EAR	10/12/15 1020
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes: RESAMPLES DUE TO LAB ERROR

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	Fedex		N/A	Good	Yes No None	1510233

Form 1293 rev.11

Pace Analytical Services, Inc.
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

October 09, 2015

John Ellis
Arcadis Baton Rouge
10352 Plaza Americana Dr.
Baton Rouge, LA 70816

RE: Project: Grenada MS
Pace Project No.: 2026559

Dear John Ellis:
Enclosed are the analytical results for sample(s) received by the laboratory on October 03, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Melissa MacNaughton

Melissa MacNaughton
Melissa.MacNaughton@pacelabs.com
Project Manager

Enclosures

cc: Julia Daigle, Arcadis
Marie Heap, Arcadis Baton Rouge

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CERTIFICATIONS

Project: Grenada MS
Pace Project No.: 2026559

New Orleans Certification IDs

California Env. Lab Accreditation Program Branch: 11277CA
Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Pennsylvania Dept. of Env Protection (NELAC): 68-04202
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Grenada MS
Pace Project No.: 2026559

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2026559001	**VAP-9-GW(15-16)**	Water	10/02/15 14:15	10/03/15 08:40
2026559002	**VAP-9-GW(20-21)**	Water	10/02/15 14:51	10/03/15 08:40
2026559003	**VAP-9-GW(25-26)**	Water	10/02/15 15:30	10/03/15 08:40
2026559004	**VAP-9-GW(30-31)**	Water	10/02/15 16:17	10/03/15 08:40
2026559005	**VAP-9-GW(35-36)**	Water	10/02/15 16:42	10/03/15 08:40
2026559006	**VAP-9-GW(40-41)**	Water	10/02/15 17:10	10/03/15 08:40
2026559007	**VAP-9-GW(45-46)**	Water	10/02/15 17:47	10/03/15 08:40
2026559008	**VAP-9-GW(49-50)**	Water	10/02/15 18:20	10/03/15 08:40
2026559009	**VAP-1-GW(12-13)**	Water	10/02/15 08:35	10/03/15 08:40
2026559010	**VAP-1-GW(15-16)**	Water	10/02/15 09:00	10/03/15 08:40
2026559011	**VAP-1-GW(20-21)**	Water	10/02/15 09:30	10/03/15 08:40
2026559012	**VAP-1-GW(25-26)**	Water	10/02/15 09:53	10/03/15 08:40
2026559013	**VAP-1-GW(30-31)**	Water	10/02/15 10:13	10/03/15 08:40
2026559014	**VAP-1-GW(35-36)**	Water	10/02/15 10:40	10/03/15 08:40
2026559015	**VAP-1-GW(40-41)**	Water	10/02/15 11:07	10/03/15 08:40
2026559016	**VAP-1-GW(45-46)**	Water	10/02/15 11:47	10/03/15 08:40
2026559017	**VAP-1-GW(49-50)**	Water	10/02/15 12:15	10/03/15 08:40

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Grenada MS
Pace Project No.: 2026559

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2026559001	**VAP-9-GW(15-16)**	SM 3500-Cr B	JMA	1
2026559002	**VAP-9-GW(20-21)**	SM 3500-Cr B	JMA	1
2026559003	**VAP-9-GW(25-26)**	SM 3500-Cr B	JMA	1
2026559004	**VAP-9-GW(30-31)**	SM 3500-Cr B	JMA	1
2026559005	**VAP-9-GW(35-36)**	SM 3500-Cr B	JMA	1
2026559006	**VAP-9-GW(40-41)**	SM 3500-Cr B	JMA	1
2026559007	**VAP-9-GW(45-46)**	SM 3500-Cr B	JMA	1
2026559008	**VAP-9-GW(49-50)**	SM 3500-Cr B	JMA	1
2026559009	**VAP-1-GW(12-13)**	SM 3500-Cr B	JMA	1
2026559010	**VAP-1-GW(15-16)**	SM 3500-Cr B	JMA	1
2026559011	**VAP-1-GW(20-21)**	SM 3500-Cr B	JMA	1
2026559012	**VAP-1-GW(25-26)**	SM 3500-Cr B	JMA	1
2026559013	**VAP-1-GW(30-31)**	SM 3500-Cr B	JMA	1
2026559014	**VAP-1-GW(35-36)**	SM 3500-Cr B	JMA	1
2026559015	**VAP-1-GW(40-41)**	SM 3500-Cr B	JMA	1
2026559016	**VAP-1-GW(45-46)**	SM 3500-Cr B	JMA	1
2026559017	**VAP-1-GW(49-50)**	SM 3500-Cr B	JMA	1

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ANALYTICAL RESULTS

Project: Grenada MS
Pace Project No.: 2026559

Sample: VAP-9-GW(15-16) **Lab ID: 2026559001** Collected: 10/02/15 14:15 Received: 10/03/15 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/08/15 11:24	18540-29-9	M1

Sample: VAP-9-GW(20-21) **Lab ID: 2026559002** Collected: 10/02/15 14:51 Received: 10/03/15 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/08/15 11:24	18540-29-9	

Sample: VAP-9-GW(25-26) **Lab ID: 2026559003** Collected: 10/02/15 15:30 Received: 10/03/15 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/08/15 11:24	18540-29-9	

Sample: VAP-9-GW(30-31) **Lab ID: 2026559004** Collected: 10/02/15 16:17 Received: 10/03/15 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/08/15 11:24	18540-29-9	

Sample: VAP-9-GW(35-36) **Lab ID: 2026559005** Collected: 10/02/15 16:42 Received: 10/03/15 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	**0.013**	mg/L	0.010	1		10/08/15 11:49	18540-29-9	

Sample: VAP-9-GW(40-41) **Lab ID: 2026559006** Collected: 10/02/15 17:10 Received: 10/03/15 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/08/15 11:49	18540-29-9	

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ANALYTICAL RESULTS

Project: Grenada MS
Pace Project No.: 2026559

Sample: VAP-9-GW(45-46) **Lab ID: 2026559007** Collected: 10/02/15 17:47 Received: 10/03/15 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/08/15 11:49	18540-29-9	

Sample: VAP-9-GW(49-50) **Lab ID: 2026559008** Collected: 10/02/15 18:20 Received: 10/03/15 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/08/15 11:49	18540-29-9	

Sample: VAP-1-GW(12-13) **Lab ID: 2026559009** Collected: 10/02/15 08:35 Received: 10/03/15 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/08/15 11:49	18540-29-9	

Sample: VAP-1-GW(15-16) **Lab ID: 2026559010** Collected: 10/02/15 09:00 Received: 10/03/15 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/08/15 11:49	18540-29-9	

Sample: VAP-1-GW(20-21) **Lab ID: 2026559011** Collected: 10/02/15 09:30 Received: 10/03/15 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/08/15 11:49	18540-29-9	

Sample: VAP-1-GW(25-26) **Lab ID: 2026559012** Collected: 10/02/15 09:53 Received: 10/03/15 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/08/15 11:49	18540-29-9	

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ANALYTICAL RESULTS

Project: Grenada MS
Pace Project No.: 2026559

Sample: VAP-1-GW(30-31) **Lab ID: 2026559013** Collected: 10/02/15 10:13 Received: 10/03/15 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/08/15 11:49	18540-29-9	

Sample: VAP-1-GW(35-36) **Lab ID: 2026559014** Collected: 10/02/15 10:40 Received: 10/03/15 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/08/15 11:49	18540-29-9	

Sample: VAP-1-GW(40-41) **Lab ID: 2026559015** Collected: 10/02/15 11:07 Received: 10/03/15 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/08/15 11:08	18540-29-9	

Sample: VAP-1-GW(45-46) **Lab ID: 2026559016** Collected: 10/02/15 11:47 Received: 10/03/15 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/08/15 11:08	18540-29-9	

Sample: VAP-1-GW(49-50) **Lab ID: 2026559017** Collected: 10/02/15 12:15 Received: 10/03/15 08:40 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/08/15 11:08	18540-29-9	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Grenada MS
Pace Project No.: 2026559

QC Batch: WETA/7514 Analysis Method: SM 3500-Cr B
QC Batch Method: SM 3500-Cr B Analysis Description: Chromium, Hexavalent by 3500
Associated Lab Samples: 2026559001, 2026559002, 2026559003, 2026559004, 2026559005, 2026559006, 2026559007, 2026559008, 2026559009, 2026559010, 2026559011, 2026559012, 2026559013, 2026559014, 2026559015, 2026559016, 2026559017

METHOD BLANK: 163327 Matrix: Water
Associated Lab Samples: 2026559001, 2026559002, 2026559003, 2026559004, 2026559005, 2026559006, 2026559007, 2026559008, 2026559009, 2026559010, 2026559011, 2026559012, 2026559013, 2026559014, 2026559015, 2026559016, 2026559017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	ND	0.010	10/08/15 11:24	

LABORATORY CONTROL SAMPLE: 163328

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.2	0.20	100	90-110	

MATRIX SPIKE SAMPLE: 163330

Parameter	Units	2026559001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	ND	.25	0.18	73	75-125	M1

SAMPLE DUPLICATE: 163329

Parameter	Units	2026559001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/L	ND	ND		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALIFIERS

Project: Grenada MS
Pace Project No.: 2026559

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Grenada MS
Pace Project No.: 2026559

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2026559001	**VAP-9-GW(15-16)**	SM 3500-Cr B	WETA/7514		
2026559002	**VAP-9-GW(20-21)**	SM 3500-Cr B	WETA/7514		
2026559003	**VAP-9-GW(25-26)**	SM 3500-Cr B	WETA/7514		
2026559004	**VAP-9-GW(30-31)**	SM 3500-Cr B	WETA/7514		
2026559005	**VAP-9-GW(35-36)**	SM 3500-Cr B	WETA/7514		
2026559006	**VAP-9-GW(40-41)**	SM 3500-Cr B	WETA/7514		
2026559007	**VAP-9-GW(45-46)**	SM 3500-Cr B	WETA/7514		
2026559008	**VAP-9-GW(49-50)**	SM 3500-Cr B	WETA/7514		
2026559009	**VAP-1-GW(12-13)**	SM 3500-Cr B	WETA/7514		
2026559010	**VAP-1-GW(15-16)**	SM 3500-Cr B	WETA/7514		
2026559011	**VAP-1-GW(20-21)**	SM 3500-Cr B	WETA/7514		
2026559012	**VAP-1-GW(25-26)**	SM 3500-Cr B	WETA/7514		
2026559013	**VAP-1-GW(30-31)**	SM 3500-Cr B	WETA/7514		
2026559014	**VAP-1-GW(35-36)**	SM 3500-Cr B	WETA/7514		
2026559015	**VAP-1-GW(40-41)**	SM 3500-Cr B	WETA/7514		
2026559016	**VAP-1-GW(45-46)**	SM 3500-Cr B	WETA/7514		
2026559017	**VAP-1-GW(49-50)**	SM 3500-Cr B	WETA/7514		

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CHAIN-OF-CUSTODY / Analytical Request Docun

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be c

WO# : 2026559

2026559

Section A — Required Client Information:

Company:	Arcadis Baton Rouge
Address:	10352 Plaza Americana Dr.
	Baton Rouge, LA 70816
Email:	John.Ellis@Arcadis.com
Phone:	225-292-1004 Fax:
Requested Due Date:	Standard

Section B — Required Project Information:

Report To:	George Cook
Copy To:	John Ellis/ Steve Sharp
Purchase Order #:	LA00 3307.0001.00004
Project Name:	Grenada MS
Project #:	LA00 3307.0001.00004

Section C — Invoice Information:

Attention:	Accounts Payable
Company Name:	Arcadis Baton Rouge
Address:	10352 Plaza Americana Dr., Baton Rouge, LA 70816
Pace Quote:	
Pace Project Manager:	justin.stock@pacelabs.com,
Pace Profile #:	

Regulatory Agency: | State / Location: MS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Hexavalent Chromium	Residual Chlorine (Y/N)
1	VAP-9-6W(15-16)	WT	G	10-2	1400		1415		1								X		X	
2	VAP-9-6W(20-21)	WT	G	"	1430		1451		1								X		X	
3	VAP-9-6W(25-26)	WT	G	"	1508		1530		1								X		X	
4	VAP-9-6W(30-31)	WT	G	10-2	1557		1617		1								X		X	
5	VAP-9-6W(35-36)	WT	G	"	1607		1642		1								X		X	
6	VAP-9-6W(40-41)	WT	G	"	1655		1710		1								X		X	
7	VAP-9-6W(45-46)	WT	G	10-2	1726		1747		1								X		X	
8	VAP-9-6W(49-50)	WT	G	"	1800		1820		1								X		X	
9	VAP-1-6W(12-13)	WT	G	10-24	0520		0535		1								X		X	
10	VAP-1-6W(15-16)	WT	G	10-25	0847		0900		1								X		X	
11	VAP-1-6W(20-21)	WT	G	10-25	0915		0930		1								X		X	
12	VAP-1-6W(25-26)	WT	G	10-25	0943		0953		1								X		X	

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
* Samples were filtered in the Field	George Elach, Arcadis, Feelter	10/10/15	1345	Feelter						
	Feelter	10-3-15	840		10-3-15	840	0.3	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: George Elach

SIGNATURE of SAMPLER: George Elach

DATE Signed: 10/6/15

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:

Company:	Arcadis Baton Rouge
Address:	10352 Plaza Americana Dr.
	Baton Rouge, LA 70816
Email:	JohnEllis@Arcadis.com
Phone:	225-292-1004 Fax:
Requested Due Date:	Standard

Section B Required Project Information:

Report To:	George Cook
Copy To:	John Ellis / Steven Sharp
Purchase Order #:	
Project Name:	Grenada MS
Project #:	LA003307.0001.00001

Section C Invoice Information:

Attention:	Accounts Payable
Company Name:	Arcadis
Address:	10352 Plaza Americana Dr., Baton Rouge, LA 70816
Pace Quote:	
Pace Project Manager:	justin.stock@pacelabs.com,
Pace Profile #:	

Regulatory Agency: | State / Location: MS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test: Y/N	Hexavalent Chromium	Residual Chlorine (Y/N)
1	VAP-1-GW-(30-31)	WT	G	10/7/15	1023		1023		1								1		1	
2	VAP-1-GW-(35-36)	WT	G	"	1037		1040		1								1		1	
3	VAP-1-GW-(40-41)	WT	G	"	1055		1107		1								1		1	
4	VAP-1-GW-(45-46)	WT	G	10/7/15	1138		1147		1								1		1	
5	VAP-1-GW-(49-50)	WT	G	10/7/15	1200		1215		1								1		1	
6		WT															1		1	
7		WT															1		1	
8		WT															1		1	
9		WT															1		1	
10		WT															1		1	
11		WT															1		1	
12		WT															1		1	

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
* Samples were filtered in the Field	George Flack	10/10/15	1345				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: George Flack

SIGNATURE of SAMPLER: [signature] DATE Signed: 10/10/15

SAMPLE CONDITIONS: TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

WO# : 2026559

PM: MM1 Due Date: 10/19/15
CLIENT: 20-ARCADISGM Arcadis Baton Rc

Pace Analytical

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St. Rose, LA 70087

Sample Condition Upon R

Project #: 20

Courier: ☐ Pace Courier ☐ Hired Courier ☑ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☑Yes ☐No

Therometer Used: ☐ Therm Fisher IR 5 ☐ Therm Fisher IR 6 ☑ Therm Fisher IR 7

Type of Ice: Wet Blue None Samples on ice: [see COC]

Cooler Temperature: [see COC] Temp should be above freezing to 6°C

Date and Initials of person examining contents: 10-3-15 AV

Temp must be measured from Temperature blank when present

				Comments:
Temperature Blank Present"?	☐Yes	☐No	☑N/A	1
Chain of Custody Present:	☑Yes	☐No	☐N/A	2
Chain of Custody Complete:	☑Yes	☐No	☐N/A	3
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	4
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	5
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	6
Sufficient Volume:	☑Yes	☐No	☐N/A	7
Correct Containers Used:	☑Yes	☐No	☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes	☐No	☑N/A	9
Sample Labels match COC:	☑Yes	☐No	☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes	☐No	☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes	☐No	☑N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☐N/A	14
Trip Blank Present:	☐Yes	☑No		15

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

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(504)469-0333

October 12, 2015

John Ellis
Arcadis Baton Rouge
10352 Plaza Americana Dr.
Baton Rouge, LA 70816

RE: Project: Grenada MS
Pace Project No.: 2026793

Dear John Ellis:
Enclosed are the analytical results for sample(s) received by the laboratory on October 08, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Melissa MacNaughton

Melissa MacNaughton
Melissa.MacNaughton@pacelabs.com
Project Manager

Enclosures

cc: Julia Daigle, Arcadis
Marie Heap, Arcadis Baton Rouge

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CERTIFICATIONS

Project: Grenada MS
Pace Project No.: 2026793

New Orleans Certification IDs

California Env. Lab Accreditation Program Branch: 11277CA
Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Pennsylvania Dept. of Env Protection (NELAC): 68-04202
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119

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SAMPLE SUMMARY

Project: Grenada MS
Pace Project No.: 2026793

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2026793001	**VAP-2-GW (15-16)**	Water	10/05/15 08:50	10/08/15 09:55
2026793002	**VAP-2-GW (20-21)**	Water	10/05/15 10:00	10/08/15 09:55
2026793003	**VAP-2-GW (25-26)**	Water	10/05/15 10:33	10/08/15 09:55
2026793004	**VAP-2-GW (30-31)**	Water	10/05/15 13:12	10/08/15 09:55
2026793005	**VAP-2-GW (35-36)**	Water	10/05/15 13:38	10/08/15 09:55
2026793006	**VAP-2-GW (40-41)**	Water	10/05/15 14:41	10/08/15 09:55
2026793007	**VAP-2-GW (45-46)**	Water	10/05/15 15:30	10/08/15 09:55
2026793008	**VAP-2-GW (49-50)**	Water	10/05/15 16:00	10/08/15 09:55
2026793009	**Dup-GW-01 (100515)**	Water	10/05/15 00:00	10/08/15 09:55
2026793010	**VAP-3-GW (15-16)**	Water	10/06/15 08:06	10/08/15 09:55
2026793011	**VAP-3-GW (20-21)**	Water	10/06/15 09:11	10/08/15 09:55
2026793012	**VAP-3-GW (25-26)**	Water	10/06/15 09:39	10/08/15 09:55
2026793013	**VAP-3-GW (30-31)**	Water	10/06/15 10:10	10/08/15 09:55
2026793014	**VAP-3-GW (35-36)**	Water	10/06/15 10:58	10/08/15 09:55
2026793015	**VAP-3-GW (40-41)**	Water	10/06/15 11:30	10/08/15 09:55
2026793016	**VAP-3-GW (45-46)**	Water	10/06/15 12:04	10/08/15 09:55
2026793017	**VAP-3-GW (49-50)**	Water	10/06/15 12:55	10/08/15 09:55
2026793018	**VAP-4-GW (15-16)**	Water	10/06/15 14:52	10/08/15 09:55
2026793019	**VAP-4-GW (20-21)**	Water	10/06/15 15:31	10/08/15 09:55
2026793020	**VAP-4-GW (25-26)**	Water	10/06/15 16:06	10/08/15 09:55
2026793021	**VAP-4-GW (30-31)**	Water	10/06/15 16:36	10/08/15 09:55
2026793022	**VAP-4-GW (35-36)**	Water	10/07/15 08:11	10/08/15 09:55
2026793023	**VAP-4-GW (40-41)**	Water	10/07/15 08:45	10/08/15 09:55
2026793024	**VAP-4-GW (45-46)**	Water	10/07/15 09:18	10/08/15 09:55
2026793025	**VAP-4-GW (48-49)**	Water	10/07/15 09:55	10/08/15 09:55
2026793026	**VAP-5-GW (15-16)**	Water	10/07/15 12:00	10/08/15 09:55
2026793027	**VAP-5-GW (20-21)**	Water	10/07/15 12:28	10/08/15 09:55
2026793028	**VAP-5-GW (25-26)**	Water	10/07/15 12:57	10/08/15 09:55
2026793029	**VAP-5-GW (30-31)**	Water	10/07/15 13:31	10/08/15 09:55
2026793030	**VAP-5-GW (35-36)**	Water	10/07/15 13:57	10/08/15 09:55
2026793031	**VAP-5-GW (40-41)**	Water	10/07/15 14:43	10/08/15 09:55
2026793032	**VAP-5-GW (45-46)**	Water	10/07/15 15:15	10/08/15 09:55

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SAMPLE ANALYTE COUNT

Project: Grenada MS
Pace Project No.: 2026793

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2026793001	VAP-2-GW (15-16)	SM 3500-Cr B	JMA	1
2026793002	VAP-2-GW (20-21)	SM 3500-Cr B	JMA	1
2026793003	VAP-2-GW (25-26)	SM 3500-Cr B	JMA	1
2026793004	VAP-2-GW (30-31)	SM 3500-Cr B	JMA	1
2026793005	VAP-2-GW (35-36)	SM 3500-Cr B	JMA	1
2026793006	VAP-2-GW (40-41)	SM 3500-Cr B	JMA	1
2026793007	VAP-2-GW (45-46)	SM 3500-Cr B	JMA	1
2026793008	VAP-2-GW (49-50)	SM 3500-Cr B	JMA	1
2026793009	Dup-GW-01 (100515)	SM 3500-Cr B	JMA	1
2026793010	VAP-3-GW (15-16)	SM 3500-Cr B	JMA	1
2026793011	VAP-3-GW (20-21)	SM 3500-Cr B	JMA	1
2026793012	VAP-3-GW (25-26)	SM 3500-Cr B	JMA	1
2026793013	VAP-3-GW (30-31)	SM 3500-Cr B	JMA	1
2026793014	VAP-3-GW (35-36)	SM 3500-Cr B	JMA	1
2026793015	VAP-3-GW (40-41)	SM 3500-Cr B	JMA	1
2026793016	VAP-3-GW (45-46)	SM 3500-Cr B	JMA	1
2026793017	VAP-3-GW (49-50)	SM 3500-Cr B	JMA	1
2026793018	VAP-4-GW (15-16)	SM 3500-Cr B	JMA	1
2026793019	VAP-4-GW (20-21)	SM 3500-Cr B	JMA	1
2026793020	VAP-4-GW (25-26)	SM 3500-Cr B	JMA	1
2026793021	VAP-4-GW (30-31)	SM 3500-Cr B	JMA	1
2026793022	VAP-4-GW (35-36)	SM 3500-Cr B	JMA	1
2026793023	VAP-4-GW (40-41)	SM 3500-Cr B	JMA	1
2026793024	VAP-4-GW (45-46)	SM 3500-Cr B	JMA	1
2026793025	VAP-4-GW (48-49)	SM 3500-Cr B	JMA	1
2026793026	VAP-5-GW (15-16)	SM 3500-Cr B	JMA	1
2026793027	VAP-5-GW (20-21)	SM 3500-Cr B	JMA	1
2026793028	VAP-5-GW (25-26)	SM 3500-Cr B	JMA	1
2026793029	VAP-5-GW (30-31)	SM 3500-Cr B	JMA	1
2026793030	VAP-5-GW (35-36)	SM 3500-Cr B	JMA	1
2026793031	VAP-5-GW (40-41)	SM 3500-Cr B	JMA	1
2026793032	VAP-5-GW (45-46)	SM 3500-Cr B	JMA	1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Grenada MS
Pace Project No.: 2026793

Sample: VAP-2-GW (15-16) **Lab ID: 2026793001** Collected: 10/05/15 08:50 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	**0.016**	mg/L	0.010	1		10/09/15 14:56	18540-29-9	

Sample: VAP-2-GW (20-21) **Lab ID: 2026793002** Collected: 10/05/15 10:00 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 14:56	18540-29-9	

Sample: VAP-2-GW (25-26) **Lab ID: 2026793003** Collected: 10/05/15 10:33 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 14:59	18540-29-9	

Sample: VAP-2-GW (30-31) **Lab ID: 2026793004** Collected: 10/05/15 13:12 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 14:56	18540-29-9	

Sample: VAP-2-GW (35-36) **Lab ID: 2026793005** Collected: 10/05/15 13:38 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 14:56	18540-29-9	M1

Sample: VAP-2-GW (40-41) **Lab ID: 2026793006** Collected: 10/05/15 14:41 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 15:17	18540-29-9	

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ANALYTICAL RESULTS

Project: Grenada MS
Pace Project No.: 2026793

Sample: VAP-2-GW (45-46) **Lab ID: 2026793007** Collected: 10/05/15 15:30 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 15:17	18540-29-9	

Sample: VAP-2-GW (49-50) **Lab ID: 2026793008** Collected: 10/05/15 16:00 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 15:17	18540-29-9	

Sample: Dup-GW-01 (100515) **Lab ID: 2026793009** Collected: 10/05/15 00:00 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 15:17	18540-29-9	

Sample: VAP-3-GW (15-16) **Lab ID: 2026793010** Collected: 10/06/15 08:06 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 15:17	18540-29-9	

Sample: VAP-3-GW (20-21) **Lab ID: 2026793011** Collected: 10/06/15 09:11 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 15:17	18540-29-9	

Sample: VAP-3-GW (25-26) **Lab ID: 2026793012** Collected: 10/06/15 09:39 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 15:17	18540-29-9	

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ANALYTICAL RESULTS

Project: Grenada MS
Pace Project No.: 2026793

Sample: VAP-3-GW (30-31) **Lab ID: 2026793013** Collected: 10/06/15 10:10 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 15:17	18540-29-9	

Sample: VAP-3-GW (35-36) **Lab ID: 2026793014** Collected: 10/06/15 10:58 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 15:17	18540-29-9	

Sample: VAP-3-GW (40-41) **Lab ID: 2026793015** Collected: 10/06/15 11:30 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 13:01	18540-29-9	

Sample: VAP-3-GW (45-46) **Lab ID: 2026793016** Collected: 10/06/15 12:04 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 13:01	18540-29-9	

Sample: VAP-3-GW (49-50) **Lab ID: 2026793017** Collected: 10/06/15 12:55 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 13:01	18540-29-9	

Sample: VAP-4-GW (15-16) **Lab ID: 2026793018** Collected: 10/06/15 14:52 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 13:01	18540-29-9	

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ANALYTICAL RESULTS

Project: Grenada MS
Pace Project No.: 2026793

Sample: VAP-4-GW (20-21) **Lab ID: 2026793019** Collected: 10/06/15 15:31 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 13:01	18540-29-9	

Sample: VAP-4-GW (25-26) **Lab ID: 2026793020** Collected: 10/06/15 16:06 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 13:01	18540-29-9	

Sample: VAP-4-GW (30-31) **Lab ID: 2026793021** Collected: 10/06/15 16:36 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 15:31	18540-29-9	M1

Sample: VAP-4-GW (35-36) **Lab ID: 2026793022** Collected: 10/07/15 08:11 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 15:31	18540-29-9	

Sample: VAP-4-GW (40-41) **Lab ID: 2026793023** Collected: 10/07/15 08:45 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 15:31	18540-29-9	

Sample: VAP-4-GW (45-46) **Lab ID: 2026793024** Collected: 10/07/15 09:18 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 15:31	18540-29-9	

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ANALYTICAL RESULTS

Project: Grenada MS
Pace Project No.: 2026793

Sample: VAP-4-GW (48-49) **Lab ID: 2026793025** Collected: 10/07/15 09:55 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 15:31	18540-29-9	

Sample: VAP-5-GW (15-16) **Lab ID: 2026793026** Collected: 10/07/15 12:00 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 15:31	18540-29-9	

Sample: VAP-5-GW (20-21) **Lab ID: 2026793027** Collected: 10/07/15 12:28 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 15:31	18540-29-9	

Sample: VAP-5-GW (25-26) **Lab ID: 2026793028** Collected: 10/07/15 12:57 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 15:31	18540-29-9	

Sample: VAP-5-GW (30-31) **Lab ID: 2026793029** Collected: 10/07/15 13:31 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 15:44	18540-29-9	

Sample: VAP-5-GW (35-36) **Lab ID: 2026793030** Collected: 10/07/15 13:57 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 15:44	18540-29-9	

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ANALYTICAL RESULTS

Project: Grenada MS
Pace Project No.: 2026793

Sample: VAP-5-GW (40-41) **Lab ID: 2026793031** Collected: 10/07/15 14:43 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 15:44	18540-29-9	

Sample: VAP-5-GW (45-46) **Lab ID: 2026793032** Collected: 10/07/15 15:15 Received: 10/08/15 09:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/09/15 15:44	18540-29-9	

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QUALITY CONTROL DATA

Project: Grenada MS
Pace Project No.: 2026793

QC Batch: WETA/7566 Analysis Method: SM 3500-Cr B
QC Batch Method: SM 3500-Cr B Analysis Description: Chromium, Hexavalent by 3500
Associated Lab Samples: 2026793001, 2026793002, 2026793003, 2026793004, 2026793005, 2026793006, 2026793007, 2026793008, 2026793009, 2026793010, 2026793011, 2026793012, 2026793013, 2026793014, 2026793015, 2026793016, 2026793017, 2026793018, 2026793019, 2026793020

METHOD BLANK: 164726 Matrix: Water
Associated Lab Samples: 2026793001, 2026793002, 2026793003, 2026793004, 2026793005, 2026793006, 2026793007, 2026793008, 2026793009, 2026793010, 2026793011, 2026793012, 2026793013, 2026793014, 2026793015, 2026793016, 2026793017, 2026793018, 2026793019, 2026793020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	ND	0.010	10/09/15 14:56	

LABORATORY CONTROL SAMPLE: 164727

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.2	0.19	97	90-110	

MATRIX SPIKE SAMPLE: 164729

Parameter	Units	2026793005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	ND	.25	0.086	34	75-125	M1

SAMPLE DUPLICATE: 164728

Parameter	Units	2026793005 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/L	ND	ND		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: Grenada MS
Pace Project No.: 2026793

QC Batch: WETA/7567 Analysis Method: SM 3500-Cr B
QC Batch Method: SM 3500-Cr B Analysis Description: Chromium, Hexavalent by 3500
Associated Lab Samples: 2026793021, 2026793022, 2026793023, 2026793024, 2026793025, 2026793026, 2026793027, 2026793028, 2026793029, 2026793030, 2026793031, 2026793032

METHOD BLANK: 164730 Matrix: Water
Associated Lab Samples: 2026793021, 2026793022, 2026793023, 2026793024, 2026793025, 2026793026, 2026793027, 2026793028, 2026793029, 2026793030, 2026793031, 2026793032

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	ND	0.010	10/09/15 14:56	

LABORATORY CONTROL SAMPLE: 164731

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.2	0.20	98	90-110	

MATRIX SPIKE SAMPLE: 164733

Parameter	Units	2026793021 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	ND	.25	ND	0	75-125	M1

SAMPLE DUPLICATE: 164732

Parameter	Units	2026793021 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/L	ND	ND		20	

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QUALIFIERS

Project: Grenada MS
Pace Project No.: 2026793

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

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TNI - The Nelac Institute

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Grenada MS
Pace Project No.: 2026793

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2026793001	**VAP-2-GW (15-16)**	SM 3500-Cr B	WETA/7566		
2026793002	**VAP-2-GW (20-21)**	SM 3500-Cr B	WETA/7566		
2026793003	**VAP-2-GW (25-26)**	SM 3500-Cr B	WETA/7566		
2026793004	**VAP-2-GW (30-31)**	SM 3500-Cr B	WETA/7566		
2026793005	**VAP-2-GW (35-36)**	SM 3500-Cr B	WETA/7566		
2026793006	**VAP-2-GW (40-41)**	SM 3500-Cr B	WETA/7566		
2026793007	**VAP-2-GW (45-46)**	SM 3500-Cr B	WETA/7566		
2026793008	**VAP-2-GW (49-50)**	SM 3500-Cr B	WETA/7566		
2026793009	**Dup-GW-01 (100515)**	SM 3500-Cr B	WETA/7566		
2026793010	**VAP-3-GW (15-16)**	SM 3500-Cr B	WETA/7566		
2026793011	**VAP-3-GW (20-21)**	SM 3500-Cr B	WETA/7566		
2026793012	**VAP-3-GW (25-26)**	SM 3500-Cr B	WETA/7566		
2026793013	**VAP-3-GW (30-31)**	SM 3500-Cr B	WETA/7566		
2026793014	**VAP-3-GW (35-36)**	SM 3500-Cr B	WETA/7566		
2026793015	**VAP-3-GW (40-41)**	SM 3500-Cr B	WETA/7566		
2026793016	**VAP-3-GW (45-46)**	SM 3500-Cr B	WETA/7566		
2026793017	**VAP-3-GW (49-50)**	SM 3500-Cr B	WETA/7566		
2026793018	**VAP-4-GW (15-16)**	SM 3500-Cr B	WETA/7566		
2026793019	**VAP-4-GW (20-21)**	SM 3500-Cr B	WETA/7566		
2026793020	**VAP-4-GW (25-26)**	SM 3500-Cr B	WETA/7566		
2026793021	**VAP-4-GW (30-31)**	SM 3500-Cr B	WETA/7567		
2026793022	**VAP-4-GW (35-36)**	SM 3500-Cr B	WETA/7567		
2026793023	**VAP-4-GW (40-41)**	SM 3500-Cr B	WETA/7567		
2026793024	**VAP-4-GW (45-46)**	SM 3500-Cr B	WETA/7567		
2026793025	**VAP-4-GW (48-49)**	SM 3500-Cr B	WETA/7567		
2026793026	**VAP-5-GW (15-16)**	SM 3500-Cr B	WETA/7567		
2026793027	**VAP-5-GW (20-21)**	SM 3500-Cr B	WETA/7567		
2026793028	**VAP-5-GW (25-26)**	SM 3500-Cr B	WETA/7567		
2026793029	**VAP-5-GW (30-31)**	SM 3500-Cr B	WETA/7567		
2026793030	**VAP-5-GW (35-36)**	SM 3500-Cr B	WETA/7567		
2026793031	**VAP-5-GW (40-41)**	SM 3500-Cr B	WETA/7567		
2026793032	**VAP-5-GW (45-46)**	SM 3500-Cr B	WETA/7567		

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WO# : 2026793

2026793

1 Of 4

Section A — Required Client Information:

Company:	Arcadis Baton Rouge
Address:	10352 Plaza Americana Dr.
	Baton Rouge, LA 70816
Email:	John.Ellis@Arcadis.com
Phone: 225-252-1004	Fax:
Requested Due Date:	Standard

Section B — Required Project Information:

Report To:	George Cook
Copy To:	John Ellis/ Steve Sharp
Purchase Order #:	
Project Name:	Grenada MS
Project #:	LA00 3307.0001 0004

Section C — Invoice Information:

Attention:	Accounts Payable
Company Name:	Arcadis Batc
Address:	10352 Plaza Americana Dr.,Baton Rouge, LA 70816
Pace Quote:	
Pace Project Manager:	justin.stock@pacelabs.com,
Pace Profile #:	43329

Regulatory Agency

State / Location: MS

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Hexavalent Chromium	Residual Chlorine (Y/N)
1	VAP-2Gw (15-16)	WT	G	10-5-15	0850				1				X				X		X	
2	VAP-2-6w (20-21)	WT	G	"	1000				1								X		X	
3	VAP-2-6w (25-26)	WT	G	"	1033				1								X		X	
4	VAP-2-6w (30-31)	WT	G	"	1312				1								X		X	
5	VAP-2-6w-(35-36)	WT	G	10-5-15	1330				3								X		X	MS/MSD
6	VAP-2-6w (40-41)	WT	G	"	1441				1								X		X	
7	VAP-2-6w (45-46)	WT	G	"	1530				1								X		X	
8	VAP-2-6w (49-50)	WT	G	"	1600				1								X		X	
9	Dup-6w-01 (Coarse)	WT	C	10-5-15					1								X		X	
10	VAP-3-6w (15-16)	WT	G	10-06-15	0806				1								X		X	
11	VAP-3-6w (20-21)	WT	G	"	0911				1								X		X	
12	VAP-3-6w (25-26)	WT	G	"	0939				1								X		X	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Sample was filtered in Field	George Flach	10/7/15	1800	FedEx						
	FedEx	10-8-15	955		10-8-15	955	3.9	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: George Flach

SIGNATURE of SAMPLER:

DATE Signed:

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 2 Of 2

Section A
Required Client Information:

Company:	Arcadis Baton Rouge
Address:	10352 Plaza Americana Dr.
	Baton Rouge, LA 70816
Email:	John.Ellis @ Arcadis
Phone:	225-292-1004 Fax:
Requested Due Date:	Standard

Section B
Required Project Information:

Report To:	George Cook
Copy To:	John Ellis/ Steve Sharp
Purchase Order #:	
Project Name:	Grenada MS
Project #:	LA003307.004.0004

Section C
Invoice Information:

Attention:	Accounts Payable
Company Name:	Arcadis Baton Rouge
Address:	10352 Plaza Americana Dr.,Baton Rouge, LA 70816
Pace Quote:	
Pace Project Manager:	justin.stock@pacelabs.com,
Pace Profile #:	

Regulatory Agency

State / Location: MS

MATRIX CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Other OT, Tissue TS

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Hexavalent Chromium	Residual Chlorine (Y/N)
1	VAP-3-GW(30-31)	WT	G	10-06-15		1010			1								X		X	
2	VAP-3-GW(35-36)	WT	G	"		1058			1								X		X	
3	VAP-3-GW(40-41)	WT	G	"		1130			1								X		X	
4	VAP-3-GW(45-46)	WT	G	10-06-15		1204			1								X		X	
5	VAP-3-GW(49-50)	WT	G	"		1255			1								X		X	
6	VAP-4-GW(15-16)	WT	G	"		1452			1								X		X	
7	VAP-4-GW(20-21)	WT	G	10-06-15		1531			1								X		X	
8	VAP-4-GW(25-26)	WT	G	10-06-15		1606			1								X		X	
9	VAP-4-GW(30-31)	WT	G	"		1636											X		X	
10	VAP-4-GW(35-36)	WT	G	10-07-15		0811											X		X	
11	VAP-4-GW(40-41)	WT	G	10-07-15		0845											X		X	
12	VAP-4-GW(45-46)	WT	G	10-07-15		0918											X		X	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
X Samples were filtered in Field	George E Cook	10/07/15	1800	Fed Ex						
	Fed Ex	10-8-15	955	[signature]	10-8-15	955	3.9	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: George E Cook

SIGNATURE of SAMPLER: [signature]

DATE Signed: 10/07/15

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 3 Of 1

Section A — Required Client Information:

Company:	Arcadis Baton Rouge
Address:	10352 Plaza Americana Dr.
	Baton Rouge, LA 70816
Email:	John.Ellis@Arcadis
Phone:	225-922-4004 Fax:
Requested Due Date:	Standard

Section B — Required Project Information:

Report To:	George Cook
Copy To:	John Ellis/ Steve Sharp
Purchase Order #:	
Project Name:	Grenada MS
Project #:	LA00 3307.0001.0004

Section C — Invoice Information:

Attention:	Accounts Payable
Company Name:	Arcadis Baton Rouge
Address:	10352 Plaza Americana Dr., Baton Rouge, LA 70816
Pace Quote:	
Pace Project Manager:	justin.stock@pacelabs.com,
Pace Profile #:	

Regulatory Agency

State / Location: MS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Hexavalent Chromium	Residual Chlorine (Y/N)
1	VAP-4-6W(~~49-50~~)(48-49)	WT	G	10/07/15		0955			1								X		X	
2	VAP-5-6W(~~13-14~~)(15-16)	WT	G	"		1200			1								X		X	
3	VAP-5-6W(20-21)	WT	G	10/07/15		1228			1								X		X	
4	VAP-5-6W(25-26)	WT	G	"		1257			1								X		X	
5	VAP-5-6W(30-31)	WT	G	10/07/15		1331			1								X		X	
6	VAP-5-6W(35-36)	WT	G	"		1357			1								X		X	
7	VAP-5-6W(40-41)	WT	G	10/07/15		1443			1								X		X	
8	VAP-5-6W(45-46)	WT	G	"		1515			1								X		X	
9	VAP-5-6W(48-50)	WT	G	"					1								X		X	
10		WT															X		X	
11		WT															X		X	
12		WT															X		X	

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	George Elliott Arcadis	10/07/15	1800	FedEx						
	FedEx	10-8-15	955		10-8-15	955	3.9	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: George Elliott Cook

SIGNATURE of SAMPLER: [signature]

DATE Signed: 10/07/15

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Condition Upon Rece

Project

WO#: 2026793

PM: MM1 Due Date: 10/22/15

CLIENT: 20-ARCADISGM Arcadis Baton F

Courier: ☐ Pace Courier ☐ Hired Courier ☒ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☒Yes ☐No

Therometer Used:	☐ Therm Fisher IR 5 ☐ Therm Fisher IR 6 ☒ Therm Fisher IR 7

Type of Ice: Wet Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 10-08-15 MM

Temp must be measured from Temperature blank when present

				Comments:
Temperature Blank Present"?	☐Yes	☒No	☐N/A	1
Chain of Custody Present:	☒Yes	☐No	☐N/A	2
Chain of Custody Complete:	☒Yes	☐No	☐N/A	3
Chain of Custody Relinquished:	☒Yes	☐No	☐N/A	4
Sampler Name & Signature on COC:	☒Yes	☐No	☐N/A	5
Samples Arrived within Hold Time:	☒Yes	☐No	☐N/A	6
Sufficient Volume:	☒Yes	☐No	☐N/A	7
Correct Containers Used:	☒Yes	☐No	☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes	☐No	☒N/A	9
Sample Labels match COC:	☒Yes	☐No	☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☒Yes	☐No	☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☒Yes	☐No	☐N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☒Yes	☐No	☐N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☒N/A	14
Trip Blank Present:	☐Yes	☒No		15

Client Notification/ Resolution:

Person Contacted: Date/Time:

Comments/ Resolution: Did not receive LAST sample with ID: VAP-5-GW (49-50). No Time on COC either.

Pace Analytical Services, Inc.
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

October 14, 2015

John Ellis
Arcadis Baton Rouge
10352 Plaza Americana Dr.
Baton Rouge, LA 70816

RE: Project: Grenada MS
Pace Project No.: 2026909

Dear John Ellis:
Enclosed are the analytical results for sample(s) received by the laboratory on October 10, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Melissa MacNaughton

Melissa MacNaughton
Melissa.MacNaughton@pacelabs.com
Project Manager

Enclosures

cc: Julia Daigle, Arcadis
Marie Heap, Arcadis Baton Rouge

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St. Rose, LA 70087
(504)469-0333

CERTIFICATIONS

Project: Grenada MS
Pace Project No.: 2026909

New Orleans Certification IDs

California Env. Lab Accreditation Program Branch: 11277CA
Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Pennsylvania Dept. of Env Protection (NELAC): 68-04202
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Grenada MS
Pace Project No.: 2026909

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2026909001	**VAP-6-GW(15-16)**	Water	10/08/15 09:21	10/10/15 08:55
2026909002	**VAP-6-GW(20-21)**	Water	10/08/15 09:42	10/10/15 08:55
2026909003	**VAP-6-GW(25-26)**	Water	10/08/15 10:10	10/10/15 08:55
2026909004	**VAP-6-GW(30-31)**	Water	10/08/15 10:35	10/10/15 08:55
2026909005	**VAP-6-GW(35-36)**	Water	10/08/15 11:15	10/10/15 08:55
2026909006	**VAP-6-GW(40-41)**	Water	10/08/15 11:40	10/10/15 08:55
2026909007	**VAP-6-GW(45-46)**	Water	10/08/15 12:23	10/10/15 08:55
2026909008	**VAP-6-GW(49-50)**	Water	10/08/15 12:47	10/10/15 08:55
2026909009	**DUP-02 (100815)**	Water	10/08/15 00:00	10/10/15 08:55
2026909010	**VAP-8-GW(18-19)**	Water	10/08/15 14:00	10/10/15 08:55
2026909011	**VAP-8-GW(20-21)**	Water	10/08/15 14:40	10/10/15 08:55
2026909012	**VAP-8-GW(25-26)**	Water	10/08/15 15:01	10/10/15 08:55
2026909013	**VAP-8-GW(30-31)**	Water	10/08/15 15:27	10/10/15 08:55
2026909014	**VAP-8-GW(35-36)**	Water	10/08/15 15:55	10/10/15 08:55
2026909015	**VAP-8-GW(40-41)**	Water	10/08/15 16:38	10/10/15 08:55
2026909016	**VAP-8-GW(45-46)**	Water	10/08/15 17:08	10/10/15 08:55
2026909017	**VAP-8-GW(49-50)**	Water	10/08/15 17:40	10/10/15 08:55
2026909018	**VAP-7-GW(13-14)**	Water	10/09/15 08:45	10/10/15 08:55
2026909019	**VAP-7-GW(15-16)**	Water	10/09/15 09:30	10/10/15 08:55
2026909020	**VAP-7-GW(20-21)**	Water	10/09/15 10:00	10/10/15 08:55
2026909021	**VAP-7-GW(25-26)**	Water	10/09/15 10:34	10/10/15 08:55
2026909022	**VAP-7-GW(30-31)**	Water	10/09/15 10:57	10/10/15 08:55
2026909023	**VAP-7-GW(35-36)**	Water	10/09/15 11:34	10/10/15 08:55
2026909024	**VAP-7-GW(43-44)**	Water	10/09/15 11:57	10/10/15 08:55
2026909025	**VAP-7-GW(48-49)**	Water	10/09/15 12:26	10/10/15 08:55
2026909026	**DUP03 (100915)**	Water	10/09/15 00:00	10/10/15 08:55

REPORT OF LABORATORY ANALYSIS

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(504)469-0333

SAMPLE ANALYTE COUNT

Project: Grenada MS
Pace Project No.: 2026909

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2026909001	VAP-6-GW(15-16)	SM 3500-Cr B	JMA	1
2026909002	VAP-6-GW(20-21)	SM 3500-Cr B	JMA	1
2026909003	VAP-6-GW(25-26)	SM 3500-Cr B	JMA	1
2026909004	VAP-6-GW(30-31)	SM 3500-Cr B	JMA	1
2026909005	VAP-6-GW(35-36)	SM 3500-Cr B	JMA	1
2026909006	VAP-6-GW(40-41)	SM 3500-Cr B	JMA	1
2026909007	VAP-6-GW(45-46)	SM 3500-Cr B	JMA	1
2026909008	VAP-6-GW(49-50)	SM 3500-Cr B	JMA	1
2026909009	DUP-02 (100815)	SM 3500-Cr B	JMA	1
2026909010	VAP-8-GW(18-19)	SM 3500-Cr B	JMA	1
2026909011	VAP-8-GW(20-21)	SM 3500-Cr B	JMA	1
2026909012	VAP-8-GW(25-26)	SM 3500-Cr B	JMA	1
2026909013	VAP-8-GW(30-31)	SM 3500-Cr B	JMA	1
2026909014	VAP-8-GW(35-36)	SM 3500-Cr B	JMA	1
2026909015	VAP-8-GW(40-41)	SM 3500-Cr B	JMA	1
2026909016	VAP-8-GW(45-46)	SM 3500-Cr B	JMA	1
2026909017	VAP-8-GW(49-50)	SM 3500-Cr B	JMA	1
2026909018	VAP-7-GW(13-14)	SM 3500-Cr B	JMA	1
2026909019	VAP-7-GW(15-16)	SM 3500-Cr B	JMA	1
2026909020	VAP-7-GW(20-21)	SM 3500-Cr B	JMA	1
2026909021	VAP-7-GW(25-26)	SM 3500-Cr B	JMA	1
2026909022	VAP-7-GW(30-31)	SM 3500-Cr B	JMA	1
2026909023	VAP-7-GW(35-36)	SM 3500-Cr B	JMA	1
2026909024	VAP-7-GW(43-44)	SM 3500-Cr B	JMA	1
2026909025	VAP-7-GW(48-49)	SM 3500-Cr B	JMA	1
2026909026	DUP03 (100915)	SM 3500-Cr B	JMA	1

REPORT OF LABORATORY ANALYSIS

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St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: Grenada MS
Pace Project No.: 2026909

Sample: VAP-6-GW(15-16) **Lab ID: 2026909001** Collected: 10/08/15 09:21 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 10:44	18540-29-9	

Sample: VAP-6-GW(20-21) **Lab ID: 2026909002** Collected: 10/08/15 09:42 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 10:44	18540-29-9	

Sample: VAP-6-GW(25-26) **Lab ID: 2026909003** Collected: 10/08/15 10:10 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 10:44	18540-29-9	

Sample: VAP-6-GW(30-31) **Lab ID: 2026909004** Collected: 10/08/15 10:35 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 10:44	18540-29-9	

Sample: VAP-6-GW(35-36) **Lab ID: 2026909005** Collected: 10/08/15 11:15 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 10:44	18540-29-9	

Sample: VAP-6-GW(40-41) **Lab ID: 2026909006** Collected: 10/08/15 11:40 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 10:44	18540-29-9	M1

REPORT OF LABORATORY ANALYSIS

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1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: Grenada MS
Pace Project No.: 2026909

Sample: VAP-6-GW(45-46) **Lab ID: 2026909007** Collected: 10/08/15 12:23 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 10:57	18540-29-9	

Sample: VAP-6-GW(49-50) **Lab ID: 2026909008** Collected: 10/08/15 12:47 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 10:57	18540-29-9	

Sample: DUP-02 (100815) **Lab ID: 2026909009** Collected: 10/08/15 00:00 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 10:57	18540-29-9	

Sample: VAP-8-GW(18-19) **Lab ID: 2026909010** Collected: 10/08/15 14:00 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 10:57	18540-29-9	

Sample: VAP-8-GW(20-21) **Lab ID: 2026909011** Collected: 10/08/15 14:40 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 10:57	18540-29-9	

Sample: VAP-8-GW(25-26) **Lab ID: 2026909012** Collected: 10/08/15 15:01 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 10:57	18540-29-9	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

ANALYTICAL RESULTS

Project: Grenada MS
Pace Project No.: 2026909

Sample: VAP-8-GW(30-31) **Lab ID: 2026909013** Collected: 10/08/15 15:27 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 10:57	18540-29-9	

Sample: VAP-8-GW(35-36) **Lab ID: 2026909014** Collected: 10/08/15 15:55 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 10:57	18540-29-9	

Sample: VAP-8-GW(40-41) **Lab ID: 2026909015** Collected: 10/08/15 16:38 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 11:00	18540-29-9	

Sample: VAP-8-GW(45-46) **Lab ID: 2026909016** Collected: 10/08/15 17:08 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 11:00	18540-29-9	

Sample: VAP-8-GW(49-50) **Lab ID: 2026909017** Collected: 10/08/15 17:40 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 11:00	18540-29-9	

Sample: VAP-7-GW(13-14) **Lab ID: 2026909018** Collected: 10/09/15 08:45 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 11:00	18540-29-9	

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ANALYTICAL RESULTS

Project: Grenada MS
Pace Project No.: 2026909

Sample: VAP-7-GW(15-16) **Lab ID: 2026909019** Collected: 10/09/15 09:30 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 15:19	18540-29-9	

Sample: VAP-7-GW(20-21) **Lab ID: 2026909020** Collected: 10/09/15 10:00 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 15:19	18540-29-9	

Sample: VAP-7-GW(25-26) **Lab ID: 2026909021** Collected: 10/09/15 10:34 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 15:19	18540-29-9	

Sample: VAP-7-GW(30-31) **Lab ID: 2026909022** Collected: 10/09/15 10:57 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 15:19	18540-29-9	

Sample: VAP-7-GW(35-36) **Lab ID: 2026909023** Collected: 10/09/15 11:34 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 15:23	18540-29-9	

Sample: VAP-7-GW(43-44) **Lab ID: 2026909024** Collected: 10/09/15 11:57 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 15:23	18540-29-9	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Grenada MS
Pace Project No.: 2026909

Sample: VAP-7-GW(48-49) **Lab ID: 2026909025** Collected: 10/09/15 12:26 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	**0.018**	mg/L	0.010	1		10/13/15 15:23	18540-29-9	

Sample: DUP03 (100915) **Lab ID: 2026909026** Collected: 10/09/15 00:00 Received: 10/10/15 08:55 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/13/15 15:23	18540-29-9	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Grenada MS
Pace Project No.: 2026909

QC Batch: WETA/7595 Analysis Method: SM 3500-Cr B
QC Batch Method: SM 3500-Cr B Analysis Description: Chromium, Hexavalent by 3500
Associated Lab Samples: 2026909001, 2026909002, 2026909003, 2026909004, 2026909005, 2026909006, 2026909007, 2026909008, 2026909009, 2026909010, 2026909011, 2026909012, 2026909013, 2026909014, 2026909015, 2026909016, 2026909017, 2026909018, 2026909019, 2026909020

METHOD BLANK: 165474 Matrix: Water
Associated Lab Samples: 2026909001, 2026909002, 2026909003, 2026909004, 2026909005, 2026909006, 2026909007, 2026909008, 2026909009, 2026909010, 2026909011, 2026909012, 2026909013, 2026909014, 2026909015, 2026909016, 2026909017, 2026909018, 2026909019, 2026909020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	ND	0.010	10/13/15 10:44	

LABORATORY CONTROL SAMPLE: 165475

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.2	0.21	107	90-110	

MATRIX SPIKE SAMPLE: 165477

Parameter	Units	2026909006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	ND	.25	0.17	67	75-125	M1

SAMPLE DUPLICATE: 165476

Parameter	Units	2026909006 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/L	ND	ND		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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1000 Riverbend Blvd - Suite F
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(504)469-0333

QUALITY CONTROL DATA

Project: Grenada MS
Pace Project No.: 2026909

QC Batch: WETA/7596 Analysis Method: SM 3500-Cr B
QC Batch Method: SM 3500-Cr B Analysis Description: Chromium, Hexavalent by 3500
Associated Lab Samples: 2026909021, 2026909022, 2026909023, 2026909024, 2026909025, 2026909026

METHOD BLANK: 165484 Matrix: Water
Associated Lab Samples: 2026909021, 2026909022, 2026909023, 2026909024, 2026909025, 2026909026

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	ND	0.010	10/13/15 10:44	

LABORATORY CONTROL SAMPLE: 165485

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.2	0.22	109	90-110	

MATRIX SPIKE SAMPLE: 165531

Parameter	Units	2026909022 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	ND	.25	0.21	83	75-125	

SAMPLE DUPLICATE: 165530

Parameter	Units	2026909022 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/L	ND	ND		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Grenada MS
Pace Project No.: 2026909

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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(504)469-0333

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Grenada MS
Pace Project No.: 2026909

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2026909001	**VAP-6-GW(15-16)**	SM 3500-Cr B	WETA/7595		
2026909002	**VAP-6-GW(20-21)**	SM 3500-Cr B	WETA/7595		
2026909003	**VAP-6-GW(25-26)**	SM 3500-Cr B	WETA/7595		
2026909004	**VAP-6-GW(30-31)**	SM 3500-Cr B	WETA/7595		
2026909005	**VAP-6-GW(35-36)**	SM 3500-Cr B	WETA/7595		
2026909006	**VAP-6-GW(40-41)**	SM 3500-Cr B	WETA/7595		
2026909007	**VAP-6-GW(45-46)**	SM 3500-Cr B	WETA/7595		
2026909008	**VAP-6-GW(49-50)**	SM 3500-Cr B	WETA/7595		
2026909009	**DUP-02 (100815)**	SM 3500-Cr B	WETA/7595		
2026909010	**VAP-8-GW(18-19)**	SM 3500-Cr B	WETA/7595		
2026909011	**VAP-8-GW(20-21)**	SM 3500-Cr B	WETA/7595		
2026909012	**VAP-8-GW(25-26)**	SM 3500-Cr B	WETA/7595		
2026909013	**VAP-8-GW(30-31)**	SM 3500-Cr B	WETA/7595		
2026909014	**VAP-8-GW(35-36)**	SM 3500-Cr B	WETA/7595		
2026909015	**VAP-8-GW(40-41)**	SM 3500-Cr B	WETA/7595		
2026909016	**VAP-8-GW(45-46)**	SM 3500-Cr B	WETA/7595		
2026909017	**VAP-8-GW(49-50)**	SM 3500-Cr B	WETA/7595		
2026909018	**VAP-7-GW(13-14)**	SM 3500-Cr B	WETA/7595		
2026909019	**VAP-7-GW(15-16)**	SM 3500-Cr B	WETA/7595		
2026909020	**VAP-7-GW(20-21)**	SM 3500-Cr B	WETA/7595		
2026909021	**VAP-7-GW(25-26)**	SM 3500-Cr B	WETA/7596		
2026909022	**VAP-7-GW(30-31)**	SM 3500-Cr B	WETA/7596		
2026909023	**VAP-7-GW(35-36)**	SM 3500-Cr B	WETA/7596		
2026909024	**VAP-7-GW(43-44)**	SM 3500-Cr B	WETA/7596		
2026909025	**VAP-7-GW(48-49)**	SM 3500-Cr B	WETA/7596		
2026909026	**DUP03 (100915)**	SM 3500-Cr B	WETA/7596		

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CHAIN-OF-CUSTODY / Analytical Request

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WO# : 2026909

2026909

Section A — Required Client Information:

Company:	Arcadis Baton Rouge
Address:	10352 Plaza Americana Dr.
	Baton Rouge, LA 70816
Email:	John.Ellis@Arcadis.com
Phone:	225 292 1004 Fax:
Requested Due Date:	5 Days

Section B — Required Project Information:

Report To:	George Cook
Copy To:	John Ellis/ Steve Sharp
Purchase Order #:	
Project Name:	Grenada MS
Project #:	LA003367.0020.00004

Section C — Invoice Information:

Attention:	Accounts Payable
Company Name:	Arcadis Baton Rouge
Address:	10352 Plaza Americana Dr.,Baton Rouge, LA 70816
Pace Quote:	
Pace Project Manager:	justin.stock@pacelabs.com,
Pace Profile #:	

Regulatory Agency: | State / Location: MS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Hexavalent Chromium	Residual Chlorine (Y/N)
1	~~VAP-6-6W(20-21)~~(15-16)	WT	G	10-08-15		0921			1								X		X	
2	~~VAP-6-6W(25-26)~~(20-21)	WT	C	"		0942			1								X		X	
3	VAP-6-6W(25-26)	WT	G	"		1040			1								X		X	
4	VAP-6-6W(30-31)	WT	G	10-08-15		1035			1								X		X	
5	VAP-6-6W(35-36)	WT	G	10-08-15		1115			1								X		X	
6	VAP-6-6W(40-41)	WT	G	"		1140			3								X		X	MS/MSD
7	VAP-6-6W(45-46)	WT	G	"		1203			1								X		X	
8	VAP-6-6W(49-50)	WT	G	10-08-15		1247			1								X		X	
9	Dup-02(10-08-15)	WT	G	10-08-15		—			1								X		X	
10	VAP-8-6W(18-19)	WT	G	"		1400			1								X		X	
11	VAP-8-6W(20-21)	WT	G	"		1440			1								X		X	
12	VAP-8-6W(25-26)	WT	G	10-08-15		~~1440~~		1501	1								X		X	

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	George Black	10/09/15		Fed Ex						
	Fed Ex	10-10-15	855		10-10-15	855	1.0	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: George Black

SIGNATURE of SAMPLER: [signature]

DATE Signed: 10/09/15 1330

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Arcadis Baton Rouge	Report To:	George Cook	Attention:	Accounts Payable
Address:	10352 Plaza Americana Dr.	Copy To:	John Ellis / Steven Sharp	Company Name:	Arcadis
	Baton Rouge, LA 70816			Address:	10352 Plaza Americana Dr., Baton Rouge, LA 70816
Email:	John.Ellis@Arcadis.com	Purchase Order #:		Pace Quote:	
Phone:	225-292-1004 Fax:	Project Name:	Grenada MS	Pace Project Manager:	justin.stock@pacelabs.com,
Requested Due Date:	Standard	Project #:	LA00133070001.00004	Pace Profile #:	

Regulatory Agency: State / Location: MS

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Hexavalent Chromium	Residual Chlorine (Y/N)
1	VAP-8-Gw(30-31)	WT		10/08/15	1527				1								1		1	
2	VAP-8-Gw(35-36)	WT		10-08-15	1555				1								1		1	
3	VAP-8-Gw-(40-41)	WT		"	1638				1								1		1	
4	VAP-8-Gw(45-46)	WT		"	1708				1								1		1	
5	VAP-8-Gw(45-50)	WT		10-08-15	1780				1								1		1	
6	VAP-7-Gw(13-14)	WT		10-09-15	0845				1								1		1	
7	VAP-7-Gw(15-16)	WT		"	0930				1								1		1	
8	VAP-7-Gw(20-21)	WT		"	1000				1								1		1	
9	VAP-7-Gw(25-26)	WT		10-09-15	1034				1								1		1	
10	VAP-7-Gw(30-31)	WT		"	1057				1								1		1	MS/MSD
11	VAP-7-Gw(35-36)	WT		"	1134				1								1		1	
12	VAP-7-Gw(43-44)	WT			1157				1								1		1	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	George Cook	10/09/15	1330				
	Fedex	10-10-15	855		10/10/15	855	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: George Cook

SIGNATURE of SAMPLER: [signature]

DATE Signed: 10/08/15 1330

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 3 Of 3

Section A
Required Client Information:

Company:	Arcadis Baton Rouge
Address:	10352 Plaza Americana Dr.
	Baton Rouge, LA 70816
Email:	John.Ellis@Arcadis.com
Phone:	225-292-6004 Fax:
Requested Due Date:	Stand

Section B
Required Project Information:

Report To:	George Cook
Copy To:	John Ellis / Steven Sharp
Purchase Order #:	
Project Name:	Grenada MS
Project #:	UA003307.0001.00004

Section C
Invoice Information:

Attention:	Accounts Payable
Company Name:	Arcadis
Address:	10352 Plaza Americana Dr., Baton Rouge, LA 70816
Pace Quote:	
Pace Project Manager:	justin.stock@pacelabs.com,
Pace Profile #:	

Regulatory Agency

State / Location
MS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Hexavalent Chromium	Residual Chlorine (Y/N)
1	UAP-7-6ml (48-49)	WT		10-09-15			1226		1								1		1	
2	Dup-03 (100915)	WT		"		—			1								1		1	
3		WT															1		1	
4		WT															1		1	
5		WT															1		1	
6		WT															1		1	
7		WT															1		1	
8		WT															1		1	
9		WT															1		1	
10		WT															1		1	
11		WT															1		1	
12		WT															1		1	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	George Cook	10/09/15	1330				
	FedEx	10-10-15	855	[signature]	10-10-15	855	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: George Cook

SIGNATURE of SAMPLER: [signature]

DATE Signed: 10/09/15 1330

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Condition Upo

WO#: 2026909

PM: MM1 Due Date: 10/26/15

CLIENT: 20-ARCADISGM Arcadis Baton R

Pl

Courier: ☐ Pace Courier ☐ Hired Courier ☑ Fed X ☐ UPS ☐ DHL ☐ USPS ☐ Customer ☑ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☑Yes ☐No

Therometer Used: ☐ Therm Fisher IR 5 ☐ Therm Fisher IR 6 ☑ Therm Fisher IR 7

Type of Ice: Wet Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 10-10-15 A

Temp must be measured from Temperature blank when present

			Comments:
Temperature Blank Present"?	☐Yes	☐No ☐N/A	1
Chain of Custody Present:	☑Yes	☐No ☐N/A	2
Chain of Custody Complete:	☑Yes	☐No ☐N/A	3
Chain of Custody Relinquished:	☑Yes	☐No ☐N/A	4
Sampler Name & Signature on COC:	☑Yes	☐No ☐N/A	5
Samples Arrived within Hold Time:	☑Yes	☐No ☐N/A	6
Sufficient Volume:	☑Yes	☐No ☐N/A	7
Correct Containers Used:	☑Yes	☐No ☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes	☐No ☑N/A	9
Sample Labels match COC:	☑Yes	☐No ☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☑Yes	☐No ☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes	☐No ☑N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes	☐No ☑N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes	☐No ☑N/A	14
Trip Blank Present:	☐Yes	☑No	15

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Pace Analytical Services, Inc.
1000 Riverbend Blvd - Suite F
St. Rose, LA 70087
(504)469-0333

October 22, 2015

John Ellis
Arcadis Baton Rouge
10352 Plaza Americana Dr.
Baton Rouge, LA 70816

RE: Project: Grenada MS
Pace Project No.: 2027354

Dear John Ellis:
Enclosed are the analytical results for sample(s) received by the laboratory on October 21, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Melissa MacNaughton

Melissa MacNaughton
Melissa.MacNaughton@pacelabs.com
Project Manager

Enclosures

cc: Julia Daigle, Arcadis
Marie Heap, Arcadis Baton Rouge

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CERTIFICATIONS

Project: Grenada MS
Pace Project No.: 2027354

New Orleans Certification IDs

California Env. Lab Accreditation Program Branch: 11277CA
Florida Department of Health (NELAC): E87595
Illinois Environmental Protection Agency: 0025721
Kansas Department of Health and Environment (NELAC): E-10266
Louisiana Dept. of Environmental Quality (NELAC/LELAP): 02006
Pennsylvania Dept. of Env Protection (NELAC): 68-04202
Texas Commission on Env. Quality (NELAC): T104704405-09-TX
U.S. Dept. of Agriculture Foreign Soil Import: P330-10-00119

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: Grenada MS
Pace Project No.: 2027354

Lab ID	Sample ID	Matrix	Date Collected	Date Received
2027354001	**VAP-10-GW (16-17)**	Water	10/20/15 08:10	10/21/15 08:05
2027354002	**VAP-10-GW (20-21)**	Water	10/20/15 09:00	10/21/15 08:05
2027354003	**VAP-10-GW (25-26)**	Water	10/20/15 09:41	10/21/15 08:05
2027354004	**VAP-10-GW (30-31)**	Water	10/20/15 10:00	10/21/15 08:05
2027354005	**VAP-10-GW (35-36)**	Water	10/20/15 10:34	10/21/15 08:05
2027354006	**VAP-10-GW (45-46)**	Water	10/20/15 12:01	10/21/15 08:05

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Grenada MS
Pace Project No.: 2027354

Lab ID	Sample ID	Method	Analysts	Analytes Reported
2027354001	**VAP-10-GW (16-17)**	SM 3500-Cr B	JMA	1
2027354002	**VAP-10-GW (20-21)**	SM 3500-Cr B	JMA	1
2027354003	**VAP-10-GW (25-26)**	SM 3500-Cr B	JMA	1
2027354004	**VAP-10-GW (30-31)**	SM 3500-Cr B	JMA	1
2027354005	**VAP-10-GW (35-36)**	SM 3500-Cr B	JMA	1
2027354006	**VAP-10-GW (45-46)**	SM 3500-Cr B	JMA	1

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ANALYTICAL RESULTS

Project: Grenada MS
Pace Project No.: 2027354

Sample: VAP-10-GW (16-17) **Lab ID: 2027354001** Collected: 10/20/15 08:10 Received: 10/21/15 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/21/15 13:10	18540-29-9	M1

Sample: VAP-10-GW (20-21) **Lab ID: 2027354002** Collected: 10/20/15 09:00 Received: 10/21/15 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/21/15 13:10	18540-29-9	

Sample: VAP-10-GW (25-26) **Lab ID: 2027354003** Collected: 10/20/15 09:41 Received: 10/21/15 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/21/15 13:10	18540-29-9	

Sample: VAP-10-GW (30-31) **Lab ID: 2027354004** Collected: 10/20/15 10:00 Received: 10/21/15 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/21/15 13:10	18540-29-9	

Sample: VAP-10-GW (35-36) **Lab ID: 2027354005** Collected: 10/20/15 10:34 Received: 10/21/15 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/21/15 13:12	18540-29-9	

Sample: VAP-10-GW (45-46) **Lab ID: 2027354006** Collected: 10/20/15 12:01 Received: 10/21/15 08:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chromium, Hexavalent Preserved	Analytical Method: SM 3500-Cr B							
Chromium, Hexavalent	ND	mg/L	0.010	1		10/21/15 13:12	18540-29-9	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Grenada MS
Pace Project No.: 2027354

QC Batch: WETA/7687 Analysis Method: SM 3500-Cr B
QC Batch Method: SM 3500-Cr B Analysis Description: Chromium, Hexavalent by 3500
Associated Lab Samples: 2027354001, 2027354002, 2027354003, 2027354004, 2027354005, 2027354006

METHOD BLANK: 168388 Matrix: Water
Associated Lab Samples: 2027354001, 2027354002, 2027354003, 2027354004, 2027354005, 2027354006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	ND	0.010	10/21/15 13:10	

LABORATORY CONTROL SAMPLE: 168389

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	.2	0.20	101	90-110	

MATRIX SPIKE SAMPLE: 168391

Parameter	Units	2027354001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	ND	.25	ND	0	75-125	M1

SAMPLE DUPLICATE: 168390

Parameter	Units	2027354001 Result	Dup Result	RPD	Max RPD	Qualifiers
Chromium, Hexavalent	mg/L	ND	ND		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Grenada MS
Pace Project No.: 2027354

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The Nelac Institute

ANALYTE QUALIFIERS

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Grenada MS
Pace Project No.: 2027354

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
2027354001	**VAP-10-GW (16-17)**	SM 3500-Cr B	WETA/7687		
2027354002	**VAP-10-GW (20-21)**	SM 3500-Cr B	WETA/7687		
2027354003	**VAP-10-GW (25-26)**	SM 3500-Cr B	WETA/7687		
2027354004	**VAP-10-GW (30-31)**	SM 3500-Cr B	WETA/7687		
2027354005	**VAP-10-GW (35-36)**	SM 3500-Cr B	WETA/7687		
2027354006	**VAP-10-GW (45-46)**	SM 3500-Cr B	WETA/7687		

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Pace Analytical

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 1

Section A — Required Client Information:

Company:	Arcadis Baton Rouge
Address:	10352 Plaza Americana Dr.
	Baton Rouge, LA 70816
Email:	John.Ellis@Arcadis.com
Phone:	225-252-1004 Fax:
Requested Due Date:	Standard

Section B — Required Project Information:

Report To:	George Cook
Copy To:	John Ellis / Steven Sharp
Purchase Order #:	
Project Name:	Grenada MS
Project #:	LVA003307.0021.00004

Section C — Invoice Information:

Attention:	Accounts Payable
Company Name:	Arcadis
Address:	10352 Plaza Americana Dr., Baton Rouge, LA 70816
Pace Quote:	
Pace Project Manager:	justin.stock@pacelabs.com
Pace Profile #:	

Regulatory Agency

WO# : 2027354

2027354

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	Hexavalent Chromium	Residual Chlorine (Y/N)
1	VAP-10-6W (16-17)	WT		10-20-15	0840				1								1		1	
2	VAP-10-6W (20-21)	WT		"	0900				1								1		1	
3	VAP-10-6W (25-26)	WT		"	0941				1								1		1	
4	VAP-10-6W (30-31)	WT		10-20-15	1000				1								1		1	
5	VAP-10-6W (35-36)	WT		"	1034				1								1		1	
6	~~VAP-10-6W (40-41)~~	WT		"	1107				1								1		1	No Sample collected 40-41
7	~~VAP-10~~ VAP-10-6W (45-46)	WT		10-20-15	1201				1								1		1	
8	~~VAP-10-6W (45-50)~~	~~WT~~		~~10-20-15~~													1		1	No Sample 45-50
9		WT															1		1	
10		WT															1		1	
11		WT															1		1	
12		WT															1		1	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
* No sample collected 40-41, 45-50	Collected	10-21-15	0825		10/21/15	805	2.3	Y	N/A	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pace Analytical

1000 Riverbend. Blvd., Suite F
St. Rose, LA 70087

Sample Condition Upon R

WO# : 2027354

PM: MM1 Due Date: 11/04/15

CLIENT: 20-ARCADISGM Arcadis Baton

Proj

Courier: ☐ Pace Courier ☐ Hired Courier ☐ Fed X ☐ UPS ☐ DHL ☐ USPS ☒ Customer ☐ Other

Custody Seal on Cooler/Box Present: [see COC] **Custody Seals intact:** ☐Yes ☒No

Therometer Used: ☐ Therm Fisher IR 5 ☐ Therm Fisher IR 6 ☒ Therm Fisher IR 7

Type of Ice: (Wet) Blue None

Samples on ice: [see COC]

Cooler Temperature: [see COC]

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 10-21-15 MD

Temp must be measured from Temperature blank when present

			Comments:
Temperature Blank Present"?	☐Yes ☐No	☒N/A	1
Chain of Custody Present:	☒Yes ☐No	☐N/A	2
Chain of Custody Complete:	☒Yes ☐No	☐N/A	3
Chain of Custody Relinquished:	☒Yes ☐No	☐N/A	4
Sampler Name & Signature on COC:	☐Yes ☒No	☐N/A	5
Samples Arrived within Hold Time:	☒Yes ☐No	☐N/A	6
Sufficient Volume:	☒Yes ☐No	☐N/A	7
Correct Containers Used:	☒Yes ☐No	☐N/A	8
Filtered vol. Rec. for Diss. tests	☐Yes ☐No	☒N/A	9
Sample Labels match COC:	☒Yes ☐No	☐N/A	10
All containers received within manafacture's precautionary and/or expiration dates.	☒Yes ☐No	☐N/A	11
All containers needing chemical preservation have been checked (except VOA, coliform, & O&G).	☐Yes ☐No	☒N/A	12
All containers preservation checked found to be in compliance with EPA recommendation.	☐Yes ☐No	☒N/A	13 If No, was preserative added? ☐Yes ☐No If added record lot no.: HNO3 _____ H2SO4 _____
Headspace in VOA Vials (>6mm):	☐Yes ☐No	☒N/A	14
Trip Blank Present:	☐Yes ☒No		15

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

CGC, Geotechnical Laboratory
Test Results

Date: 10/21/2015
CGC Job # C14081-7
Tests by: DRW/KJS
Test No.

Job: Granada Manufacturing (LA003307.0001) **Client:** Arcadis

Sample No.	Depth (ft)	Description (Visual)	Natural Moisture (%)	Porosity			Void Ratio	Unit Weight-Wet (pcf)	Unit Weight-Dry (pcf)	Specific Gravity
				Water Filled (%)	Air Filled (%)	Total (%)				
VAP 6	6'-8'	Brown Lean Clay	20.9	36.0	0.0	36.0	0.56	130.28	107.73	2.68
VAP 8	6'-8'	Brown Silty Clay	22.6	37.4	0.3	37.7	0.61	126.51	103.19	2.65
VAP 9	6'-8'	Brown Lean Clay	25.4	39.7	1.9	41.6	0.71	122.26	97.46	2.67

Notes:

ARCADIS
Infrastructure · Water · Environment · Buildings

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 1

Lab Work Order #

Send Results to:

Contact & Company Name: Marie Heap/Arcadis	Telephone: 317-236-2819
Address: 132 E. Washington Street Suit 600	Fax: 317-231-6514
City: Indianapolis State: IN Zip: 46204	E-mail Address: Marie.Heap@Arcadis.com
Project Name/Location (City, State): Grenada Manufacturing (MS)	Project #: LA003 302001.0005
Sampler's Printed Name: George Elcock	Sampler's Signature: [signature]

Preservative	E						
Filtered (✓)	—						
# of Containers	1						
Container Information	9						

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

Container Information Key:
1. 40 ml Vial
2. 1 L Amber
3. 250 ml Plastic
4. 500 ml Plastic
5. Encore
6. 2 oz. Glass
7. 4 oz. Glass
8. 8 oz. Glass
9. Other: _____
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: _____

PARAMETER ANALYSIS & METHOD

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Water Filled porosity / Air Filled porosity / % moisture							REMARKS
VAP-6 (6-8')	10-08-15	0830		G	S	1							
VAP-8 (6-8)	"	1356		G	S	1							
VAP-9 (6-8)	10-09-15	1250		G	S	1							

Special Instructions/Comments:
(1) Air Filled porosity (2) % Moisture
(3) Water Filled porosity
** Call Marie Heap upon arrival at Lab. 317-236-2819

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt

		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: CGL Inc.	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: George Elcock	Printed Name:	Printed Name:	Printed Name:
☐ Cooler packed with ice (✓) NA		Signature: [signature]	Signature:	Signature:	Signature:
Specify Turnaround Requirements: Stard	Sample Receipt:	Firm: Arcadis	Firm/Courier:	Firm/Courier:	Firm:
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 10/11/12 1200	Date/Time:	Date/Time:	Date/Time:

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by ARCADIS

LETTER OF TRANSMITTAL

S&ME, Inc.
6190 Enterprise Ct.
Dublin, Ohio 43016
(614) 793-2226 – Phone
(614) 793-2410 – Fax
www.smeinc.com

Date: October 1, 2015
S&ME Project No: 3717-15-010
Project Name: Mississippi Site
Reference: Laboratory Test Results

To: T and M Associates
4675 Lakehurst Ct., Suite 250
Dublin, Ohio 43016
Attention: Mr. Jim Peeples

With this e-mail, we are sending you the following:

Document	Number of Pages
Laboratory Test Results • Atterberg Limits • 3 USDA gradations • 3 Hydraulic Conductivity tests • Laboratory Test Summary	9 including cover

These documents are transmitted as checked below:

[ ] For Approval [ ] For Your Use [X] As Requested [ ] For review & comment [ ] _____

Jim,

Here are the revised testing reports. I apologize for any inconvenience this may have caused.

Thank you,
~Paula

Signed: Paula J Manning

Paula J. Manning,
Laboratory Manager/
Project Manager

Distribution: 1 Copy – T and M Associates
Mr. Jim Peeples

IF ENCLOSURES ARE NOT AS NOTED, PLEASE NOTIFY US AT ONCE.

This Letter of Transmittal and the documents accompanying this Letter of Transmittal contain information from S&ME. Inc. which is confidential and legally privileged. The information is intended only for the use of the individual or entity named in this Letter of Transmittal. If you are not the authorized recipient, you are hereby notified that any disclosure, copying, distribution, or the taking of any action in reliance on these documents is strictly prohibited.

S&ME

SUMMARY OF LABORATORY TEST RESULTS

SPECIMEN ID	PT.ID	MC	LL	PL	PI	% passing #270	% passing .002 mm	opt.	pcf	PERMEABILITY	USDA Classification
ST-219A	7.00	23	30	16	14	76.3	20.4			3.46 x 10-09 cm/sec	SILT LOAM
ST-219B	7.00	22	35	15	20	81.4	22.6			1.32 x 10-07 cm/sec	SILTY CLAY LOAM
ST-219C	7.00	22	34	15	19	79.6	21.8			3.12 x 10-09 cm/sec	SILT LOAM

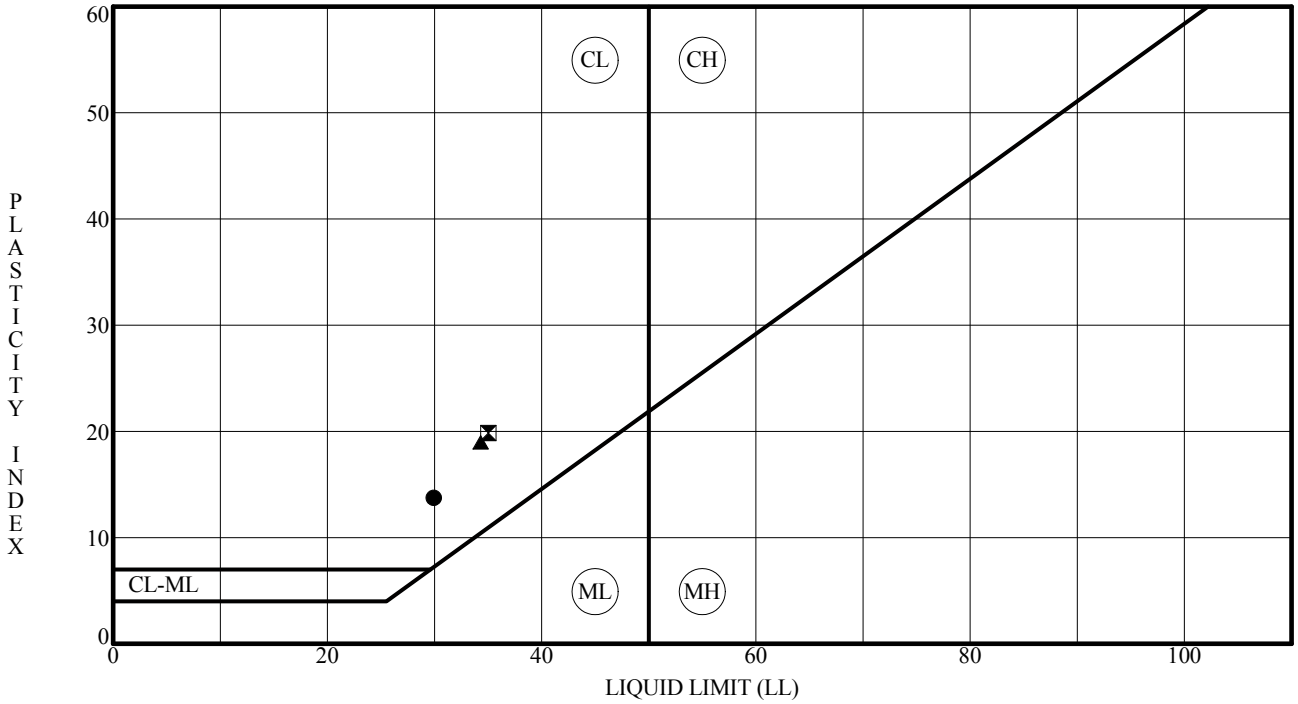
SUMUSDA

BULK SAMPLES

PROJECT T and M Associates-Mississippi Site
LOCATION Mississippi
JOB NO. 3717-15-010 DATE 10/1/15

PLATE 1

ATTERBERG LIMITS' RESULTS - ASTM D4318

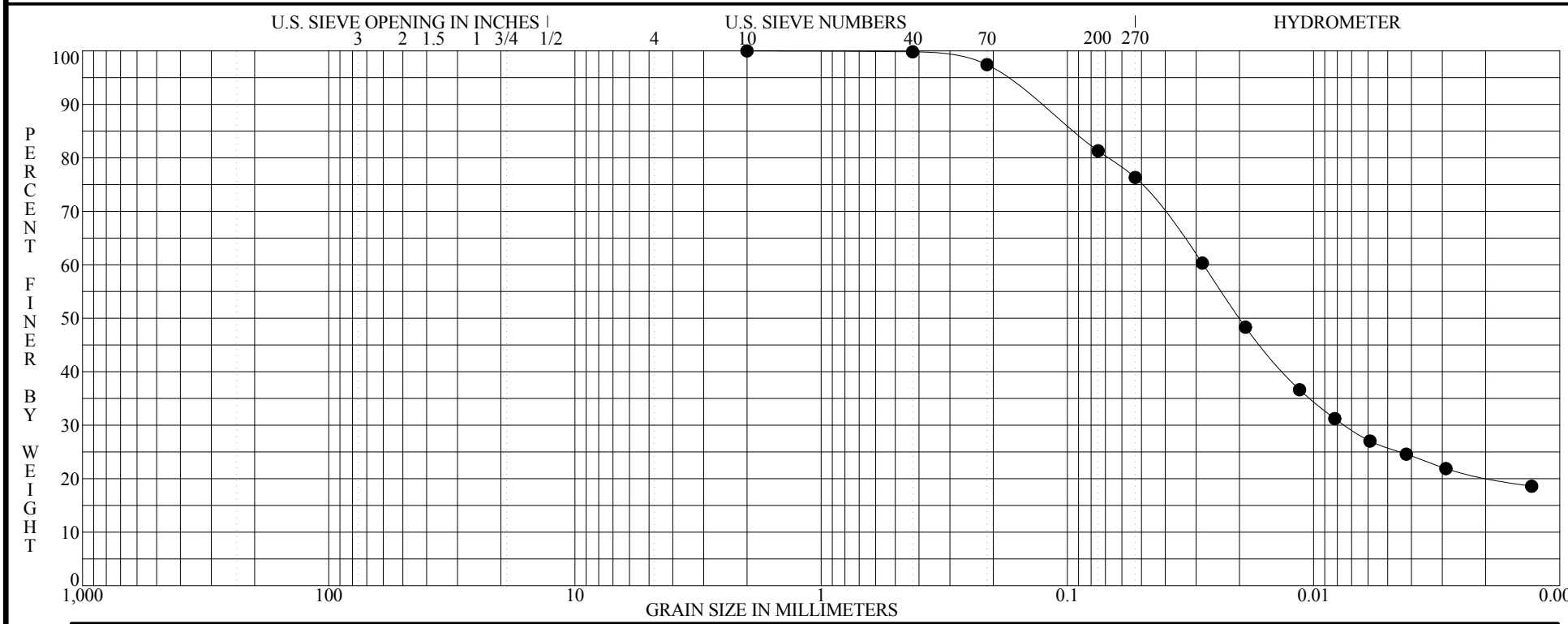


	Specimen Id.	Depth	MC	LL	PL	PI	Fines	ASTM Classification
●	**ST-219A**	**7.00**	**23**	**30**	**16**	**14**	**81.3**	**SILT LOAM**
⧓	**ST-219B**	**7.00**	**22**	**35**	**15**	**20**	**86.0**	**SILTY CLAY LOAM**
▲	**ST-219C**	**7.00**	**22**	**34**	**15**	**19**	**84.5**	**SILT LOAM**

PROJECT T and M Associates-Mississippi Site
LOCATION Mississippi
JOB NO. 3717-15-010 **DATE** 10/1/15

ALPI-REG

GRN-USDA



BOULDERS	COBBLES	GRAVEL		SAND			SILT OR CLAY
		coarse	fine	coarse	medium	fine	

	Specimen Identification - Depth	Classification	MC%	LL	PL	PI	Cc	Cu
●	**ST-219A**		**23**	**30**	**16**	**14**		
		USDA Classification : SILT LOAM						

	Specimen Identification - Depth	D100	D95	D60	D50	D10	%Gravel	%Sand	%Silt	%Clay
●	**ST-219A**	**2.0000**	**0.1812**	**0.0280**	**0.0200**		**0.0**	**23.7**	**56.0**	**20.4**

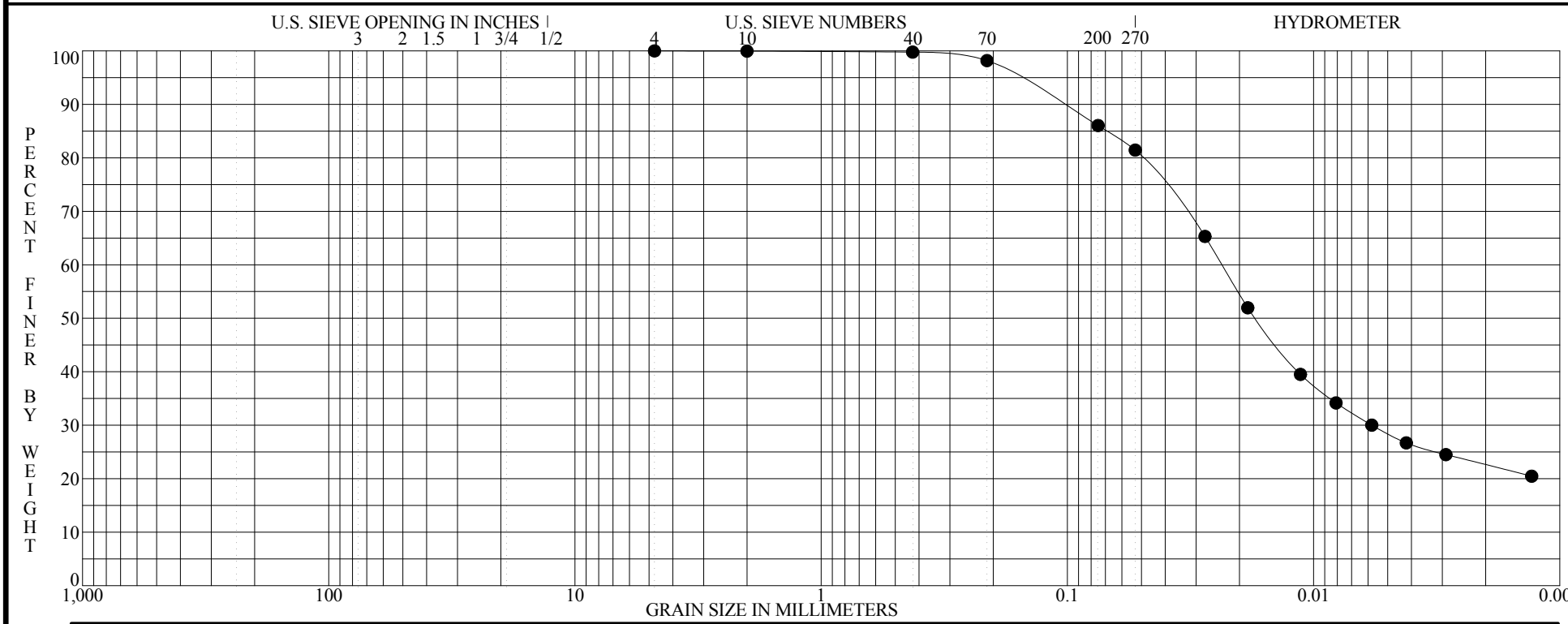
ASTM D422

GRADATION CURVE

PROJECT T and M Associates-Mississippi Site
LOCATION Mississippi
JOB NO. 3717-15-010 **DATE** 10/1/15

PLATE 1

GRN-USDA



BOULDERS	COBBLES	GRAVEL		SAND			SILT OR CLAY
		coarse	fine	coarse	medium	fine	

	Specimen Identification - Depth	Classification	MC%	LL	PL	PI	Cc	Cu
●	**ST-219B**		**22**	**35**	**15**	**20**		
		USDA Classification : SILTY CLAY LOAM						

	Specimen Identification - Depth	D100	D95	D60	D50	D10	%Gravel	%Sand	%Silt	%Clay
●	**ST-219B**	**4.7500**	**0.1613**	**0.0235**	**0.0171**		**0.0**	**18.5**	**58.8**	**22.6**

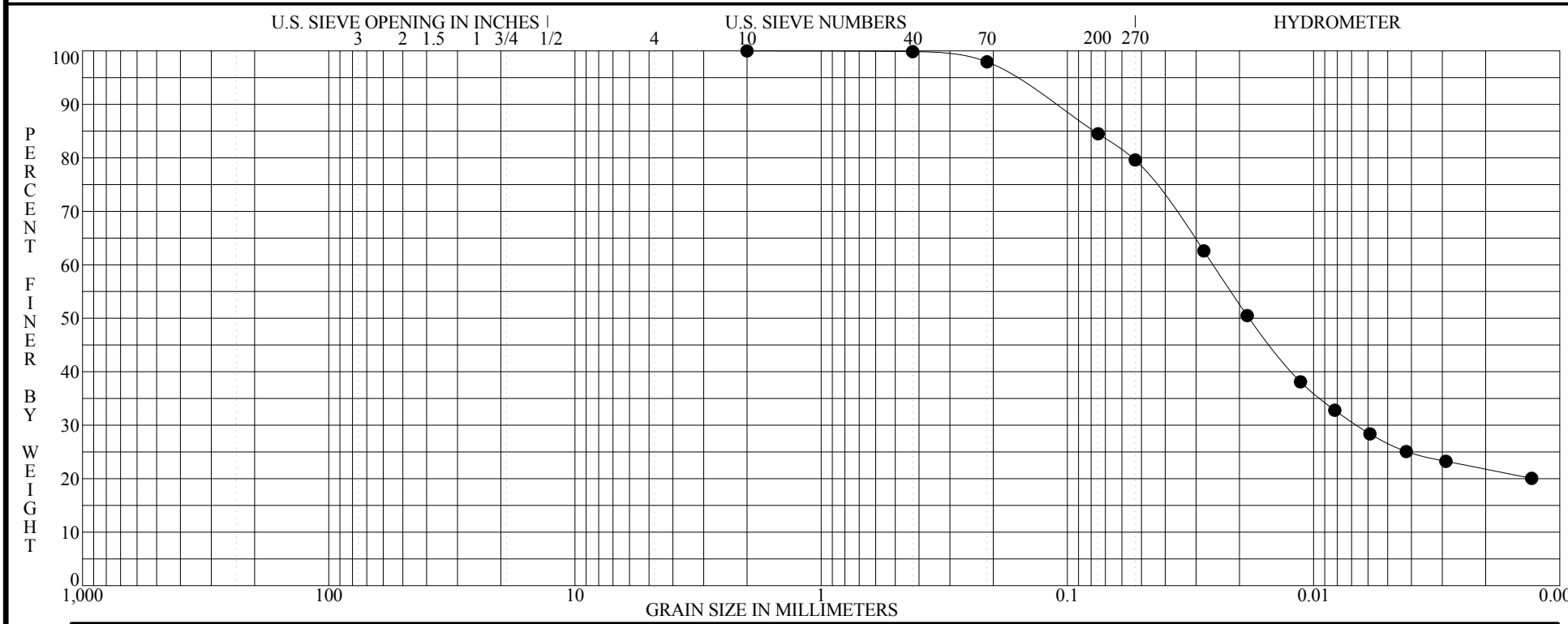
ASTM D422

GRADATION CURVE

PROJECT T and M Associates-Mississippi Site
LOCATION Mississippi
JOB NO. 3717-15-010 **DATE** 10/1/15

PLATE 2

GRN-USDA



BOULDERS	COBBLES	GRAVEL		SAND			SILT OR CLAY
		coarse	fine	coarse	medium	fine	

	Specimen Identification - Depth	Classification	MC%	LL	PL	PI	Cc	Cu
●	**ST-219C**		**22**	**34**	**15**	**19**		
		USDA Classification : SILT LOAM						

	Specimen Identification - Depth	D100	D95	D60	D50	D10	%Gravel	%Sand	%Silt	%Clay
●	**ST-219C**	**2.0000**	**0.1687**	**0.0256**	**0.0182**		**0.0**	**20.4**	**57.8**	**21.8**

ASTM D422

GRADATION CURVE

PROJECT T and M Associates-Mississippi Site
LOCATION Mississippi
JOB NO. 3717-15-010 **DATE** 10/1/15

PLATE 3

PERMEABILITY TEST DATA AND COMPUTATION SHEET

((ASTM D-5084) FALLING HEAD, METHOD C)

S&ME

Job Number:	**3717-15-010**	Date:	**7/15-7/20/2015**	Maximum Dry Density:	
Project Name:	**Mississippi Site**	Boring:	**ST-219**	Optimum Moisture Content:	
Project Location:	**Mississippi**	Sample:	**A II**	% Compaction.:	
Tested By:	**PJM**	Depth:	**6.0' to 8.0'**	Optimum +/-:	
Remarks:				Natural:	**X**
Material:	**SILT LOAM**			Remolded:	

Sample:

Initial Length:	3.4578 in = 8.783 cm
Final Ave. Length (L):	3.4035 in = 8.645 cm
Diameter:	1.6693 in = 4.24 cm
Area (A):	2.189 sq in = 14.12 sq cm
Volume (V):	7.568 cu in = 124.01 cu cm
Wet Wt.:	251.81 grams
Unit Wet Wt.:	126.77 pcf
Unit Dry Wt.:	**102.84 pcf**

Test Conditions:

Chamber Pressure:	85 psi
Back Pressure:	78 psi
Confining Pressure:	7 psi
Temp. @ Start:	23.9 °C
Temp. @ End:	24.0 °C
Average Temp.:	24.0 °C
B Parameter:	1

Moisture Content:

	Before Test	After Test
Pan No. =	B	B
Wet Wt. + Pan =	251.81	249.85
Dry Wt. + Pan =	204.29	204.29
Wt. of Pan =	0.00	0.00
Wt. of Dry Soil =	204.29	204.29
Wt. of Water =	47.52	45.56
% Moisture =	**23.26**	22.30
% SATURATION	100.84	100.85
S.G. =	**2.6570**	
% POROSITY =	**38.00**	

Pipette Pressures During Test:

Top Pipette:	82 psi	= 5767.8 cm
Bottom Pipette:	78 psi	= 5486.4 cm

Pipette:

Area (a): 0.3435 sq in = 0.8725 sq cm

Calculations:

$$k = \frac{a \cdot L}{2 \cdot A \cdot \Delta t} \ln\left(\frac{h_1}{h_2}\right)$$

where:

- k = Hydraulic Conductivity
- a = Pipette Cross-Sectional Area
- L = Length of Sample
- A = Sample Cross-Sectional Area
- Δt = Time Interval ($t_2 - t_1$)
- h_1 = Head Loss Across Permeameter/Specimen at t_1
- h_2 = Head Loss Across Permeameter/Specimen at t_2
- ln = Natural Logarithm (Base e = 2.71828)

Date	Time Readings	Time Interval Δt Seconds	Top Pipette cc	Hydraulic Head Headwater H_1 cm	Bottom Pipette cc	Hydraulic Head Tailwater H_2 cm	Head Loss $h = H_1 - H_2$ cm	$\ell n (h_1/h_2)$	Temp. Corr. Permeability k cm/sec
7/15/2015	8:36 AM	0.00	38.00	5510.82	6.90	5827.82	-317.00	–	–
7/15/2015	4:27 PM	28,260	37.90	5510.94	7.00	5827.71	-316.77	0.00072	6.228E-09
7/16/2015	8:30 AM	57,780	37.85	5511.00	7.30	5827.37	-316.37	0.00127	5.336E-09
7/18/2015	1:35 PM	191,100	37.60	5511.28	7.60	5827.02	-315.74	0.00199	2.539E-09
7/20/2015	9:06 AM	156,660	37.40	5511.51	8.00	5826.56	-315.05	0.00218	3.386E-09

Time Weighted Average, k [cm/sec] **= 3.458E-09**

PERMEABILITY TEST DATA AND COMPUTATION SHEET

((ASTM D-5084) FALLING HEAD, METHOD C)

S&ME

Job Number:	**3717-15-010**	Date:	**7/13-16/2015**	Maximum Dry Density:	
Project Name:	**Mississippi Site**	Boring:	**ST-219**	Optimum Moisture Content:	
Project Location:	**Mississippi**	Sample:	**B III**	% Compaction.:	
Tested By:	**PJM**	Depth:	**6.0' to 8.0'**	Optimum +/-:	
Remarks:				Natural:	**X**
Material:	**SILTY CLAY LOAM**			Remolded:	

Sample:

Initial Length:	4.1257 in = 10.479 cm
Final Ave. Length (L):	4.1460 in = 10.531 cm
Diameter:	1.6497 in = 4.19 cm
Area (A):	2.137 sq in = 13.79 sq cm
Volume (V):	8.819 cu in = 144.51 cu cm
Wet Wt.:	296.58 grams
Unit Wet Wt.:	128.13 pcf
Unit Dry Wt.:	**104.86 pcf**

Test Conditions:

Chamber Pressure:	65 psi
Back Pressure:	58 psi
Confining Pressure:	7 psi
Temp. @ Start:	23.7 °C
Temp. @ End:	23.8 °C
Average Temp.:	23.8 °C
B Parameter:	1

Pipette Pressures During Test:

Top Pipette:	63 psi	= 4431.3 cm
Bottom Pipette:	58 psi	= 4079.6 cm

Pipette:

Area (a): 0.3435 sq in = 0.8725 sq cm

Moisture Content:

	Before Test	After Test
Pan No. =	C	C
Wet Wt. + Pan =	296.58	299.33
Dry Wt. + Pan =	242.73	242.73
Wt. of Pan =	0.00	0.00
Wt. of Dry Soil =	242.73	242.73
Wt. of Water =	53.85	56.60
% Moisture =	**22.19**	23.32
% SATURATION	103.62	107.44

S.G. = 2.6230

% POROSITY = 35.96

Calculations:

$$k = \frac{a \cdot L}{2 \cdot A \cdot \Delta t} \ln\left(\frac{h_1}{h_2}\right)$$

where:

k = Hydraulic Conductivity

a = Pipette Cross-Sectional Area

L = Length of Sample

A = Sample Cross-Sectional Area

Δt = Time Interval ($t_2 - t_1$)

h_1 = Head Loss Across Permeameter/Specimen at t_1

h_2 = Head Loss Across Permeameter/Specimen at t_2

ln = Natural Logarithm (Base e = 2.71828)

Date	Time Readings	Time Interval Δt Seconds	Bottom Pipette cc	Hydraulic Head Headwater H_1 cm	Top Pipette cc	Hydraulic Head Tailwater H_2 cm	Head Loss $h = H_1 - H_2$ cm	$\ell n\ (h_1/h_2)$	Temp. Corr. Permeability k cm/sec
7/13/2015	2:43 PM	0.00	37.70	4104.40	10.80	4486.92	-382.52	–	–
7/13/2015	3:09 PM	1,560	37.30	4104.86	10.90	4486.81	-381.95	0.00150	2.930E-07
7/13/2015	4:25 PM	4,560	36.20	4106.12	11.00	4486.69	-380.58	0.00361	2.412E-07
7/14/2015	8:28 AM	57,780	24.10	4119.99	11.10	4486.58	-366.59	0.03743	1.975E-07
7/15/2015	8:33 AM	86,700	13.00	4132.71	11.40	4486.24	-353.53	0.03629	1.276E-07
7/15/2015	4:29 PM	28,560	10.30	4135.80	11.50	4486.12	-350.32	0.00912	9.734E-08
7/16/2015	8:31 AM	57,720	5.90	4140.85	11.60	4486.01	-345.16	0.01483	7.834E-08

Time Weighted Average, k [cm/sec] **= 1.323E-07**

PERMEABILITY TEST DATA AND COMPUTATION SHEET

((ASTM D-5084) FALLING HEAD, METHOD C)

S&ME

Job Number:	**3717-15-010**	Date:	**7/13-20/2015**	Maximum Dry Density:	
Project Name:	**Mississippi Site**	Boring:	**ST-219**	Optimum Moisture Content:	
Project Location:	**Mississippi**	Sample:	**C II**	% Compaction.:	
Tested By:	**PJM**	Depth:	**6.0' to 8.0'**	Optimum +/-:	
Remarks:				Natural:	**X**
Material:	**SILT LOAM**			Remolded:	

Sample:

Initial Length:	3.4218 in = 8.691 cm
Final Ave. Length (L):	3.3533 in = 8.517 cm
Diameter:	1.6625 in = 4.22 cm
Area (A):	2.171 sq in = 14.00 sq cm
Volume (V):	7.428 cu in = 121.72 cu cm
Wet Wt.:	245.78 grams
Unit Wet Wt.:	126.06 pcf
Unit Dry Wt.:	103.53 pcf

Pipette:

Area (a): 0.3435 sq in = 0.8725 sq cm

Test Conditions:

Chamber Pressure:	65 psi	
Back Pressure:	58 psi	
Confining Pressure:	7 psi	
Temp. @ Start:	23.7 °C	
Temp. @ End:	23.8 °C	
Average Temp.:	23.8 °C	
B Parameter:	1	

Pipette Pressures During Test:

Top Pipette:	63 psi	= 4431.3 cm
Bottom Pipette:	58 psi	= 4079.6 cm

Moisture Content:

	Before Test	After Test
Pan No. =	D	D
Wet Wt. + Pan =	245.78	244.74
Dry Wt. + Pan =	201.86	201.86
Wt. of Pan =	0.00	0.00
Wt. of Dry Soil =	201.86	201.86
Wt. of Water =	43.92	42.88
% Moisture =	**21.76**	21.24
% SATURATION	**94.88**	**97.78**
S.G. =	**2.6760**	
% POROSITY =	**38.03**	

Calculations:

$$k = \frac{a \cdot L}{2 \cdot A \cdot \Delta t} \ln\left(\frac{h_1}{h_2}\right)$$

where:

- k = Hydraulic Conductivity
- a = Pipette Cross-Sectional Area
- L = Length of Sample
- A = Sample Cross-Sectional Area
- Δt = Time Interval ($t_2 - t_1$)
- h_1 = Head Loss Across Permeameter/Specimen at t_1
- h_2 = Head Loss Across Permeameter/Specimen at t_2
- ln = Natural Logarithm (Base e = 2.71828)

Date	Time Readings	Time Interval Δt Seconds	Bottom Pipette cc	Hydraulic Head Headwater H_1 cm	Top Pipette cc	Hydraulic Head Tailwater H_2 cm	Head Loss $h = H_1 - H_2$ cm	$\ell n\ (h_1/h_2)$	Temp. Corr. Permeability k cm/sec
7/13/2015	10:43 AM	0.00	47.30	4093.40	1.90	4497.12	-403.73	–	–
7/13/2015	11:44 AM	3,660	47.25	4093.45	2.00	4497.01	-403.56	0.00043	2.825E-08
7/13/2015	1:08 PM	5,040	47.20	4093.51	2.10	4496.90	-403.38	0.00043	2.053E-08
7/13/2015	3:09 PM	7,260	47.15	4093.57	2.20	4496.78	-403.21	0.00043	1.426E-08
7/14/2015	8:28 AM	62,340	47.00	4093.74	2.40	4496.55	-402.81	0.00100	3.877E-09
7/15/2015	8:33 AM	86,700	46.90	4093.85	2.60	4496.32	-402.47	0.00085	2.391E-09
7/16/2015	8:31 AM	86,280	46.80	4093.97	2.80	4496.09	-402.12	0.00085	2.405E-09
7/17/2015	1:36 PM	104,700	46.70	4094.08	3.00	4495.86	-401.78	0.00086	1.984E-09
7/20/2015	9:06 AM	243,000	46.20	4094.66	3.50	4495.29	-400.63	0.00286	2.854E-09

Time Weighted Average, k [cm/sec] **= 3.119E-09**

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-56145-1
Client Project/Site: Grenada Manufacturing

For:
ARCADIS U.S., Inc.
10352 Plaza Americana Dr.
Baton Rouge, Louisiana 70816

Attn: Mr. John Ellis

Denise Pohl

Authorized for release by:
10/19/2015 2:41:33 PM

Denise Pohl, Project Manager II
(330)966-9789
denise.pohl@testamericainc.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
X	Surrogate is outside control limits
E	Result exceeded calibration range.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 240-56145-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Grenada Manufacturing

Report Number: 240-56145-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 10/3/2015 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 0.1º C, 0.3º C and 0.5º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples VAP-9 (2-4) (240-56145-1), DUP-01 (100115) (240-56145-10) and VAP-1 (1-2) (240-56145-12) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 10/06/2015 and analyzed on 10/10/2015.

2-Butanone (MEK) was detected in method blank MB 240-201259/7 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with 201259.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 240-56145-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples VAP-9-GW (15-16') (240-56145-2), VAP-9-GW (20-21') (240-56145-3), VAP-9-GW (25-26') (240-56145-4), VAP-9-GW (30-31') (240-56145-5), VAP-9-GW (35-36') (240-56145-6), VAP-9-GW (40-41') (240-56145-7), VAP-9-GW (45-46') (240-56145-8), VAP-9-GW (49-50') (240-56145-9), TB-01 (100115) (240-56145-11), VAP-1-GW (12-13') (240-56145-13), VAP-1-GW (15-16') (240-56145-14), VAP-1-GW (20-21') (240-56145-15), VAP-1-GW (25-26') (240-56145-16), VAP-1-GW (30-31') (240-56145-17), VAP-1-GW (35-36') (240-56145-18), VAP-1-GW (40-41') (240-56145-19), VAP-1-GW (45-46') (240-56145-20) and VAP-1-GW (49-50') (240-56145-21) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 10/06/2015, 10/09/2015 and 10/12/2015.

Methylene Chloride was detected in method blank MB 240-200552/6 at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. 1,2,4-Trichlorobenzene and Acetone were detected in method blank MB 240-200552/6 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Methylene Chloride was detected in method blank MB 240-201374/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Methylene Chloride was detected in method blank MB 240-201375/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Method(s) 8260B: The following samples was submitted for volatile analysis with insufficient preservation (pH>2): VAP-9-GW (15-16') (240-56145-2) and VAP-9-GW (25-26') (240-56145-4).

Method(s) 8260B: There was no MS/MSD run in batch 200552 due to an instrument failure. Batch includes: VAP-9-GW (15-16') (240-56145-2) and VAP-9-GW (25-26') (240-56145-4).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Samples VAP-9 (2-4) (240-56145-1), DUP-01 (100115) (240-56145-10) and VAP-1 (1-2) (240-56145-12) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 10/06/2015 and analyzed on 10/08/2015.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

Hexachlorocyclopentadiene and Pentachlorophenol failed the recovery criteria low for the MS of sample VAP-1 (1-2)MS (240-56145-12) in batch 240-200852. Hexachlorocyclopentadiene failed the recovery criteria low for the MSD of sample VAP-1 (1-2)MSD (240-56145-12) in batch 240-200852. Pentachlorophenol exceeded the RPD limit. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Samples VAP-9-GW (15-16') (240-56145-2), VAP-9-GW (20-21') (240-56145-3), VAP-9-GW (25-26') (240-56145-4), VAP-9-GW (30-31') (240-56145-5), VAP-9-GW (35-36') (240-56145-6), VAP-9-GW (40-41') (240-56145-7), VAP-9-GW (45-46') (240-56145-8), VAP-9-GW (49-50') (240-56145-9), VAP-1-GW (12-13') (240-56145-13), VAP-1-GW (15-16') (240-56145-14), VAP-1-GW (20-21') (240-56145-15), VAP-1-GW (25-26') (240-56145-16), VAP-1-GW (30-31') (240-56145-17), VAP-1-GW (35-36') (240-56145-18), VAP-1-GW (40-41') (240-56145-19), VAP-1-GW (45-46') (240-56145-20) and VAP-1-GW (49-50') (240-56145-21) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 10/06/2015 and 10/08/2015 and analyzed on 10/07/2015, 10/08/2015 and 10/09/2015.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

Di-n-butyl phthalate was detected in method blank MB 240-200483/18-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the

Job ID: 240-56145-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

MDL and/or RL, the result has been flagged. Caprolactam and Di-n-butyl phthalate were detected in method blank MB 240-200940/11-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Several analytes failed the surrogate recovery criteria low for VAP-1-GW (20-21') (240-56145-15). 2,4,6-Tribromophenol (Surr), 2-Fluorobiphenyl (Surr), Nitrobenzene-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-1-GW (30-31') (240-56145-17). Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-9-GW (15-16') (240-56145-2). 2,4,6-Tribromophenol (Surr), 2-Fluorobiphenyl (Surr), Nitrobenzene-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-1-GW (45-46') (240-56145-20). 2,4,6-Tribromophenol (Surr), 2-Fluorobiphenyl (Surr), Nitrobenzene-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-1-GW (49-50') (240-56145-21). Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-9-GW (20-21') (240-56145-3). 2,4,6-Tribromophenol (Surr), 2-Fluorobiphenyl (Surr), Nitrobenzene-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-9-GW (30-31') (240-56145-5). 2-Fluorobiphenyl (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-9-GW (40-41') (240-56145-7). Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-9-GW (45-46') (240-56145-8). Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-9-GW (49-50') (240-56145-9). Refer to the QC report for details.

Benzaldehyde failed the recovery criteria high for LCS 240-200483/19-A. Refer to the QC report for details.

Sample VAP-1-GW (20-21') (240-56145-15)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Method(s) 8270C: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates, per fraction, to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: VAP-9-GW (15-16') (240-56145-2), VAP-9-GW (20-21') (240-56145-3), VAP-9-GW (45-46') (240-56145-8) and VAP-9-GW (49-50') (240-56145-9). These results have been reported and qualified.

Method(s) 8270C: The laboratory control sample (LCS) for 200483 recovered outside control limits for the following analytes: Benzaldehyde. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270C: Surrogate recovery for the following samples was outside control limits: VAP-9-GW (30-31') (240-56145-5), VAP-9-GW (40-41') (240-56145-7), VAP-1-GW (20-21') (240-56145-15), VAP-1-GW (30-31') (240-56145-17), VAP-1-GW (45-46') (240-56145-20) and VAP-1-GW (49-50') (240-56145-21). Re-extraction and/or re-analysis was performed with concurring results. The original analysis has been reported.

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 240-200483.

Method(s) 3510C: The following samples formed very thick, nasty emulsions during the extraction procedure: VAP-9-GW (15-16') (240-56145-2), VAP-9-GW (20-21') (240-56145-3), VAP-9-GW (25-26') (240-56145-4), VAP-9-GW (30-31') (240-56145-5), VAP-9-GW (35-36') (240-56145-6), VAP-9-GW (40-41') (240-56145-7), VAP-9-GW (45-46') (240-56145-8), VAP-9-GW (49-50') (240-56145-9), VAP-1-GW (12-13') (240-56145-13), VAP-1-GW (15-16') (240-56145-14), VAP-1-GW (20-21') (240-56145-15), VAP-1-GW (25-26') (240-56145-16), VAP-1-GW (30-31') (240-56145-17), VAP-1-GW (35-36') (240-56145-18), VAP-1-GW (40-41') (240-56145-19), VAP-1-GW (45-46') (240-56145-20) and VAP-1-GW (49-50') (240-56145-21). A centrifuge was used to attempt to break up the emulsions, but very little separation was achieved between sample and solvent. Only fractions of the solvent used for extraction were recovered.

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with analytical batch 240-200940.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)

Samples VAP-9 (2-4) (240-56145-1), DUP-01 (100115) (240-56145-10) and VAP-1 (1-2) (240-56145-12) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 10/07/2015 and analyzed on 10/08/2015 and 10/09/2015.

Job ID: 240-56145-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

Cadmium and Silver were detected in method blank MB 240-200730/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Sample DUP-01 (100115) (240-56145-10)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Method(s) 200.7 Rev 4.4, 6010B, 6010C: The following sample was diluted due to the nature of the sample matrix: DUP-01 (100115) (240-56145-10). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL RECOVERABLE METALS (ICP)

Samples VAP-9-GW (15-16') (240-56145-2), VAP-9-GW (20-21') (240-56145-3), VAP-9-GW (25-26') (240-56145-4), VAP-9-GW (30-31') (240-56145-5), VAP-9-GW (35-36') (240-56145-6), VAP-9-GW (40-41') (240-56145-7), VAP-9-GW (45-46') (240-56145-8), VAP-9-GW (49-50') (240-56145-9), VAP-1-GW (12-13') (240-56145-13), VAP-1-GW (15-16') (240-56145-14), VAP-1-GW (20-21') (240-56145-15), VAP-1-GW (25-26') (240-56145-16), VAP-1-GW (30-31') (240-56145-17), VAP-1-GW (35-36') (240-56145-18), VAP-1-GW (40-41') (240-56145-19), VAP-1-GW (45-46') (240-56145-20) and VAP-1-GW (49-50') (240-56145-21) were analyzed for total recoverable metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 10/06/2015 and analyzed on 10/07/2015 and 10/09/2015.

Barium was detected in method blank MB 240-200509/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY

Samples VAP-9-GW (15-16') (240-56145-2), VAP-9-GW (20-21') (240-56145-3), VAP-9-GW (25-26') (240-56145-4), VAP-9-GW (30-31') (240-56145-5), VAP-9-GW (35-36') (240-56145-6), VAP-9-GW (40-41') (240-56145-7), VAP-9-GW (45-46') (240-56145-8), VAP-9-GW (49-50') (240-56145-9), VAP-1-GW (12-13') (240-56145-13), VAP-1-GW (15-16') (240-56145-14), VAP-1-GW (20-21') (240-56145-15), VAP-1-GW (25-26') (240-56145-16), VAP-1-GW (30-31') (240-56145-17), VAP-1-GW (35-36') (240-56145-18), VAP-1-GW (40-41') (240-56145-19), VAP-1-GW (45-46') (240-56145-20) and VAP-1-GW (49-50') (240-56145-21) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 10/06/2015 and analyzed on 10/08/2015 and 10/13/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY

Samples VAP-9 (2-4) (240-56145-1), DUP-01 (100115) (240-56145-10) and VAP-1 (1-2) (240-56145-12) were analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared on 10/07/2015 and analyzed on 10/09/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HEXAVALENT CHROMIUM

Samples VAP-9 (2-4) (240-56145-1), DUP-01 (100115) (240-56145-10) and VAP-1 (1-2) (240-56145-12) were analyzed for hexavalent chromium in accordance with EPA SW-846 Method 3060A/7196A. The samples were prepared on 10/07/2015 and analyzed on 10/08/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS

Samples VAP-9 (2-4) (240-56145-1), DUP-01 (100115) (240-56145-10) and VAP-1 (1-2) (240-56145-12) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 10/05/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN
7471A	Mercury (CVAA)	SW846	TAL CAN
7196A	Chromium, Hexavalent	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-56145-1	VAP-9 (2-4)	Solid	10/01/15 13:17	10/03/15 09:30
240-56145-2	VAP-9-GW (15-16')	Water	10/01/15 14:00	10/03/15 09:30
240-56145-3	VAP-9-GW (20-21')	Water	10/01/15 14:30	10/03/15 09:30
240-56145-4	VAP-9-GW (25-26')	Water	10/01/15 15:08	10/03/15 09:30
240-56145-5	VAP-9-GW (30-31')	Water	10/01/15 15:57	10/03/15 09:30
240-56145-6	VAP-9-GW (35-36')	Water	10/01/15 16:42	10/03/15 09:30
240-56145-7	VAP-9-GW (40-41')	Water	10/01/15 16:55	10/03/15 09:30
240-56145-8	VAP-9-GW (45-46')	Water	10/01/15 17:28	10/03/15 09:30
240-56145-9	VAP-9-GW (49-50')	Water	10/01/15 18:00	10/03/15 09:30
240-56145-10	DUP-01 (100115)	Solid	10/01/15 00:00	10/03/15 09:30
240-56145-11	TB-01 (100115)	Water	10/01/15 00:00	10/03/15 09:30
240-56145-12	VAP-1 (1-2)	Solid	10/02/15 07:55	10/03/15 09:30
240-56145-13	VAP-1-GW (12-13')	Water	10/02/15 08:00	10/03/15 09:30
240-56145-14	VAP-1-GW (15-16')	Water	10/02/15 08:47	10/03/15 09:30
240-56145-15	VAP-1-GW (20-21')	Water	10/02/15 09:15	10/03/15 09:30
240-56145-16	VAP-1-GW (25-26')	Water	10/02/15 09:43	10/03/15 09:30
240-56145-17	VAP-1-GW (30-31')	Water	10/02/15 10:03	10/03/15 09:30
240-56145-18	VAP-1-GW (35-36')	Water	10/02/15 10:27	10/03/15 09:30
240-56145-19	VAP-1-GW (40-41')	Water	10/02/15 10:55	10/03/15 09:30
240-56145-20	VAP-1-GW (45-46')	Water	10/02/15 11:28	10/03/15 09:30
240-56145-21	VAP-1-GW (49-50')	Water	10/02/15 12:00	10/03/15 09:30

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Client Sample ID: VAP-9 (2-4) — Lab Sample ID: 240-56145-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	45		17	1.4	ug/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	4.9	J B	17	0.41	ug/Kg	1	☼	8260B	Total/NA
Arsenic	5.5		0.84	0.34	mg/Kg	1	☼	6010B	Total/NA
Barium	70		17	0.34	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.019	J B	0.17	0.018	mg/Kg	1	☼	6010B	Total/NA
Chromium	11		0.42	0.063	mg/Kg	1	☼	6010B	Total/NA
Lead	8.9		0.25	0.17	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.52		0.42	0.29	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: VAP-9-GW (15-16') — Lab Sample ID: 240-56145-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.3	J B	10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	1.3	J	10	0.53	ug/L	1		8260B	Total/NA
Di-n-butyl phthalate	0.56	J B	0.96	0.38	ug/L	1		8270C	Total/NA
Arsenic	43		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	280	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.77	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	130		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	31		3.0	1.9	ug/L	1		6010B	Total Recoverable
Mercury	0.28		0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: VAP-9-GW (20-21') — Lab Sample ID: 240-56145-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.3	J	10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	1.2	J	10	0.53	ug/L	1		8260B	Total/NA
Carbon disulfide	0.64	J	1.0	0.38	ug/L	1		8260B	Total/NA
Caprolactam	2.5	J	5.0	0.37	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.26	J	1.0	0.13	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.70	J B	1.0	0.40	ug/L	1		8270C	Total/NA
Arsenic	48		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	1600	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	4.7		2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	680		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	280		3.0	1.9	ug/L	1		6010B	Total Recoverable
Selenium	26		5.0	4.0	ug/L	1		6010B	Total Recoverable
Mercury	1.6		0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: VAP-9-GW (25-26') — Lab Sample ID: 240-56145-4

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-9-GW (25-26') (Continued) — Lab Sample ID: 240-56145-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.8	J B	10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	0.66	J	10	0.53	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.7	J	1.9	1.5	ug/L	1		8270C	Total/NA
Caprolactam	1.6	J B	4.8	0.36	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.60	J B	0.96	0.38	ug/L	1		8270C	Total/NA
Arsenic	19		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	900	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	1.4	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	330		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	82		3.0	1.9	ug/L	1		6010B	Total Recoverable
Mercury	0.12	J	0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: VAP-9-GW (30-31') — Lab Sample ID: 240-56145-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.56	J	1.0	0.38	ug/L	1		8260B	Total/NA
Caprolactam	2.1	J	5.1	0.38	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.75	J B	1.0	0.41	ug/L	1		8270C	Total/NA
Arsenic	9.8	J	10	2.9	ug/L	1		6010B	Total Recoverable
Barium	420	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.59	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	120		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	56		3.0	1.9	ug/L	1		6010B	Total Recoverable
Selenium	12		5.0	4.0	ug/L	1		6010B	Total Recoverable
Mercury	0.26		0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: VAP-9-GW (35-36') — Lab Sample ID: 240-56145-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Caprolactam	2.0	J	5.0	0.37	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.53	J B	1.0	0.40	ug/L	1		8270C	Total/NA
Barium	120	J B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.21	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	1.3	J	5.0	0.55	ug/L	1		6010B	Total Recoverable

Client Sample ID: VAP-9-GW (40-41') — Lab Sample ID: 240-56145-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.52	J	1.0	0.38	ug/L	1		8260B	Total/NA
Di-n-butyl phthalate	0.48	J B	0.89	0.36	ug/L	1		8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-9-GW (40-41') (Continued) — Lab Sample ID: 240-56145-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	8.8	J	10	2.9	ug/L	1		6010B	Total Recoverable
Barium	540	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.69	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	180		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	75		3.0	1.9	ug/L	1		6010B	Total Recoverable

Client Sample ID: VAP-9-GW (45-46') — Lab Sample ID: 240-56145-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.0	J	10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	0.68	J	10	0.53	ug/L	1		8260B	Total/NA
Carbon disulfide	0.47	J	1.0	0.38	ug/L	1		8260B	Total/NA
Caprolactam	1.1	J	4.6	0.34	ug/L	1		8270C	Total/NA
Arsenic	13		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	510	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	1.7	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	150		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	42		3.0	1.9	ug/L	1		6010B	Total Recoverable
Mercury	0.14	J	0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: VAP-9-GW (49-50') — Lab Sample ID: 240-56145-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.1	J	10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	0.65	J	10	0.53	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	4.3		1.9	1.4	ug/L	1		8270C	Total/NA
Caprolactam	17		4.6	0.34	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.58	J B	0.93	0.37	ug/L	1		8270C	Total/NA
Arsenic	25		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	590	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	2.0		2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	270		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	71		3.0	1.9	ug/L	1		6010B	Total Recoverable
Selenium	6.9		5.0	4.0	ug/L	1		6010B	Total Recoverable

Client Sample ID: DUP-01 (100115) — Lab Sample ID: 240-56145-10

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP-01 (100115) (Continued) — Lab Sample ID: 240-56145-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	31		18	1.4	ug/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	3.3	J B	18	0.42	ug/Kg	1	☼	8260B	Total/NA
Bis(2-ethylhexyl) phthalate	26	J	84	23	ug/Kg	1	☼	8270C	Total/NA
Arsenic	6.0		1.9	0.77	mg/Kg	2	☼	6010B	Total/NA
Barium	110		38	0.77	mg/Kg	2	☼	6010B	Total/NA
Chromium	11		0.94	0.14	mg/Kg	2	☼	6010B	Total/NA
Lead	8.0		0.57	0.38	mg/Kg	2	☼	6010B	Total/NA

Client Sample ID: TB-01 (100115) — Lab Sample ID: 240-56145-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.2	J	10	0.94	ug/L	1		8260B	Total/NA

Client Sample ID: VAP-1 (1-2) — Lab Sample ID: 240-56145-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	40		18	1.4	ug/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	2.6	J B	18	0.43	ug/Kg	1	☼	8260B	Total/NA
Carbon disulfide	0.57	J	4.4	0.30	ug/Kg	1	☼	8260B	Total/NA
Bis(2-ethylhexyl) phthalate	36	J	84	23	ug/Kg	1	☼	8270C	Total/NA
Caprolactam	52	J	400	44	ug/Kg	1	☼	8270C	Total/NA
Arsenic	9.1		0.96	0.39	mg/Kg	1	☼	6010B	Total/NA
Barium	79		19	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.058	J B	0.19	0.020	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.48	0.072	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.29	0.19	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.43	J	0.48	0.33	mg/Kg	1	☼	6010B	Total/NA
Silver	0.098	J B	0.48	0.060	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.046	J	0.11	0.016	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: VAP-1-GW (12-13') — Lab Sample ID: 240-56145-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.9	J	10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	0.72	J	10	0.53	ug/L	1		8260B	Total/NA
Caprolactam	28		4.6	0.34	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.59	J B	0.93	0.37	ug/L	1		8270C	Total/NA
Arsenic	60		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	370	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	1.0	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	120		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	42		3.0	1.9	ug/L	1		6010B	Total Recoverable
Mercury	0.11	J	0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: VAP-1-GW (15-16') — Lab Sample ID: 240-56145-14

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-1-GW (15-16') (Continued) — Lab Sample ID: 240-56145-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.6	J	10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	0.56	J	10	0.53	ug/L	1		8260B	Total/NA
Caprolactam	35		4.8	0.36	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.38	J B	0.96	0.38	ug/L	1		8270C	Total/NA
Barium	34	J B	200	1.0	ug/L	1		6010B	Total Recoverable
Chromium	14		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	3.5		3.0	1.9	ug/L	1		6010B	Total Recoverable

Client Sample ID: VAP-1-GW (20-21') — Lab Sample ID: 240-56145-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.9	J	10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	0.79	J	10	0.53	ug/L	1		8260B	Total/NA
Di-n-butyl phthalate	0.87	J B	0.96	0.38	ug/L	1		8270C	Total/NA
Caprolactam - RA	100		9.6	0.72	ug/L	2		8270C	Total/NA
Barium	50	J B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.14	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	18		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	4.3		3.0	1.9	ug/L	1		6010B	Total Recoverable

Client Sample ID: VAP-1-GW (25-26') — Lab Sample ID: 240-56145-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.1	J	10	0.94	ug/L	1		8260B	Total/NA
Caprolactam	14	B	4.8	0.36	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.84	J B	0.96	0.38	ug/L	1		8270C	Total/NA
Arsenic	30		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	520	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	1.4	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	200		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	82		3.0	1.9	ug/L	1		6010B	Total Recoverable
Selenium	7.7		5.0	4.0	ug/L	1		6010B	Total Recoverable

Client Sample ID: VAP-1-GW (30-31') — Lab Sample ID: 240-56145-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.0	J	10	0.94	ug/L	1		8260B	Total/NA
Caprolactam	24		4.6	0.34	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.80	J B	0.93	0.37	ug/L	1		8270C	Total/NA
Arsenic	12		10	2.9	ug/L	1		6010B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-1-GW (30-31') (Continued) — Lab Sample ID: 240-56145-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	830	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.71	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	280		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	45		3.0	1.9	ug/L	1		6010B	Total Recoverable

Client Sample ID: VAP-1-GW (35-36') — Lab Sample ID: 240-56145-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Caprolactam	25	B	4.7	0.35	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.79	J B	0.94	0.38	ug/L	1		8270C	Total/NA
Arsenic	24		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	360	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.67	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	320		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	81		3.0	1.9	ug/L	1		6010B	Total Recoverable

Client Sample ID: VAP-1-GW (40-41') — Lab Sample ID: 240-56145-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	14		10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	0.91	J	10	0.53	ug/L	1		8260B	Total/NA
Carbon disulfide	0.47	J	1.0	0.38	ug/L	1		8260B	Total/NA
Caprolactam	9.4	B	4.8	0.36	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.63	J B	0.96	0.38	ug/L	1		8270C	Total/NA
Arsenic	38		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	630	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	1.2	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	430		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	62		3.0	1.9	ug/L	1		6010B	Total Recoverable
Selenium	4.9	J	5.0	4.0	ug/L	1		6010B	Total Recoverable

Client Sample ID: VAP-1-GW (45-46') — Lab Sample ID: 240-56145-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.6	J	10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	0.80	J	10	0.53	ug/L	1		8260B	Total/NA
Caprolactam	9.5		4.6	0.34	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.70	J B	0.93	0.37	ug/L	1		8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-1-GW (45-46') (Continued) — Lab Sample ID: 240-56145-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.2	J	10	2.9	ug/L	1		6010B	Total Recoverable
Barium	660	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	1.0	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	210		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	75		3.0	1.9	ug/L	1		6010B	Total Recoverable
Selenium	4.9	J	5.0	4.0	ug/L	1		6010B	Total Recoverable

Client Sample ID: VAP-1-GW (49-50') — Lab Sample ID: 240-56145-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.2	J	10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	0.59	J	10	0.53	ug/L	1		8260B	Total/NA
Caprolactam	28		5.0	0.37	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.84	J B	1.0	0.40	ug/L	1		8270C	Total/NA
Arsenic	12		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	490	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.89	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	200		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	31		3.0	1.9	ug/L	1		6010B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Client Sample ID: VAP-9 (2-4)
Date Collected: 10/01/15 13:17
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-1
Matrix: Solid
Percent Solids: 82.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**45**		17	1.4	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Benzene	4.2	U	4.2	0.20	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Dichlorobromomethane	4.2	U	4.2	0.18	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Bromoform	4.2	U	4.2	0.32	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Bromomethane	4.2	U	4.2	0.60	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
2-Butanone (MEK)	**4.9**	**J B**	17	0.41	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Carbon disulfide	4.2	U	4.2	0.29	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Carbon tetrachloride	4.2	U	4.2	0.28	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Chlorobenzene	4.2	U	4.2	0.25	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Chloroethane	4.2	U	4.2	0.29	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Chloroform	4.2	U	4.2	0.18	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Chloromethane	4.2	U	4.2	1.1	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
1,1-Dichloroethane	4.2	U	4.2	1.0	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
1,2-Dichloroethane	4.2	U	4.2	0.17	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
1,1-Dichloroethene	4.2	U	4.2	0.41	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
1,2-Dichloropropane	4.2	U	4.2	0.24	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
cis-1,3-Dichloropropene	4.2	U	4.2	0.23	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
trans-1,3-Dichloropropene	4.2	U	4.2	0.18	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Ethylbenzene	4.2	U	4.2	0.27	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
2-Hexanone	17	U	17	0.59	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Methylene Chloride	4.2	U	4.2	0.90	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
4-Methyl-2-pentanone (MIBK)	17	U	17	0.25	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Styrene	4.2	U	4.2	0.23	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
1,1,2,2-Tetrachloroethane	4.2	U	4.2	0.14	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Tetrachloroethene	4.2	U	4.2	0.28	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Toluene	4.2	U	4.2	0.23	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Trichloroethene	4.2	U	4.2	0.22	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Vinyl chloride	4.2	U	4.2	0.33	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Xylenes, Total	8.5	U	8.5	0.53	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
1,1,1-Trichloroethane	4.2	U	4.2	0.22	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
1,1,2-Trichloroethane	4.2	U	4.2	0.41	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Cyclohexane	8.5	U	8.5	0.25	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
1,2-Dibromo-3-Chloropropane	8.5	U	8.5	1.6	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Ethylene Dibromide	4.2	U	4.2	0.21	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Dichlorodifluoromethane	4.2	U	4.2	0.34	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
cis-1,2-Dichloroethene	4.2	U	4.2	0.24	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
trans-1,2-Dichloroethene	4.2	U	4.2	0.31	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Isopropylbenzene	4.2	U	4.2	0.25	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Methyl acetate	8.5	U	8.5	1.9	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Methyl tert-butyl ether	4.2	U	4.2	0.13	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	4.2	U	4.2	0.33	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
1,2,4-Trichlorobenzene	4.2	U	4.2	0.33	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
1,2-Dichlorobenzene	4.2	U	4.2	0.32	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
1,3-Dichlorobenzene	4.2	U	4.2	0.34	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
1,4-Dichlorobenzene	4.2	U	4.2	0.35	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Trichlorofluoromethane	4.2	U	4.2	0.22	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Chlorodibromomethane	4.2	U	4.2	0.14	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1
Methylcyclohexane	8.5	U	8.5	0.28	ug/Kg	☼	10/06/15 20:02	10/10/15 07:58	1

Client Sample ID: VAP-9 (2-4)
Date Collected: 10/01/15 13:17
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-1
Matrix: Solid
Percent Solids: 82.8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 120*	*10/06/15 20:02*	*10/10/15 07:58*	*1*
4-Bromofluorobenzene (Surr)	*116*		*64 - 130*	*10/06/15 20:02*	*10/10/15 07:58*	*1*
Toluene-d8 (Surr)	*101*		*69 - 128*	*10/06/15 20:02*	*10/10/15 07:58*	*1*
Dibromofluoromethane (Surr)	*100*		*68 - 120*	*10/06/15 20:02*	*10/10/15 07:58*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	60	U	60	4.2	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
bis (2-chloroisopropyl) ether	120	U	120	11	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
2,4,5-Trichlorophenol	180	U	180	30	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
2,4,6-Trichlorophenol	180	U	180	11	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
2,4-Dichlorophenol	180	U	180	24	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
2,4-Dimethylphenol	180	U	180	24	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
2,4-Dinitrophenol	400	U	400	25	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
2,4-Dinitrotoluene	240	U	240	20	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
2,6-Dinitrotoluene	240	U	240	25	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
2-Chloronaphthalene	60	U	60	0.54	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
2-Chlorophenol	60	U	60	9.9	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
2-Methylnaphthalene	8.0	U	8.0	0.60	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
2-Methylphenol	240	U	240	13	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
2-Nitroaniline	240	U	240	11	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
2-Nitrophenol	60	U	60	10	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
3,3'-Dichlorobenzidine	120	U	120	22	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
3-Nitroaniline	240	U	240	19	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
4,6-Dinitro-2-methylphenol	180	U	180	11	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
4-Bromophenyl phenyl ether	60	U	60	16	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
4-Chloro-3-methylphenol	180	U	180	25	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
4-Chloroaniline	180	U	180	20	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
4-Chlorophenyl phenyl ether	60	U	60	16	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
4-Nitroaniline	240	U	240	31	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
4-Nitrophenol	400	U	400	20	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Acenaphthene	8.0	U	8.0	0.91	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Acenaphthylene	8.0	U	8.0	0.42	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Acetophenone	120	U	120	11	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Anthracene	8.0	U	8.0	0.94	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Atrazine	240	U	240	11	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Benzaldehyde	120	U	120	14	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Benzo[a]anthracene	8.0	U	8.0	0.76	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Benzo[a]pyrene	8.0	U	8.0	0.77	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Benzo[b]fluoranthene	8.0	U	8.0	0.71	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Benzo[g,h,i]perylene	8.0	U	8.0	0.42	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Benzo[k]fluoranthene	8.0	U	8.0	0.82	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Bis(2-chloroethoxy)methane	120	U	120	26	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Bis(2-chloroethyl)ether	120	U	120	2.4	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Bis(2-ethylhexyl) phthalate	84	U	84	23	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Butyl benzyl phthalate	84	U	84	12	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Caprolactam	400	U	400	45	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Carbazole	60	U	60	32	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Chrysene	8.0	U	8.0	1.3	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Dibenz(a,h)anthracene	8.0	U	8.0	0.79	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1

Client Sample ID: VAP-9 (2-4)
Date Collected: 10/01/15 13:17
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-1
Matrix: Solid
Percent Solids: 82.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	60	U	60	0.79	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Diethyl phthalate	84	U	84	19	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Dimethyl phthalate	84	U	84	20	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Di-n-butyl phthalate	84	U	84	18	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Di-n-octyl phthalate	84	U	84	9.5	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Fluoranthene	8.0	U	8.0	0.66	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Fluorene	8.0	U	8.0	0.64	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Hexachlorobenzene	8.0	U	8.0	2.5	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Hexachlorobutadiene	60	U	60	6.7	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Hexachlorocyclopentadiene	400	U	400	9.7	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Hexachloroethane	60	U	60	11	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Indeno[1,2,3-cd]pyrene	8.0	U	8.0	0.42	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Isophorone	60	U	60	16	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Naphthalene	8.0	U	8.0	0.99	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Nitrobenzene	120	U	120	2.6	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
N-Nitrosodi-n-propylamine	60	U	60	7.6	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
N-Nitrosodiphenylamine	60	U	60	25	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Pentachlorophenol	180	U	180	11	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Phenol	60	U	60	8.8	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Phenanthrene	8.0	U	8.0	0.88	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
Pyrene	8.0	U	8.0	0.53	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1
3 & 4 Methylphenol	480	U	480	24	ug/Kg	☼	10/06/15 07:57	10/08/15 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*24 - 110*	*10/06/15 07:57*	*10/08/15 13:58*	*1*
2-Fluorophenol (Surr)	*58*		*24 - 110*	*10/06/15 07:57*	*10/08/15 13:58*	*1*
2,4,6-Tribromophenol (Surr)	*26*		*10 - 110*	*10/06/15 07:57*	*10/08/15 13:58*	*1*
Nitrobenzene-d5 (Surr)	*55*		*20 - 110*	*10/06/15 07:57*	*10/08/15 13:58*	*1*
Phenol-d5 (Surr)	*65*		*26 - 110*	*10/06/15 07:57*	*10/08/15 13:58*	*1*
Terphenyl-d14 (Surr)	*78*		*36 - 110*	*10/06/15 07:57*	*10/08/15 13:58*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.5**		0.84	0.34	mg/Kg	☼	10/07/15 11:19	10/08/15 17:17	1
Barium	**70**		17	0.34	mg/Kg	☼	10/07/15 11:19	10/08/15 17:17	1
Cadmium	**0.019**	**J B**	0.17	0.018	mg/Kg	☼	10/07/15 11:19	10/08/15 17:17	1
Chromium	**11**		0.42	0.063	mg/Kg	☼	10/07/15 11:19	10/08/15 17:17	1
Lead	**8.9**		0.25	0.17	mg/Kg	☼	10/07/15 11:19	10/08/15 17:17	1
Selenium	**0.52**		0.42	0.29	mg/Kg	☼	10/07/15 11:19	10/08/15 17:17	1
Silver	0.42	U	0.42	0.053	mg/Kg	☼	10/07/15 11:19	10/08/15 17:17	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.12	0.016	mg/Kg	☼	10/07/15 16:25	10/09/15 11:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.97	U	0.97	0.31	mg/Kg	☼	10/07/15 10:18	10/08/15 11:02	1
Percent Solids	**83**		0.10	0.10	%			10/05/15 10:13	1
Percent Moisture	**17**		0.10	0.10	%			10/05/15 10:13	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Client Sample ID: VAP-9-GW (15-16')
Date Collected: 10/01/15 14:00
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**8.3**	**J B**	10	0.94	ug/L			10/06/15 21:33	1
Benzene	1.0	U	1.0	0.35	ug/L			10/06/15 21:33	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/06/15 21:33	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/06/15 21:33	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/06/15 21:33	1
2-Butanone (MEK)	**1.3**	**J**	10	0.53	ug/L			10/06/15 21:33	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/06/15 21:33	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/06/15 21:33	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/06/15 21:33	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/06/15 21:33	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/06/15 21:33	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/06/15 21:33	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/06/15 21:33	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/06/15 21:33	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/06/15 21:33	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/06/15 21:33	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/06/15 21:33	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/06/15 21:33	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/06/15 21:33	1
2-Hexanone	10	U	10	0.48	ug/L			10/06/15 21:33	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/06/15 21:33	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/06/15 21:33	1
Styrene	1.0	U	1.0	0.45	ug/L			10/06/15 21:33	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/06/15 21:33	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/06/15 21:33	1
Toluene	1.0	U	1.0	0.23	ug/L			10/06/15 21:33	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/06/15 21:33	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/06/15 21:33	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/06/15 21:33	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/06/15 21:33	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/06/15 21:33	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/06/15 21:33	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/06/15 21:33	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/06/15 21:33	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/06/15 21:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/06/15 21:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/06/15 21:33	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/06/15 21:33	1
Methyl acetate	10	U	10	2.3	ug/L			10/06/15 21:33	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/06/15 21:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/06/15 21:33	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/06/15 21:33	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/06/15 21:33	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/06/15 21:33	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/06/15 21:33	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/06/15 21:33	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/06/15 21:33	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/06/15 21:33	1

Client Sample ID: VAP-9-GW (15-16')

Date Collected: 10/01/15 14:00
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-2

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*78 - 125*		*10/06/15 21:33*	*1*
4-Bromofluorobenzene (Surr)	*76*		*61 - 120*		*10/06/15 21:33*	*1*
Toluene-d8 (Surr)	*84*		*80 - 120*		*10/06/15 21:33*	*1*
Dibromofluoromethane (Surr)	*108*		*79 - 120*		*10/06/15 21:33*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/06/15 08:39	10/07/15 12:47	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/06/15 08:39	10/07/15 12:47	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/06/15 08:39	10/07/15 12:47	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/06/15 08:39	10/07/15 12:47	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/06/15 08:39	10/07/15 12:47	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/06/15 08:39	10/07/15 12:47	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/06/15 08:39	10/07/15 12:47	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/06/15 08:39	10/07/15 12:47	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/06/15 08:39	10/07/15 12:47	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/06/15 08:39	10/07/15 12:47	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/06/15 08:39	10/07/15 12:47	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/06/15 08:39	10/07/15 12:47	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/06/15 08:39	10/07/15 12:47	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/06/15 08:39	10/07/15 12:47	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/06/15 08:39	10/07/15 12:47	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/06/15 08:39	10/07/15 12:47	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/06/15 08:39	10/07/15 12:47	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/06/15 08:39	10/07/15 12:47	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/06/15 08:39	10/07/15 12:47	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/06/15 08:39	10/07/15 12:47	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/06/15 08:39	10/07/15 12:47	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/06/15 08:39	10/07/15 12:47	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/06/15 08:39	10/07/15 12:47	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/06/15 08:39	10/07/15 12:47	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/06/15 08:39	10/07/15 12:47	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/06/15 08:39	10/07/15 12:47	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/06/15 08:39	10/07/15 12:47	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/06/15 08:39	10/07/15 12:47	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/06/15 08:39	10/07/15 12:47	1
Benzaldehyde	0.96	U *	0.96	0.28	ug/L		10/06/15 08:39	10/07/15 12:47	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/06/15 08:39	10/07/15 12:47	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/06/15 08:39	10/07/15 12:47	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/06/15 08:39	10/07/15 12:47	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/06/15 08:39	10/07/15 12:47	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/06/15 08:39	10/07/15 12:47	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/06/15 08:39	10/07/15 12:47	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/06/15 08:39	10/07/15 12:47	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	1.5	ug/L		10/06/15 08:39	10/07/15 12:47	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/06/15 08:39	10/07/15 12:47	1
Caprolactam	4.8	U	4.8	0.36	ug/L		10/06/15 08:39	10/07/15 12:47	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/06/15 08:39	10/07/15 12:47	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/06/15 08:39	10/07/15 12:47	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/06/15 08:39	10/07/15 12:47	1

Client Sample ID: VAP-9-GW (15-16')

Date Collected: 10/01/15 14:00
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-2
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/06/15 08:39	10/07/15 12:47	1
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/06/15 08:39	10/07/15 12:47	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/06/15 08:39	10/07/15 12:47	1
Di-n-butyl phthalate	**0.56**	**J B**	0.96	0.38	ug/L		10/06/15 08:39	10/07/15 12:47	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/06/15 08:39	10/07/15 12:47	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/06/15 08:39	10/07/15 12:47	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/06/15 08:39	10/07/15 12:47	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/06/15 08:39	10/07/15 12:47	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/06/15 08:39	10/07/15 12:47	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/06/15 08:39	10/07/15 12:47	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/06/15 08:39	10/07/15 12:47	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/06/15 08:39	10/07/15 12:47	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/06/15 08:39	10/07/15 12:47	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/06/15 08:39	10/07/15 12:47	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/06/15 08:39	10/07/15 12:47	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/06/15 08:39	10/07/15 12:47	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/06/15 08:39	10/07/15 12:47	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/06/15 08:39	10/07/15 12:47	1
Phenol	0.96	U	0.96	0.14	ug/L		10/06/15 08:39	10/07/15 12:47	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/06/15 08:39	10/07/15 12:47	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/06/15 08:39	10/07/15 12:47	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/06/15 08:39	10/07/15 12:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*32*		*29 - 110*	*10/06/15 08:39*	*10/07/15 12:47*	*1*
2-Fluorophenol (Surr)	*32*		*15 - 110*	*10/06/15 08:39*	*10/07/15 12:47*	*1*
2,4,6-Tribromophenol (Surr)	*22*		*21 - 128*	*10/06/15 08:39*	*10/07/15 12:47*	*1*
Nitrobenzene-d5 (Surr)	*33*		*31 - 110*	*10/06/15 08:39*	*10/07/15 12:47*	*1*
Phenol-d5 (Surr)	*26*		*10 - 110*	*10/06/15 08:39*	*10/07/15 12:47*	*1*
Terphenyl-d14 (Surr)	*28*	*X*	*31 - 115*	*10/06/15 08:39*	*10/07/15 12:47*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**43**		10	2.9	ug/L		10/06/15 10:16	10/07/15 18:46	1
Barium	**280**	**B**	200	1.0	ug/L		10/06/15 10:16	10/07/15 18:46	1
Cadmium	**0.77**	**J**	2.0	0.14	ug/L		10/06/15 10:16	10/07/15 18:46	1
Chromium	**130**		5.0	0.55	ug/L		10/06/15 10:16	10/07/15 18:46	1
Lead	**31**		3.0	1.9	ug/L		10/06/15 10:16	10/07/15 18:46	1
Selenium	5.0	U	5.0	4.0	ug/L		10/06/15 10:16	10/07/15 18:46	1
Silver	5.0	U	5.0	0.92	ug/L		10/06/15 10:16	10/07/15 18:46	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.28**		0.20	0.090	ug/L		10/06/15 14:00	10/13/15 11:15	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Client Sample ID: VAP-9-GW (20-21')
Date Collected: 10/01/15 14:30
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**2.3**	**J**	10	0.94	ug/L			10/09/15 19:41	1
Benzene	1.0	U	1.0	0.35	ug/L			10/09/15 19:41	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/09/15 19:41	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/09/15 19:41	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/09/15 19:41	1
2-Butanone (MEK)	**1.2**	**J**	10	0.53	ug/L			10/09/15 19:41	1
Carbon disulfide	**0.64**	**J**	1.0	0.38	ug/L			10/09/15 19:41	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/09/15 19:41	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/09/15 19:41	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/09/15 19:41	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/09/15 19:41	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/09/15 19:41	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/09/15 19:41	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/09/15 19:41	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/09/15 19:41	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/09/15 19:41	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/09/15 19:41	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/09/15 19:41	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/09/15 19:41	1
2-Hexanone	10	U	10	0.48	ug/L			10/09/15 19:41	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/09/15 19:41	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/09/15 19:41	1
Styrene	1.0	U	1.0	0.45	ug/L			10/09/15 19:41	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/09/15 19:41	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/09/15 19:41	1
Toluene	1.0	U	1.0	0.23	ug/L			10/09/15 19:41	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/09/15 19:41	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/09/15 19:41	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/09/15 19:41	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/09/15 19:41	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/09/15 19:41	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/09/15 19:41	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/09/15 19:41	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/09/15 19:41	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/09/15 19:41	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/09/15 19:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/09/15 19:41	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/09/15 19:41	1
Methyl acetate	10	U	10	2.3	ug/L			10/09/15 19:41	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/09/15 19:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/09/15 19:41	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/09/15 19:41	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/09/15 19:41	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/09/15 19:41	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/09/15 19:41	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/09/15 19:41	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/09/15 19:41	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/09/15 19:41	1

Client Sample ID: VAP-9-GW (20-21')

Date Collected: 10/01/15 14:30
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-3

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*78 - 125*		*10/09/15 19:41*	*1*
4-Bromofluorobenzene (Surr)	*84*		*61 - 120*		*10/09/15 19:41*	*1*
Toluene-d8 (Surr)	*84*		*80 - 120*		*10/09/15 19:41*	*1*
Dibromofluoromethane (Surr)	*103*		*79 - 120*		*10/09/15 19:41*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 13:10	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/06/15 08:39	10/07/15 13:10	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/06/15 08:39	10/07/15 13:10	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/06/15 08:39	10/07/15 13:10	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/06/15 08:39	10/07/15 13:10	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/06/15 08:39	10/07/15 13:10	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/06/15 08:39	10/07/15 13:10	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/06/15 08:39	10/07/15 13:10	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/06/15 08:39	10/07/15 13:10	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 13:10	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/06/15 08:39	10/07/15 13:10	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/06/15 08:39	10/07/15 13:10	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/06/15 08:39	10/07/15 13:10	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/06/15 08:39	10/07/15 13:10	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/06/15 08:39	10/07/15 13:10	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/06/15 08:39	10/07/15 13:10	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/06/15 08:39	10/07/15 13:10	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/06/15 08:39	10/07/15 13:10	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/06/15 08:39	10/07/15 13:10	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/06/15 08:39	10/07/15 13:10	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/06/15 08:39	10/07/15 13:10	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/06/15 08:39	10/07/15 13:10	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/06/15 08:39	10/07/15 13:10	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/06/15 08:39	10/07/15 13:10	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/06/15 08:39	10/07/15 13:10	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/06/15 08:39	10/07/15 13:10	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/06/15 08:39	10/07/15 13:10	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/06/15 08:39	10/07/15 13:10	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 13:10	1
Benzaldehyde	1.0	U *	1.0	0.30	ug/L		10/06/15 08:39	10/07/15 13:10	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/06/15 08:39	10/07/15 13:10	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/06/15 08:39	10/07/15 13:10	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/06/15 08:39	10/07/15 13:10	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/06/15 08:39	10/07/15 13:10	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/06/15 08:39	10/07/15 13:10	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/06/15 08:39	10/07/15 13:10	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/06/15 08:39	10/07/15 13:10	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	1.5	ug/L		10/06/15 08:39	10/07/15 13:10	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/06/15 08:39	10/07/15 13:10	1
Caprolactam	**2.5**	**J**	5.0	0.37	ug/L		10/06/15 08:39	10/07/15 13:10	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/06/15 08:39	10/07/15 13:10	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/06/15 08:39	10/07/15 13:10	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/06/15 08:39	10/07/15 13:10	1

Client Sample ID: VAP-9-GW (20-21')

Date Collected: 10/01/15 14:30
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-3
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/06/15 08:39	10/07/15 13:10	1
Diethyl phthalate	**0.26**	**J**	1.0	0.13	ug/L		10/06/15 08:39	10/07/15 13:10	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/06/15 08:39	10/07/15 13:10	1
Di-n-butyl phthalate	**0.70**	**J B**	1.0	0.40	ug/L		10/06/15 08:39	10/07/15 13:10	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/06/15 08:39	10/07/15 13:10	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/06/15 08:39	10/07/15 13:10	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/06/15 08:39	10/07/15 13:10	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 13:10	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/06/15 08:39	10/07/15 13:10	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/06/15 08:39	10/07/15 13:10	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/06/15 08:39	10/07/15 13:10	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/06/15 08:39	10/07/15 13:10	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/06/15 08:39	10/07/15 13:10	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/06/15 08:39	10/07/15 13:10	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 13:10	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/06/15 08:39	10/07/15 13:10	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/06/15 08:39	10/07/15 13:10	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/06/15 08:39	10/07/15 13:10	1
Phenol	1.0	U	1.0	0.15	ug/L		10/06/15 08:39	10/07/15 13:10	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/06/15 08:39	10/07/15 13:10	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/06/15 08:39	10/07/15 13:10	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/06/15 08:39	10/07/15 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*29*		*29 - 110*	*10/06/15 08:39*	*10/07/15 13:10*	*1*
2-Fluorophenol (Surr)	*33*		*15 - 110*	*10/06/15 08:39*	*10/07/15 13:10*	*1*
2,4,6-Tribromophenol (Surr)	*24*		*21 - 128*	*10/06/15 08:39*	*10/07/15 13:10*	*1*
Nitrobenzene-d5 (Surr)	*33*		*31 - 110*	*10/06/15 08:39*	*10/07/15 13:10*	*1*
Phenol-d5 (Surr)	*27*		*10 - 110*	*10/06/15 08:39*	*10/07/15 13:10*	*1*
Terphenyl-d14 (Surr)	*21*	*X*	*31 - 115*	*10/06/15 08:39*	*10/07/15 13:10*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**48**		10	2.9	ug/L		10/06/15 10:16	10/07/15 18:50	1
Barium	**1600**	**B**	200	1.0	ug/L		10/06/15 10:16	10/07/15 18:50	1
Cadmium	**4.7**		2.0	0.14	ug/L		10/06/15 10:16	10/07/15 18:50	1
Chromium	**680**		5.0	0.55	ug/L		10/06/15 10:16	10/07/15 18:50	1
Lead	**280**		3.0	1.9	ug/L		10/06/15 10:16	10/07/15 18:50	1
Selenium	**26**		5.0	4.0	ug/L		10/06/15 10:16	10/07/15 18:50	1
Silver	5.0	U	5.0	0.92	ug/L		10/06/15 10:16	10/07/15 18:50	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.6**		0.20	0.090	ug/L		10/06/15 14:00	10/13/15 11:17	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Client Sample ID: VAP-9-GW (25-26')
Date Collected: 10/01/15 15:08
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**2.8**	**J B**	10	0.94	ug/L			10/06/15 21:56	1
Benzene	1.0	U	1.0	0.35	ug/L			10/06/15 21:56	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/06/15 21:56	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/06/15 21:56	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/06/15 21:56	1
2-Butanone (MEK)	**0.66**	**J**	10	0.53	ug/L			10/06/15 21:56	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/06/15 21:56	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/06/15 21:56	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/06/15 21:56	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/06/15 21:56	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/06/15 21:56	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/06/15 21:56	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/06/15 21:56	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/06/15 21:56	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/06/15 21:56	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/06/15 21:56	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/06/15 21:56	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/06/15 21:56	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/06/15 21:56	1
2-Hexanone	10	U	10	0.48	ug/L			10/06/15 21:56	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/06/15 21:56	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/06/15 21:56	1
Styrene	1.0	U	1.0	0.45	ug/L			10/06/15 21:56	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/06/15 21:56	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/06/15 21:56	1
Toluene	1.0	U	1.0	0.23	ug/L			10/06/15 21:56	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/06/15 21:56	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/06/15 21:56	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/06/15 21:56	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/06/15 21:56	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/06/15 21:56	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/06/15 21:56	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/06/15 21:56	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/06/15 21:56	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/06/15 21:56	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/06/15 21:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/06/15 21:56	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/06/15 21:56	1
Methyl acetate	10	U	10	2.3	ug/L			10/06/15 21:56	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/06/15 21:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/06/15 21:56	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/06/15 21:56	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/06/15 21:56	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/06/15 21:56	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/06/15 21:56	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/06/15 21:56	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/06/15 21:56	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/06/15 21:56	1

Client Sample ID: VAP-9-GW (25-26')

Date Collected: 10/01/15 15:08
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-4

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*78 - 125*		*10/06/15 21:56*	*1*
4-Bromofluorobenzene (Surr)	*75*		*61 - 120*		*10/06/15 21:56*	*1*
Toluene-d8 (Surr)	*85*		*80 - 120*		*10/06/15 21:56*	*1*
Dibromofluoromethane (Surr)	*107*		*79 - 120*		*10/06/15 21:56*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/08/15 11:15	10/09/15 12:24	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/08/15 11:15	10/09/15 12:24	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/08/15 11:15	10/09/15 12:24	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/08/15 11:15	10/09/15 12:24	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/08/15 11:15	10/09/15 12:24	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/08/15 11:15	10/09/15 12:24	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/08/15 11:15	10/09/15 12:24	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/08/15 11:15	10/09/15 12:24	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/08/15 11:15	10/09/15 12:24	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/08/15 11:15	10/09/15 12:24	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/08/15 11:15	10/09/15 12:24	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/08/15 11:15	10/09/15 12:24	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/08/15 11:15	10/09/15 12:24	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/08/15 11:15	10/09/15 12:24	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/08/15 11:15	10/09/15 12:24	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/08/15 11:15	10/09/15 12:24	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/08/15 11:15	10/09/15 12:24	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/08/15 11:15	10/09/15 12:24	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/08/15 11:15	10/09/15 12:24	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/08/15 11:15	10/09/15 12:24	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/08/15 11:15	10/09/15 12:24	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/08/15 11:15	10/09/15 12:24	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/08/15 11:15	10/09/15 12:24	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/08/15 11:15	10/09/15 12:24	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/08/15 11:15	10/09/15 12:24	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/08/15 11:15	10/09/15 12:24	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/08/15 11:15	10/09/15 12:24	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/08/15 11:15	10/09/15 12:24	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/08/15 11:15	10/09/15 12:24	1
Benzaldehyde	0.96	U	0.96	0.28	ug/L		10/08/15 11:15	10/09/15 12:24	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/08/15 11:15	10/09/15 12:24	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/08/15 11:15	10/09/15 12:24	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/08/15 11:15	10/09/15 12:24	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/08/15 11:15	10/09/15 12:24	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/08/15 11:15	10/09/15 12:24	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/08/15 11:15	10/09/15 12:24	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/08/15 11:15	10/09/15 12:24	1
Bis(2-ethylhexyl) phthalate	**1.7**	**J**	1.9	1.5	ug/L		10/08/15 11:15	10/09/15 12:24	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/08/15 11:15	10/09/15 12:24	1
Caprolactam	**1.6**	**J B**	4.8	0.36	ug/L		10/08/15 11:15	10/09/15 12:24	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/08/15 11:15	10/09/15 12:24	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/08/15 11:15	10/09/15 12:24	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/08/15 11:15	10/09/15 12:24	1

Client Sample ID: VAP-9-GW (25-26')

Date Collected: 10/01/15 15:08
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-4
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/08/15 11:15	10/09/15 12:24	1
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/08/15 11:15	10/09/15 12:24	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/08/15 11:15	10/09/15 12:24	1
Di-n-butyl phthalate	**0.60**	**J B**	0.96	0.38	ug/L		10/08/15 11:15	10/09/15 12:24	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/08/15 11:15	10/09/15 12:24	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/08/15 11:15	10/09/15 12:24	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/08/15 11:15	10/09/15 12:24	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/08/15 11:15	10/09/15 12:24	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/08/15 11:15	10/09/15 12:24	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/08/15 11:15	10/09/15 12:24	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/08/15 11:15	10/09/15 12:24	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/08/15 11:15	10/09/15 12:24	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/08/15 11:15	10/09/15 12:24	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/08/15 11:15	10/09/15 12:24	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/08/15 11:15	10/09/15 12:24	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/08/15 11:15	10/09/15 12:24	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/08/15 11:15	10/09/15 12:24	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/08/15 11:15	10/09/15 12:24	1
Phenol	0.96	U	0.96	0.14	ug/L		10/08/15 11:15	10/09/15 12:24	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/08/15 11:15	10/09/15 12:24	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/08/15 11:15	10/09/15 12:24	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/08/15 11:15	10/09/15 12:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*44*		*29 - 110*	*10/08/15 11:15*	*10/09/15 12:24*	*1*
2-Fluorophenol (Surr)	*39*		*15 - 110*	*10/08/15 11:15*	*10/09/15 12:24*	*1*
2,4,6-Tribromophenol (Surr)	*49*		*21 - 128*	*10/08/15 11:15*	*10/09/15 12:24*	*1*
Nitrobenzene-d5 (Surr)	*51*		*31 - 110*	*10/08/15 11:15*	*10/09/15 12:24*	*1*
Phenol-d5 (Surr)	*25*		*10 - 110*	*10/08/15 11:15*	*10/09/15 12:24*	*1*
Terphenyl-d14 (Surr)	*31*		*31 - 115*	*10/08/15 11:15*	*10/09/15 12:24*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**19**		10	2.9	ug/L		10/06/15 10:16	10/07/15 18:54	1
Barium	**900**	**B**	200	1.0	ug/L		10/06/15 10:16	10/07/15 18:54	1
Cadmium	**1.4**	**J**	2.0	0.14	ug/L		10/06/15 10:16	10/07/15 18:54	1
Chromium	**330**		5.0	0.55	ug/L		10/06/15 10:16	10/07/15 18:54	1
Lead	**82**		3.0	1.9	ug/L		10/06/15 10:16	10/07/15 18:54	1
Selenium	5.0	U	5.0	4.0	ug/L		10/06/15 10:16	10/07/15 18:54	1
Silver	5.0	U	5.0	0.92	ug/L		10/06/15 10:16	10/07/15 18:54	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.12**	**J**	0.20	0.090	ug/L		10/06/15 14:00	10/13/15 11:24	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Client Sample ID: VAP-9-GW (30-31')
Date Collected: 10/01/15 15:57
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/09/15 20:03	1
Benzene	1.0	U	1.0	0.35	ug/L			10/09/15 20:03	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/09/15 20:03	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/09/15 20:03	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/09/15 20:03	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/09/15 20:03	1
Carbon disulfide	**0.56**	**J**	1.0	0.38	ug/L			10/09/15 20:03	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/09/15 20:03	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/09/15 20:03	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/09/15 20:03	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/09/15 20:03	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/09/15 20:03	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/09/15 20:03	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/09/15 20:03	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/09/15 20:03	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/09/15 20:03	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/09/15 20:03	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/09/15 20:03	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/09/15 20:03	1
2-Hexanone	10	U	10	0.48	ug/L			10/09/15 20:03	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/09/15 20:03	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/09/15 20:03	1
Styrene	1.0	U	1.0	0.45	ug/L			10/09/15 20:03	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/09/15 20:03	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/09/15 20:03	1
Toluene	1.0	U	1.0	0.23	ug/L			10/09/15 20:03	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/09/15 20:03	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/09/15 20:03	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/09/15 20:03	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/09/15 20:03	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/09/15 20:03	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/09/15 20:03	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/09/15 20:03	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/09/15 20:03	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/09/15 20:03	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/09/15 20:03	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/09/15 20:03	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/09/15 20:03	1
Methyl acetate	10	U	10	2.3	ug/L			10/09/15 20:03	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/09/15 20:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/09/15 20:03	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/09/15 20:03	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/09/15 20:03	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/09/15 20:03	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/09/15 20:03	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/09/15 20:03	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/09/15 20:03	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/09/15 20:03	1

Client Sample ID: VAP-9-GW (30-31')

Date Collected: 10/01/15 15:57
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-5

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*78 - 125*		*10/09/15 20:03*	*1*
4-Bromofluorobenzene (Surr)	*85*		*61 - 120*		*10/09/15 20:03*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*10/09/15 20:03*	*1*
Dibromofluoromethane (Surr)	*102*		*79 - 120*		*10/09/15 20:03*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.13	ug/L		10/06/15 08:39	10/07/15 13:56	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.19	ug/L		10/06/15 08:39	10/07/15 13:56	1
2,4,5-Trichlorophenol	5.1	U	5.1	0.37	ug/L		10/06/15 08:39	10/07/15 13:56	1
2,4,6-Trichlorophenol	5.1	U	5.1	0.27	ug/L		10/06/15 08:39	10/07/15 13:56	1
2,4-Dichlorophenol	2.0	U	2.0	0.30	ug/L		10/06/15 08:39	10/07/15 13:56	1
2,4-Dimethylphenol	2.0	U	2.0	0.32	ug/L		10/06/15 08:39	10/07/15 13:56	1
2,4-Dinitrophenol	41	U	41	6.3	ug/L		10/06/15 08:39	10/07/15 13:56	1
2,4-Dinitrotoluene	5.1	U	5.1	0.26	ug/L		10/06/15 08:39	10/07/15 13:56	1
2,6-Dinitrotoluene	5.1	U	5.1	0.24	ug/L		10/06/15 08:39	10/07/15 13:56	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 13:56	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/06/15 08:39	10/07/15 13:56	1
2-Methylnaphthalene	0.20	U	0.20	0.038	ug/L		10/06/15 08:39	10/07/15 13:56	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/06/15 08:39	10/07/15 13:56	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/06/15 08:39	10/07/15 13:56	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/06/15 08:39	10/07/15 13:56	1
3,3'-Dichlorobenzidine	5.1	U	5.1	0.36	ug/L		10/06/15 08:39	10/07/15 13:56	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/06/15 08:39	10/07/15 13:56	1
4,6-Dinitro-2-methylphenol	5.1	U	5.1	0.54	ug/L		10/06/15 08:39	10/07/15 13:56	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/06/15 08:39	10/07/15 13:56	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/06/15 08:39	10/07/15 13:56	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/06/15 08:39	10/07/15 13:56	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.30	ug/L		10/06/15 08:39	10/07/15 13:56	1
4-Nitroaniline	2.0	U	2.0	0.25	ug/L		10/06/15 08:39	10/07/15 13:56	1
4-Nitrophenol	5.1	U	5.1	0.60	ug/L		10/06/15 08:39	10/07/15 13:56	1
Acenaphthene	0.20	U	0.20	0.045	ug/L		10/06/15 08:39	10/07/15 13:56	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/06/15 08:39	10/07/15 13:56	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/06/15 08:39	10/07/15 13:56	1
Anthracene	0.20	U	0.20	0.032	ug/L		10/06/15 08:39	10/07/15 13:56	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 13:56	1
Benzaldehyde	1.0	U *	1.0	0.30	ug/L		10/06/15 08:39	10/07/15 13:56	1
Benzo[a]anthracene	0.20	U	0.20	0.060	ug/L		10/06/15 08:39	10/07/15 13:56	1
Benzo[a]pyrene	0.20	U	0.20	0.031	ug/L		10/06/15 08:39	10/07/15 13:56	1
Benzo[b]fluoranthene	0.20	U	0.20	0.060	ug/L		10/06/15 08:39	10/07/15 13:56	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.051	ug/L		10/06/15 08:39	10/07/15 13:56	1
Benzo[k]fluoranthene	0.20	U	0.20	0.049	ug/L		10/06/15 08:39	10/07/15 13:56	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.038	ug/L		10/06/15 08:39	10/07/15 13:56	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/06/15 08:39	10/07/15 13:56	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	1.6	ug/L		10/06/15 08:39	10/07/15 13:56	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/06/15 08:39	10/07/15 13:56	1
Caprolactam	**2.1**	**J**	5.1	0.38	ug/L		10/06/15 08:39	10/07/15 13:56	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/06/15 08:39	10/07/15 13:56	1
Chrysene	0.20	U	0.20	0.036	ug/L		10/06/15 08:39	10/07/15 13:56	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.041	ug/L		10/06/15 08:39	10/07/15 13:56	1

Client Sample ID: VAP-9-GW (30-31')

Date Collected: 10/01/15 15:57
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-5
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/06/15 08:39	10/07/15 13:56	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/06/15 08:39	10/07/15 13:56	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/06/15 08:39	10/07/15 13:56	1
Di-n-butyl phthalate	**0.75**	**J B**	1.0	0.41	ug/L		10/06/15 08:39	10/07/15 13:56	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/06/15 08:39	10/07/15 13:56	1
Fluoranthene	0.20	U	0.20	0.028	ug/L		10/06/15 08:39	10/07/15 13:56	1
Fluorene	0.20	U	0.20	0.035	ug/L		10/06/15 08:39	10/07/15 13:56	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 13:56	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/06/15 08:39	10/07/15 13:56	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/06/15 08:39	10/07/15 13:56	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/06/15 08:39	10/07/15 13:56	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.049	ug/L		10/06/15 08:39	10/07/15 13:56	1
Isophorone	1.0	U	1.0	0.043	ug/L		10/06/15 08:39	10/07/15 13:56	1
Naphthalene	0.20	U	0.20	0.044	ug/L		10/06/15 08:39	10/07/15 13:56	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 13:56	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/06/15 08:39	10/07/15 13:56	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/06/15 08:39	10/07/15 13:56	1
Pentachlorophenol	41	U	41	5.6	ug/L		10/06/15 08:39	10/07/15 13:56	1
Phenol	1.0	U	1.0	0.15	ug/L		10/06/15 08:39	10/07/15 13:56	1
Phenanthrene	0.20	U	0.20	0.032	ug/L		10/06/15 08:39	10/07/15 13:56	1
Pyrene	0.20	U	0.20	0.029	ug/L		10/06/15 08:39	10/07/15 13:56	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/06/15 08:39	10/07/15 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*18*	*X*	*29 - 110*	*10/06/15 08:39*	*10/07/15 13:56*	*1*
2-Fluorophenol (Surr)	*18*		*15 - 110*	*10/06/15 08:39*	*10/07/15 13:56*	*1*
2,4,6-Tribromophenol (Surr)	*19*	*X*	*21 - 128*	*10/06/15 08:39*	*10/07/15 13:56*	*1*
Nitrobenzene-d5 (Surr)	*19*	*X*	*31 - 110*	*10/06/15 08:39*	*10/07/15 13:56*	*1*
Phenol-d5 (Surr)	*15*		*10 - 110*	*10/06/15 08:39*	*10/07/15 13:56*	*1*
Terphenyl-d14 (Surr)	*16*	*X*	*31 - 115*	*10/06/15 08:39*	*10/07/15 13:56*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**9.8**	**J**	10	2.9	ug/L		10/06/15 10:16	10/07/15 18:58	1
Barium	**420**	**B**	200	1.0	ug/L		10/06/15 10:16	10/07/15 18:58	1
Cadmium	**0.59**	**J**	2.0	0.14	ug/L		10/06/15 10:16	10/07/15 18:58	1
Chromium	**120**		5.0	0.55	ug/L		10/06/15 10:16	10/07/15 18:58	1
Lead	**56**		3.0	1.9	ug/L		10/06/15 10:16	10/07/15 18:58	1
Selenium	**12**		5.0	4.0	ug/L		10/06/15 10:16	10/07/15 18:58	1
Silver	5.0	U	5.0	0.92	ug/L		10/06/15 10:16	10/07/15 18:58	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.26**		0.20	0.090	ug/L		10/06/15 14:00	10/13/15 11:26	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Client Sample ID: VAP-9-GW (35-36')
Date Collected: 10/01/15 16:42
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/12/15 13:31	1
Benzene	1.0	U	1.0	0.35	ug/L			10/12/15 13:31	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/12/15 13:31	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/12/15 13:31	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/12/15 13:31	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/12/15 13:31	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/12/15 13:31	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/12/15 13:31	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 13:31	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/12/15 13:31	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/12/15 13:31	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/12/15 13:31	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/12/15 13:31	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/12/15 13:31	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/12/15 13:31	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/12/15 13:31	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/12/15 13:31	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/12/15 13:31	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/12/15 13:31	1
2-Hexanone	10	U	10	0.48	ug/L			10/12/15 13:31	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/12/15 13:31	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/12/15 13:31	1
Styrene	1.0	U	1.0	0.45	ug/L			10/12/15 13:31	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/12/15 13:31	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/12/15 13:31	1
Toluene	1.0	U	1.0	0.23	ug/L			10/12/15 13:31	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/12/15 13:31	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/12/15 13:31	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/12/15 13:31	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/12/15 13:31	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/12/15 13:31	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/12/15 13:31	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/12/15 13:31	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/12/15 13:31	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/12/15 13:31	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/12/15 13:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/12/15 13:31	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/12/15 13:31	1
Methyl acetate	10	U	10	2.3	ug/L			10/12/15 13:31	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/12/15 13:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/12/15 13:31	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/12/15 13:31	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 13:31	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/12/15 13:31	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/12/15 13:31	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/12/15 13:31	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/12/15 13:31	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/12/15 13:31	1

Client Sample ID: VAP-9-GW (35-36')

Date Collected: 10/01/15 16:42
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-6

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*78 - 125*		*10/12/15 13:31*	*1*
4-Bromofluorobenzene (Surr)	*99*		*61 - 120*		*10/12/15 13:31*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*10/12/15 13:31*	*1*
Dibromofluoromethane (Surr)	*97*		*79 - 120*		*10/12/15 13:31*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 14:19	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/06/15 08:39	10/07/15 14:19	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/06/15 08:39	10/07/15 14:19	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/06/15 08:39	10/07/15 14:19	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/06/15 08:39	10/07/15 14:19	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/06/15 08:39	10/07/15 14:19	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/06/15 08:39	10/07/15 14:19	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/06/15 08:39	10/07/15 14:19	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/06/15 08:39	10/07/15 14:19	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 14:19	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/06/15 08:39	10/07/15 14:19	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/06/15 08:39	10/07/15 14:19	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/06/15 08:39	10/07/15 14:19	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/06/15 08:39	10/07/15 14:19	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/06/15 08:39	10/07/15 14:19	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/06/15 08:39	10/07/15 14:19	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/06/15 08:39	10/07/15 14:19	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/06/15 08:39	10/07/15 14:19	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/06/15 08:39	10/07/15 14:19	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/06/15 08:39	10/07/15 14:19	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/06/15 08:39	10/07/15 14:19	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/06/15 08:39	10/07/15 14:19	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/06/15 08:39	10/07/15 14:19	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/06/15 08:39	10/07/15 14:19	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/06/15 08:39	10/07/15 14:19	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/06/15 08:39	10/07/15 14:19	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/06/15 08:39	10/07/15 14:19	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/06/15 08:39	10/07/15 14:19	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 14:19	1
Benzaldehyde	1.0	U *	1.0	0.30	ug/L		10/06/15 08:39	10/07/15 14:19	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/06/15 08:39	10/07/15 14:19	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/06/15 08:39	10/07/15 14:19	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/06/15 08:39	10/07/15 14:19	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/06/15 08:39	10/07/15 14:19	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/06/15 08:39	10/07/15 14:19	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/06/15 08:39	10/07/15 14:19	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/06/15 08:39	10/07/15 14:19	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	1.5	ug/L		10/06/15 08:39	10/07/15 14:19	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/06/15 08:39	10/07/15 14:19	1
Caprolactam	**2.0**	**J**	5.0	0.37	ug/L		10/06/15 08:39	10/07/15 14:19	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/06/15 08:39	10/07/15 14:19	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/06/15 08:39	10/07/15 14:19	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/06/15 08:39	10/07/15 14:19	1

Client Sample ID: VAP-9-GW (35-36')
Date Collected: 10/01/15 16:42
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-6
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/06/15 08:39	10/07/15 14:19	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/06/15 08:39	10/07/15 14:19	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/06/15 08:39	10/07/15 14:19	1
Di-n-butyl phthalate	**0.53**	**J B**	1.0	0.40	ug/L		10/06/15 08:39	10/07/15 14:19	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/06/15 08:39	10/07/15 14:19	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/06/15 08:39	10/07/15 14:19	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/06/15 08:39	10/07/15 14:19	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 14:19	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/06/15 08:39	10/07/15 14:19	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/06/15 08:39	10/07/15 14:19	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/06/15 08:39	10/07/15 14:19	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/06/15 08:39	10/07/15 14:19	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/06/15 08:39	10/07/15 14:19	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/06/15 08:39	10/07/15 14:19	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 14:19	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/06/15 08:39	10/07/15 14:19	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/06/15 08:39	10/07/15 14:19	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/06/15 08:39	10/07/15 14:19	1
Phenol	1.0	U	1.0	0.15	ug/L		10/06/15 08:39	10/07/15 14:19	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/06/15 08:39	10/07/15 14:19	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/06/15 08:39	10/07/15 14:19	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/06/15 08:39	10/07/15 14:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*57*		*29 - 110*	*10/06/15 08:39*	*10/07/15 14:19*	*1*
2-Fluorophenol (Surr)	*53*		*15 - 110*	*10/06/15 08:39*	*10/07/15 14:19*	*1*
2,4,6-Tribromophenol (Surr)	*50*		*21 - 128*	*10/06/15 08:39*	*10/07/15 14:19*	*1*
Nitrobenzene-d5 (Surr)	*59*		*31 - 110*	*10/06/15 08:39*	*10/07/15 14:19*	*1*
Phenol-d5 (Surr)	*43*		*10 - 110*	*10/06/15 08:39*	*10/07/15 14:19*	*1*
Terphenyl-d14 (Surr)	*63*		*31 - 115*	*10/06/15 08:39*	*10/07/15 14:19*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10	U	10	2.9	ug/L		10/06/15 10:16	10/07/15 18:26	1
Barium	**120**	**J B**	200	1.0	ug/L		10/06/15 10:16	10/07/15 18:26	1
Cadmium	**0.21**	**J**	2.0	0.14	ug/L		10/06/15 10:16	10/07/15 18:26	1
Chromium	**1.3**	**J**	5.0	0.55	ug/L		10/06/15 10:16	10/07/15 18:26	1
Lead	3.0	U	3.0	1.9	ug/L		10/06/15 10:16	10/07/15 18:26	1
Selenium	5.0	U	5.0	4.0	ug/L		10/06/15 10:16	10/07/15 18:26	1
Silver	5.0	U	5.0	0.92	ug/L		10/06/15 10:16	10/07/15 18:26	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/06/15 14:00	10/13/15 11:09	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Client Sample ID: VAP-9-GW (40-41')
Date Collected: 10/01/15 16:55
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/12/15 13:53	1
Benzene	1.0	U	1.0	0.35	ug/L			10/12/15 13:53	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/12/15 13:53	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/12/15 13:53	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/12/15 13:53	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/12/15 13:53	1
Carbon disulfide	**0.52**	**J**	1.0	0.38	ug/L			10/12/15 13:53	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/12/15 13:53	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 13:53	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/12/15 13:53	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/12/15 13:53	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/12/15 13:53	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/12/15 13:53	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/12/15 13:53	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/12/15 13:53	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/12/15 13:53	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/12/15 13:53	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/12/15 13:53	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/12/15 13:53	1
2-Hexanone	10	U	10	0.48	ug/L			10/12/15 13:53	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/12/15 13:53	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/12/15 13:53	1
Styrene	1.0	U	1.0	0.45	ug/L			10/12/15 13:53	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/12/15 13:53	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/12/15 13:53	1
Toluene	1.0	U	1.0	0.23	ug/L			10/12/15 13:53	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/12/15 13:53	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/12/15 13:53	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/12/15 13:53	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/12/15 13:53	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/12/15 13:53	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/12/15 13:53	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/12/15 13:53	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/12/15 13:53	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/12/15 13:53	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/12/15 13:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/12/15 13:53	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/12/15 13:53	1
Methyl acetate	10	U	10	2.3	ug/L			10/12/15 13:53	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/12/15 13:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/12/15 13:53	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/12/15 13:53	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 13:53	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/12/15 13:53	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/12/15 13:53	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/12/15 13:53	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/12/15 13:53	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/12/15 13:53	1

Client Sample ID: VAP-9-GW (40-41')

Date Collected: 10/01/15 16:55
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-7
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*78 - 125*		*10/12/15 13:53*	*1*
4-Bromofluorobenzene (Surr)	*94*		*61 - 120*		*10/12/15 13:53*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/12/15 13:53*	*1*
Dibromofluoromethane (Surr)	*97*		*79 - 120*		*10/12/15 13:53*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.89	U	0.89	0.11	ug/L		10/06/15 08:39	10/07/15 14:42	1
bis (2-chloroisopropyl) ether	0.89	U	0.89	0.16	ug/L		10/06/15 08:39	10/07/15 14:42	1
2,4,5-Trichlorophenol	4.5	U	4.5	0.33	ug/L		10/06/15 08:39	10/07/15 14:42	1
2,4,6-Trichlorophenol	4.5	U	4.5	0.23	ug/L		10/06/15 08:39	10/07/15 14:42	1
2,4-Dichlorophenol	1.8	U	1.8	0.26	ug/L		10/06/15 08:39	10/07/15 14:42	1
2,4-Dimethylphenol	1.8	U	1.8	0.28	ug/L		10/06/15 08:39	10/07/15 14:42	1
2,4-Dinitrophenol	36	U	36	5.5	ug/L		10/06/15 08:39	10/07/15 14:42	1
2,4-Dinitrotoluene	4.5	U	4.5	0.23	ug/L		10/06/15 08:39	10/07/15 14:42	1
2,6-Dinitrotoluene	4.5	U	4.5	0.21	ug/L		10/06/15 08:39	10/07/15 14:42	1
2-Chloronaphthalene	0.89	U	0.89	0.10	ug/L		10/06/15 08:39	10/07/15 14:42	1
2-Chlorophenol	0.89	U	0.89	0.12	ug/L		10/06/15 08:39	10/07/15 14:42	1
2-Methylnaphthalene	0.18	U	0.18	0.033	ug/L		10/06/15 08:39	10/07/15 14:42	1
2-Methylphenol	0.89	U	0.89	0.17	ug/L		10/06/15 08:39	10/07/15 14:42	1
2-Nitroaniline	1.8	U	1.8	0.28	ug/L		10/06/15 08:39	10/07/15 14:42	1
2-Nitrophenol	1.8	U	1.8	0.18	ug/L		10/06/15 08:39	10/07/15 14:42	1
3,3'-Dichlorobenzidine	4.5	U	4.5	0.32	ug/L		10/06/15 08:39	10/07/15 14:42	1
3-Nitroaniline	1.8	U	1.8	0.24	ug/L		10/06/15 08:39	10/07/15 14:42	1
4,6-Dinitro-2-methylphenol	4.5	U	4.5	0.47	ug/L		10/06/15 08:39	10/07/15 14:42	1
4-Bromophenyl phenyl ether	1.8	U	1.8	0.31	ug/L		10/06/15 08:39	10/07/15 14:42	1
4-Chloro-3-methylphenol	1.8	U	1.8	0.25	ug/L		10/06/15 08:39	10/07/15 14:42	1
4-Chloroaniline	1.8	U	1.8	0.13	ug/L		10/06/15 08:39	10/07/15 14:42	1
4-Chlorophenyl phenyl ether	1.8	U	1.8	0.26	ug/L		10/06/15 08:39	10/07/15 14:42	1
4-Nitroaniline	1.8	U	1.8	0.22	ug/L		10/06/15 08:39	10/07/15 14:42	1
4-Nitrophenol	4.5	U	4.5	0.52	ug/L		10/06/15 08:39	10/07/15 14:42	1
Acenaphthene	0.18	U	0.18	0.039	ug/L		10/06/15 08:39	10/07/15 14:42	1
Acenaphthylene	0.18	U	0.18	0.018	ug/L		10/06/15 08:39	10/07/15 14:42	1
Acetophenone	0.89	U	0.89	0.13	ug/L		10/06/15 08:39	10/07/15 14:42	1
Anthracene	0.18	U	0.18	0.028	ug/L		10/06/15 08:39	10/07/15 14:42	1
Atrazine	0.89	U	0.89	0.10	ug/L		10/06/15 08:39	10/07/15 14:42	1
Benzaldehyde	0.89	U *	0.89	0.26	ug/L		10/06/15 08:39	10/07/15 14:42	1
Benzo[a]anthracene	0.18	U	0.18	0.053	ug/L		10/06/15 08:39	10/07/15 14:42	1
Benzo[a]pyrene	0.18	U	0.18	0.027	ug/L		10/06/15 08:39	10/07/15 14:42	1
Benzo[b]fluoranthene	0.18	U	0.18	0.053	ug/L		10/06/15 08:39	10/07/15 14:42	1
Benzo[g,h,i]perylene	0.18	U	0.18	0.045	ug/L		10/06/15 08:39	10/07/15 14:42	1
Benzo[k]fluoranthene	0.18	U	0.18	0.043	ug/L		10/06/15 08:39	10/07/15 14:42	1
Bis(2-chloroethoxy)methane	0.89	U	0.89	0.033	ug/L		10/06/15 08:39	10/07/15 14:42	1
Bis(2-chloroethyl)ether	0.89	U	0.89	0.17	ug/L		10/06/15 08:39	10/07/15 14:42	1
Bis(2-ethylhexyl) phthalate	1.8	U	1.8	1.4	ug/L		10/06/15 08:39	10/07/15 14:42	1
Butyl benzyl phthalate	0.89	U	0.89	0.19	ug/L		10/06/15 08:39	10/07/15 14:42	1
Caprolactam	4.5	U	4.5	0.33	ug/L		10/06/15 08:39	10/07/15 14:42	1
Carbazole	0.89	U	0.89	0.094	ug/L		10/06/15 08:39	10/07/15 14:42	1
Chrysene	0.18	U	0.18	0.031	ug/L		10/06/15 08:39	10/07/15 14:42	1
Dibenz(a,h)anthracene	0.18	U	0.18	0.036	ug/L		10/06/15 08:39	10/07/15 14:42	1

Client Sample ID: VAP-9-GW (40-41')

Date Collected: 10/01/15 16:55
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-7
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.89	U	0.89	0.12	ug/L		10/06/15 08:39	10/07/15 14:42	1
Diethyl phthalate	0.89	U	0.89	0.11	ug/L		10/06/15 08:39	10/07/15 14:42	1
Dimethyl phthalate	0.89	U	0.89	0.090	ug/L		10/06/15 08:39	10/07/15 14:42	1
Di-n-butyl phthalate	**0.48**	**J B**	0.89	0.36	ug/L		10/06/15 08:39	10/07/15 14:42	1
Di-n-octyl phthalate	0.89	U	0.89	0.33	ug/L		10/06/15 08:39	10/07/15 14:42	1
Fluoranthene	0.18	U	0.18	0.024	ug/L		10/06/15 08:39	10/07/15 14:42	1
Fluorene	0.18	U	0.18	0.030	ug/L		10/06/15 08:39	10/07/15 14:42	1
Hexachlorobenzene	0.89	U	0.89	0.10	ug/L		10/06/15 08:39	10/07/15 14:42	1
Hexachlorobutadiene	0.89	U	0.89	0.13	ug/L		10/06/15 08:39	10/07/15 14:42	1
Hexachlorocyclopentadiene	8.9	U	8.9	2.2	ug/L		10/06/15 08:39	10/07/15 14:42	1
Hexachloroethane	0.89	U	0.89	0.20	ug/L		10/06/15 08:39	10/07/15 14:42	1
Indeno[1,2,3-cd]pyrene	0.18	U	0.18	0.043	ug/L		10/06/15 08:39	10/07/15 14:42	1
Isophorone	0.89	U	0.89	0.038	ug/L		10/06/15 08:39	10/07/15 14:42	1
Naphthalene	0.18	U	0.18	0.038	ug/L		10/06/15 08:39	10/07/15 14:42	1
Nitrobenzene	0.89	U	0.89	0.10	ug/L		10/06/15 08:39	10/07/15 14:42	1
N-Nitrosodi-n-propylamine	0.89	U	0.89	0.14	ug/L		10/06/15 08:39	10/07/15 14:42	1
N-Nitrosodiphenylamine	0.89	U	0.89	0.10	ug/L		10/06/15 08:39	10/07/15 14:42	1
Pentachlorophenol	36	U	36	4.9	ug/L		10/06/15 08:39	10/07/15 14:42	1
Phenol	0.89	U	0.89	0.13	ug/L		10/06/15 08:39	10/07/15 14:42	1
Phenanthrene	0.18	U	0.18	0.028	ug/L		10/06/15 08:39	10/07/15 14:42	1
Pyrene	0.18	U	0.18	0.025	ug/L		10/06/15 08:39	10/07/15 14:42	1
3 & 4 Methylphenol	1.8	U	1.8	0.30	ug/L		10/06/15 08:39	10/07/15 14:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*27*	*X*	*29 - 110*	*10/06/15 08:39*	*10/07/15 14:42*	*1*
2-Fluorophenol (Surr)	*32*		*15 - 110*	*10/06/15 08:39*	*10/07/15 14:42*	*1*
2,4,6-Tribromophenol (Surr)	*21*		*21 - 128*	*10/06/15 08:39*	*10/07/15 14:42*	*1*
Nitrobenzene-d5 (Surr)	*31*		*31 - 110*	*10/06/15 08:39*	*10/07/15 14:42*	*1*
Phenol-d5 (Surr)	*27*		*10 - 110*	*10/06/15 08:39*	*10/07/15 14:42*	*1*
Terphenyl-d14 (Surr)	*21*	*X*	*31 - 115*	*10/06/15 08:39*	*10/07/15 14:42*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**8.8**	**J**	10	2.9	ug/L		10/06/15 10:16	10/07/15 19:02	1
Barium	**540**	**B**	200	1.0	ug/L		10/06/15 10:16	10/07/15 19:02	1
Cadmium	**0.69**	**J**	2.0	0.14	ug/L		10/06/15 10:16	10/07/15 19:02	1
Chromium	**180**		5.0	0.55	ug/L		10/06/15 10:16	10/07/15 19:02	1
Lead	**75**		3.0	1.9	ug/L		10/06/15 10:16	10/07/15 19:02	1
Selenium	5.0	U	5.0	4.0	ug/L		10/06/15 10:16	10/07/15 19:02	1
Silver	5.0	U	5.0	0.92	ug/L		10/06/15 10:16	10/07/15 19:02	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/06/15 14:00	10/13/15 11:28	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Client Sample ID: VAP-9-GW (45-46')
Date Collected: 10/01/15 17:28
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**1.0**	**J**	10	0.94	ug/L			10/12/15 14:15	1
Benzene	1.0	U	1.0	0.35	ug/L			10/12/15 14:15	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/12/15 14:15	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/12/15 14:15	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/12/15 14:15	1
2-Butanone (MEK)	**0.68**	**J**	10	0.53	ug/L			10/12/15 14:15	1
Carbon disulfide	**0.47**	**J**	1.0	0.38	ug/L			10/12/15 14:15	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/12/15 14:15	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 14:15	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/12/15 14:15	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/12/15 14:15	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/12/15 14:15	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/12/15 14:15	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/12/15 14:15	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/12/15 14:15	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/12/15 14:15	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/12/15 14:15	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/12/15 14:15	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/12/15 14:15	1
2-Hexanone	10	U	10	0.48	ug/L			10/12/15 14:15	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/12/15 14:15	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/12/15 14:15	1
Styrene	1.0	U	1.0	0.45	ug/L			10/12/15 14:15	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/12/15 14:15	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/12/15 14:15	1
Toluene	1.0	U	1.0	0.23	ug/L			10/12/15 14:15	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/12/15 14:15	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/12/15 14:15	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/12/15 14:15	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/12/15 14:15	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/12/15 14:15	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/12/15 14:15	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/12/15 14:15	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/12/15 14:15	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/12/15 14:15	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/12/15 14:15	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/12/15 14:15	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/12/15 14:15	1
Methyl acetate	10	U	10	2.3	ug/L			10/12/15 14:15	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/12/15 14:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/12/15 14:15	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/12/15 14:15	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 14:15	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/12/15 14:15	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/12/15 14:15	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/12/15 14:15	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/12/15 14:15	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/12/15 14:15	1

Client Sample ID: VAP-9-GW (45-46')

Date Collected: 10/01/15 17:28
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-8

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*78 - 125*		*10/12/15 14:15*	*1*
4-Bromofluorobenzene (Surr)	*97*		*61 - 120*		*10/12/15 14:15*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/12/15 14:15*	*1*
Dibromofluoromethane (Surr)	*97*		*79 - 120*		*10/12/15 14:15*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 15:05	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/06/15 08:39	10/07/15 15:05	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/06/15 08:39	10/07/15 15:05	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/06/15 08:39	10/07/15 15:05	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/06/15 08:39	10/07/15 15:05	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/06/15 08:39	10/07/15 15:05	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/06/15 08:39	10/07/15 15:05	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/06/15 08:39	10/07/15 15:05	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/06/15 08:39	10/07/15 15:05	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 15:05	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/06/15 08:39	10/07/15 15:05	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/06/15 08:39	10/07/15 15:05	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/06/15 08:39	10/07/15 15:05	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/06/15 08:39	10/07/15 15:05	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/06/15 08:39	10/07/15 15:05	1
3,3'-Dichlorobenzidine	4.6	U	4.6	0.33	ug/L		10/06/15 08:39	10/07/15 15:05	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/06/15 08:39	10/07/15 15:05	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/06/15 08:39	10/07/15 15:05	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/06/15 08:39	10/07/15 15:05	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/06/15 08:39	10/07/15 15:05	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/06/15 08:39	10/07/15 15:05	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/06/15 08:39	10/07/15 15:05	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/06/15 08:39	10/07/15 15:05	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/06/15 08:39	10/07/15 15:05	1
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/06/15 08:39	10/07/15 15:05	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/06/15 08:39	10/07/15 15:05	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/06/15 08:39	10/07/15 15:05	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/06/15 08:39	10/07/15 15:05	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 15:05	1
Benzaldehyde	0.93	U *	0.93	0.27	ug/L		10/06/15 08:39	10/07/15 15:05	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/06/15 08:39	10/07/15 15:05	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/06/15 08:39	10/07/15 15:05	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/06/15 08:39	10/07/15 15:05	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/06/15 08:39	10/07/15 15:05	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/06/15 08:39	10/07/15 15:05	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/06/15 08:39	10/07/15 15:05	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/06/15 08:39	10/07/15 15:05	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	1.4	ug/L		10/06/15 08:39	10/07/15 15:05	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/06/15 08:39	10/07/15 15:05	1
Caprolactam	**1.1**	**J**	4.6	0.34	ug/L		10/06/15 08:39	10/07/15 15:05	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/06/15 08:39	10/07/15 15:05	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/06/15 08:39	10/07/15 15:05	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/06/15 08:39	10/07/15 15:05	1

Client Sample ID: VAP-9-GW (45-46')

Date Collected: 10/01/15 17:28
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-8
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/06/15 08:39	10/07/15 15:05	1
Diethyl phthalate	0.93	U	0.93	0.12	ug/L		10/06/15 08:39	10/07/15 15:05	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/06/15 08:39	10/07/15 15:05	1
Di-n-butyl phthalate	0.93	U	0.93	0.37	ug/L		10/06/15 08:39	10/07/15 15:05	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/06/15 08:39	10/07/15 15:05	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/06/15 08:39	10/07/15 15:05	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/06/15 08:39	10/07/15 15:05	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 15:05	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/06/15 08:39	10/07/15 15:05	1
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/06/15 08:39	10/07/15 15:05	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/06/15 08:39	10/07/15 15:05	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/06/15 08:39	10/07/15 15:05	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/06/15 08:39	10/07/15 15:05	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/06/15 08:39	10/07/15 15:05	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 15:05	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/06/15 08:39	10/07/15 15:05	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/06/15 08:39	10/07/15 15:05	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/06/15 08:39	10/07/15 15:05	1
Phenol	0.93	U	0.93	0.14	ug/L		10/06/15 08:39	10/07/15 15:05	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/06/15 08:39	10/07/15 15:05	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/06/15 08:39	10/07/15 15:05	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/06/15 08:39	10/07/15 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*30*		*29 - 110*	*10/06/15 08:39*	*10/07/15 15:05*	*1*
2-Fluorophenol (Surr)	*33*		*15 - 110*	*10/06/15 08:39*	*10/07/15 15:05*	*1*
2,4,6-Tribromophenol (Surr)	*22*		*21 - 128*	*10/06/15 08:39*	*10/07/15 15:05*	*1*
Nitrobenzene-d5 (Surr)	*33*		*31 - 110*	*10/06/15 08:39*	*10/07/15 15:05*	*1*
Phenol-d5 (Surr)	*27*		*10 - 110*	*10/06/15 08:39*	*10/07/15 15:05*	*1*
Terphenyl-d14 (Surr)	*25*	*X*	*31 - 115*	*10/06/15 08:39*	*10/07/15 15:05*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**13**		10	2.9	ug/L		10/06/15 10:16	10/07/15 19:14	1
Barium	**510**	**B**	200	1.0	ug/L		10/06/15 10:16	10/07/15 19:14	1
Cadmium	**1.7**	**J**	2.0	0.14	ug/L		10/06/15 10:16	10/07/15 19:14	1
Chromium	**150**		5.0	0.55	ug/L		10/06/15 10:16	10/07/15 19:14	1
Lead	**42**		3.0	1.9	ug/L		10/06/15 10:16	10/07/15 19:14	1
Selenium	5.0	U	5.0	4.0	ug/L		10/06/15 10:16	10/07/15 19:14	1
Silver	5.0	U	5.0	0.92	ug/L		10/06/15 10:16	10/07/15 19:14	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.14**	**J**	0.20	0.090	ug/L		10/06/15 14:00	10/13/15 11:30	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Client Sample ID: VAP-9-GW (49-50')
Date Collected: 10/01/15 18:00
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**5.1**	**J**	10	0.94	ug/L			10/12/15 14:38	1
Benzene	1.0	U	1.0	0.35	ug/L			10/12/15 14:38	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/12/15 14:38	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/12/15 14:38	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/12/15 14:38	1
2-Butanone (MEK)	**0.65**	**J**	10	0.53	ug/L			10/12/15 14:38	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/12/15 14:38	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/12/15 14:38	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 14:38	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/12/15 14:38	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/12/15 14:38	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/12/15 14:38	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/12/15 14:38	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/12/15 14:38	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/12/15 14:38	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/12/15 14:38	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/12/15 14:38	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/12/15 14:38	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/12/15 14:38	1
2-Hexanone	10	U	10	0.48	ug/L			10/12/15 14:38	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/12/15 14:38	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/12/15 14:38	1
Styrene	1.0	U	1.0	0.45	ug/L			10/12/15 14:38	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/12/15 14:38	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/12/15 14:38	1
Toluene	1.0	U	1.0	0.23	ug/L			10/12/15 14:38	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/12/15 14:38	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/12/15 14:38	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/12/15 14:38	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/12/15 14:38	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/12/15 14:38	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/12/15 14:38	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/12/15 14:38	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/12/15 14:38	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/12/15 14:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/12/15 14:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/12/15 14:38	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/12/15 14:38	1
Methyl acetate	10	U	10	2.3	ug/L			10/12/15 14:38	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/12/15 14:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/12/15 14:38	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/12/15 14:38	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 14:38	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/12/15 14:38	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/12/15 14:38	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/12/15 14:38	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/12/15 14:38	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/12/15 14:38	1

Client Sample ID: VAP-9-GW (49-50')

Date Collected: 10/01/15 18:00
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-9

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*78 - 125*		*10/12/15 14:38*	*1*
4-Bromofluorobenzene (Surr)	*100*		*61 - 120*		*10/12/15 14:38*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*10/12/15 14:38*	*1*
Dibromofluoromethane (Surr)	*97*		*79 - 120*		*10/12/15 14:38*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 15:28	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/06/15 08:39	10/07/15 15:28	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/06/15 08:39	10/07/15 15:28	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/06/15 08:39	10/07/15 15:28	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/06/15 08:39	10/07/15 15:28	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/06/15 08:39	10/07/15 15:28	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/06/15 08:39	10/07/15 15:28	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/06/15 08:39	10/07/15 15:28	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/06/15 08:39	10/07/15 15:28	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 15:28	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/06/15 08:39	10/07/15 15:28	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/06/15 08:39	10/07/15 15:28	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/06/15 08:39	10/07/15 15:28	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/06/15 08:39	10/07/15 15:28	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/06/15 08:39	10/07/15 15:28	1
3,3'-Dichlorobenzidine	4.6	U	4.6	0.33	ug/L		10/06/15 08:39	10/07/15 15:28	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/06/15 08:39	10/07/15 15:28	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/06/15 08:39	10/07/15 15:28	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/06/15 08:39	10/07/15 15:28	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/06/15 08:39	10/07/15 15:28	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/06/15 08:39	10/07/15 15:28	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/06/15 08:39	10/07/15 15:28	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/06/15 08:39	10/07/15 15:28	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/06/15 08:39	10/07/15 15:28	1
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/06/15 08:39	10/07/15 15:28	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/06/15 08:39	10/07/15 15:28	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/06/15 08:39	10/07/15 15:28	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/06/15 08:39	10/07/15 15:28	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 15:28	1
Benzaldehyde	0.93	U *	0.93	0.27	ug/L		10/06/15 08:39	10/07/15 15:28	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/06/15 08:39	10/07/15 15:28	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/06/15 08:39	10/07/15 15:28	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/06/15 08:39	10/07/15 15:28	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/06/15 08:39	10/07/15 15:28	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/06/15 08:39	10/07/15 15:28	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/06/15 08:39	10/07/15 15:28	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/06/15 08:39	10/07/15 15:28	1
Bis(2-ethylhexyl) phthalate	**4.3**		1.9	1.4	ug/L		10/06/15 08:39	10/07/15 15:28	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/06/15 08:39	10/07/15 15:28	1
Caprolactam	**17**		4.6	0.34	ug/L		10/06/15 08:39	10/07/15 15:28	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/06/15 08:39	10/07/15 15:28	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/06/15 08:39	10/07/15 15:28	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/06/15 08:39	10/07/15 15:28	1

Client Sample ID: VAP-9-GW (49-50')
Date Collected: 10/01/15 18:00
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-9
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/06/15 08:39	10/07/15 15:28	1
Diethyl phthalate	0.93	U	0.93	0.12	ug/L		10/06/15 08:39	10/07/15 15:28	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/06/15 08:39	10/07/15 15:28	1
Di-n-butyl phthalate	**0.58**	**J B**	0.93	0.37	ug/L		10/06/15 08:39	10/07/15 15:28	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/06/15 08:39	10/07/15 15:28	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/06/15 08:39	10/07/15 15:28	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/06/15 08:39	10/07/15 15:28	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 15:28	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/06/15 08:39	10/07/15 15:28	1
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/06/15 08:39	10/07/15 15:28	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/06/15 08:39	10/07/15 15:28	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/06/15 08:39	10/07/15 15:28	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/06/15 08:39	10/07/15 15:28	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/06/15 08:39	10/07/15 15:28	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 15:28	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/06/15 08:39	10/07/15 15:28	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/06/15 08:39	10/07/15 15:28	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/06/15 08:39	10/07/15 15:28	1
Phenol	0.93	U	0.93	0.14	ug/L		10/06/15 08:39	10/07/15 15:28	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/06/15 08:39	10/07/15 15:28	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/06/15 08:39	10/07/15 15:28	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/06/15 08:39	10/07/15 15:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*43*		*29 - 110*	*10/06/15 08:39*	*10/07/15 15:28*	*1*
2-Fluorophenol (Surr)	*41*		*15 - 110*	*10/06/15 08:39*	*10/07/15 15:28*	*1*
2,4,6-Tribromophenol (Surr)	*34*		*21 - 128*	*10/06/15 08:39*	*10/07/15 15:28*	*1*
Nitrobenzene-d5 (Surr)	*45*		*31 - 110*	*10/06/15 08:39*	*10/07/15 15:28*	*1*
Phenol-d5 (Surr)	*32*		*10 - 110*	*10/06/15 08:39*	*10/07/15 15:28*	*1*
Terphenyl-d14 (Surr)	*25*	*X*	*31 - 115*	*10/06/15 08:39*	*10/07/15 15:28*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**25**		10	2.9	ug/L		10/06/15 10:16	10/07/15 19:18	1
Barium	**590**	**B**	200	1.0	ug/L		10/06/15 10:16	10/07/15 19:18	1
Cadmium	**2.0**		2.0	0.14	ug/L		10/06/15 10:16	10/07/15 19:18	1
Chromium	**270**		5.0	0.55	ug/L		10/06/15 10:16	10/07/15 19:18	1
Lead	**71**		3.0	1.9	ug/L		10/06/15 10:16	10/07/15 19:18	1
Selenium	**6.9**		5.0	4.0	ug/L		10/06/15 10:16	10/07/15 19:18	1
Silver	5.0	U	5.0	0.92	ug/L		10/06/15 10:16	10/07/15 19:18	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/06/15 14:00	10/13/15 11:32	1

Client Sample ID: DUP-01 (100115)
Date Collected: 10/01/15 00:00
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-10
Matrix: Solid
Percent Solids: 83.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**31**		18	1.4	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Benzene	4.4	U	4.4	0.21	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Dichlorobromomethane	4.4	U	4.4	0.18	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Bromoform	4.4	U	4.4	0.33	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Bromomethane	4.4	U	4.4	0.62	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
2-Butanone (MEK)	**3.3**	**J B**	18	0.42	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Carbon disulfide	4.4	U	4.4	0.30	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Carbon tetrachloride	4.4	U	4.4	0.29	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Chlorobenzene	4.4	U	4.4	0.25	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Chloroethane	4.4	U	4.4	0.30	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Chloroform	4.4	U	4.4	0.18	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Chloromethane	4.4	U	4.4	1.1	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
1,1-Dichloroethane	4.4	U	4.4	1.1	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
1,2-Dichloroethane	4.4	U	4.4	0.18	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
1,1-Dichloroethene	4.4	U	4.4	0.43	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
1,2-Dichloropropane	4.4	U	4.4	0.25	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
cis-1,3-Dichloropropene	4.4	U	4.4	0.24	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
trans-1,3-Dichloropropene	4.4	U	4.4	0.18	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Ethylbenzene	4.4	U	4.4	0.28	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
2-Hexanone	18	U	18	0.61	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Methylene Chloride	4.4	U	4.4	0.93	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
4-Methyl-2-pentanone (MIBK)	18	U	18	0.25	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Styrene	4.4	U	4.4	0.24	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
1,1,2,2-Tetrachloroethane	4.4	U	4.4	0.14	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Tetrachloroethene	4.4	U	4.4	0.29	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Toluene	4.4	U	4.4	0.24	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Trichloroethene	4.4	U	4.4	0.23	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Vinyl chloride	4.4	U	4.4	0.34	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Xylenes, Total	8.8	U	8.8	0.55	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
1,1,1-Trichloroethane	4.4	U	4.4	0.23	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
1,1,2-Trichloroethane	4.4	U	4.4	0.43	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Cyclohexane	8.8	U	8.8	0.25	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
1,2-Dibromo-3-Chloropropane	8.8	U	8.8	1.6	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Ethylene Dibromide	4.4	U	4.4	0.22	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Dichlorodifluoromethane	4.4	U	4.4	0.35	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
cis-1,2-Dichloroethene	4.4	U	4.4	0.25	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
trans-1,2-Dichloroethene	4.4	U	4.4	0.32	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Isopropylbenzene	4.4	U	4.4	0.26	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Methyl acetate	8.8	U	8.8	2.0	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Methyl tert-butyl ether	4.4	U	4.4	0.13	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	4.4	U	4.4	0.34	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
1,2,4-Trichlorobenzene	4.4	U	4.4	0.34	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
1,2-Dichlorobenzene	4.4	U	4.4	0.33	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
1,3-Dichlorobenzene	4.4	U	4.4	0.35	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
1,4-Dichlorobenzene	4.4	U	4.4	0.36	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Trichlorofluoromethane	4.4	U	4.4	0.23	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Chlorodibromomethane	4.4	U	4.4	0.14	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1
Methylcyclohexane	8.8	U	8.8	0.29	ug/Kg	☼	10/06/15 20:02	10/10/15 08:20	1

Client Sample ID: DUP-01 (100115)
Date Collected: 10/01/15 00:00
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-10
Matrix: Solid
Percent Solids: 83.4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 120*	*10/06/15 20:02*	*10/10/15 08:20*	*1*
4-Bromofluorobenzene (Surr)	*120*		*64 - 130*	*10/06/15 20:02*	*10/10/15 08:20*	*1*
Toluene-d8 (Surr)	*103*		*69 - 128*	*10/06/15 20:02*	*10/10/15 08:20*	*1*
Dibromofluoromethane (Surr)	*102*		*68 - 120*	*10/06/15 20:02*	*10/10/15 08:20*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	60	U	60	4.2	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
bis (2-chloroisopropyl) ether	120	U	120	11	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
2,4,5-Trichlorophenol	180	U	180	30	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
2,4,6-Trichlorophenol	180	U	180	11	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
2,4-Dichlorophenol	180	U	180	24	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
2,4-Dimethylphenol	180	U	180	24	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
2,4-Dinitrophenol	400	U	400	25	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
2,4-Dinitrotoluene	240	U	240	20	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
2,6-Dinitrotoluene	240	U	240	25	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
2-Chloronaphthalene	60	U	60	0.54	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
2-Chlorophenol	60	U	60	9.9	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
2-Methylnaphthalene	8.0	U	8.0	0.60	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
2-Methylphenol	240	U	240	13	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
2-Nitroaniline	240	U	240	11	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
2-Nitrophenol	60	U	60	10	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
3,3'-Dichlorobenzidine	120	U	120	22	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
3-Nitroaniline	240	U	240	19	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
4,6-Dinitro-2-methylphenol	180	U	180	11	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
4-Bromophenyl phenyl ether	60	U	60	16	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
4-Chloro-3-methylphenol	180	U	180	25	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
4-Chloroaniline	180	U	180	20	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
4-Chlorophenyl phenyl ether	60	U	60	16	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
4-Nitroaniline	240	U	240	31	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
4-Nitrophenol	400	U	400	20	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Acenaphthene	8.0	U	8.0	0.92	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Acenaphthylene	8.0	U	8.0	0.42	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Acetophenone	120	U	120	11	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Anthracene	8.0	U	8.0	0.94	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Atrazine	240	U	240	11	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Benzaldehyde	120	U	120	14	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Benzo[a]anthracene	8.0	U	8.0	0.76	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Benzo[a]pyrene	8.0	U	8.0	0.77	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Benzo[b]fluoranthene	8.0	U	8.0	0.71	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Benzo[g,h,i]perylene	8.0	U	8.0	0.42	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Benzo[k]fluoranthene	8.0	U	8.0	0.82	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Bis(2-chloroethoxy)methane	120	U	120	27	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Bis(2-chloroethyl)ether	120	U	120	2.4	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Bis(2-ethylhexyl) phthalate	**26**	**J**	84	23	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Butyl benzyl phthalate	84	U	84	12	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Caprolactam	400	U	400	45	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Carbazole	60	U	60	33	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Chrysene	8.0	U	8.0	1.3	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Dibenz(a,h)anthracene	8.0	U	8.0	0.80	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1

Client Sample ID: DUP-01 (100115)

Date Collected: 10/01/15 00:00
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-10

Matrix: Solid
Percent Solids: 83.4

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	60	U	60	0.80	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Diethyl phthalate	84	U	84	19	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Dimethyl phthalate	84	U	84	20	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Di-n-butyl phthalate	84	U	84	18	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Di-n-octyl phthalate	84	U	84	9.5	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Fluoranthene	8.0	U	8.0	0.66	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Fluorene	8.0	U	8.0	0.64	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Hexachlorobenzene	8.0	U	8.0	2.5	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Hexachlorobutadiene	60	U	60	6.7	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Hexachlorocyclopentadiene	400	U	400	9.8	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Hexachloroethane	60	U	60	11	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Indeno[1,2,3-cd]pyrene	8.0	U	8.0	0.42	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Isophorone	60	U	60	16	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Naphthalene	8.0	U	8.0	0.99	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Nitrobenzene	120	U	120	2.7	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
N-Nitrosodi-n-propylamine	60	U	60	7.6	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
N-Nitrosodiphenylamine	60	U	60	25	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Pentachlorophenol	180	U	180	11	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Phenol	60	U	60	8.8	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Phenanthrene	8.0	U	8.0	0.88	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
Pyrene	8.0	U	8.0	0.53	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1
3 & 4 Methylphenol	480	U	480	24	ug/Kg	☼	10/06/15 07:57	10/08/15 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*61*		*24 - 110*	*10/06/15 07:57*	*10/08/15 14:23*	*1*
2-Fluorophenol (Surr)	*54*		*24 - 110*	*10/06/15 07:57*	*10/08/15 14:23*	*1*
2,4,6-Tribromophenol (Surr)	*24*		*10 - 110*	*10/06/15 07:57*	*10/08/15 14:23*	*1*
Nitrobenzene-d5 (Surr)	*50*		*20 - 110*	*10/06/15 07:57*	*10/08/15 14:23*	*1*
Phenol-d5 (Surr)	*59*		*26 - 110*	*10/06/15 07:57*	*10/08/15 14:23*	*1*
Terphenyl-d14 (Surr)	*76*		*36 - 110*	*10/06/15 07:57*	*10/08/15 14:23*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**6.0**		1.9	0.77	mg/Kg	☼	10/07/15 11:19	10/09/15 20:14	2
Barium	**110**		38	0.77	mg/Kg	☼	10/07/15 11:19	10/09/15 20:14	2
Cadmium	0.38	U	0.38	0.040	mg/Kg	☼	10/07/15 11:19	10/09/15 20:14	2
Chromium	**11**		0.94	0.14	mg/Kg	☼	10/07/15 11:19	10/09/15 20:14	2
Lead	**8.0**		0.57	0.38	mg/Kg	☼	10/07/15 11:19	10/09/15 20:14	2
Selenium	0.94	U	0.94	0.64	mg/Kg	☼	10/07/15 11:19	10/09/15 20:14	2
Silver	0.94	U	0.94	0.12	mg/Kg	☼	10/07/15 11:19	10/09/15 20:14	2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.12	0.016	mg/Kg	☼	10/07/15 16:25	10/09/15 11:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.96	U	0.96	0.31	mg/Kg	☼	10/07/15 10:18	10/08/15 11:04	1
Percent Solids	**83**		0.10	0.10	%			10/05/15 10:13	1
Percent Moisture	**17**		0.10	0.10	%			10/05/15 10:13	1

Client Sample ID: TB-01 (100115)
Date Collected: 10/01/15 00:00
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	3.2	J	10	0.94	ug/L			10/12/15 15:01	1
Benzene	1.0	U	1.0	0.35	ug/L			10/12/15 15:01	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/12/15 15:01	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/12/15 15:01	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/12/15 15:01	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/12/15 15:01	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/12/15 15:01	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/12/15 15:01	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 15:01	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/12/15 15:01	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/12/15 15:01	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/12/15 15:01	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/12/15 15:01	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/12/15 15:01	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/12/15 15:01	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/12/15 15:01	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/12/15 15:01	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/12/15 15:01	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/12/15 15:01	1
2-Hexanone	10	U	10	0.48	ug/L			10/12/15 15:01	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/12/15 15:01	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/12/15 15:01	1
Styrene	1.0	U	1.0	0.45	ug/L			10/12/15 15:01	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/12/15 15:01	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/12/15 15:01	1
Toluene	1.0	U	1.0	0.23	ug/L			10/12/15 15:01	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/12/15 15:01	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/12/15 15:01	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/12/15 15:01	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/12/15 15:01	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/12/15 15:01	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/12/15 15:01	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/12/15 15:01	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/12/15 15:01	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/12/15 15:01	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/12/15 15:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/12/15 15:01	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/12/15 15:01	1
Methyl acetate	10	U	10	2.3	ug/L			10/12/15 15:01	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/12/15 15:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/12/15 15:01	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/12/15 15:01	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 15:01	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/12/15 15:01	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/12/15 15:01	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/12/15 15:01	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/12/15 15:01	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/12/15 15:01	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Client Sample ID: TB-01 (100115)
Date Collected: 10/01/15 00:00
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-11
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		78 - 125		10/12/15 15:01	1
4-Bromofluorobenzene (Surr)	98		61 - 120		10/12/15 15:01	1
Toluene-d8 (Surr)	94		80 - 120		10/12/15 15:01	1
Dibromofluoromethane (Surr)	96		79 - 120		10/12/15 15:01	1

Client Sample ID: VAP-1 (1-2)

Date Collected: 10/02/15 07:55
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-12

Matrix: Solid
Percent Solids: 83.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**40**		18	1.4	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Benzene	4.4	U	4.4	0.21	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Dichlorobromomethane	4.4	U	4.4	0.19	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Bromoform	4.4	U	4.4	0.34	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Bromomethane	4.4	U	4.4	0.63	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
2-Butanone (MEK)	**2.6**	**J B**	18	0.43	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Carbon disulfide	**0.57**	**J**	4.4	0.30	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Carbon tetrachloride	4.4	U	4.4	0.29	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Chlorobenzene	4.4	U	4.4	0.26	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Chloroethane	4.4	U	4.4	0.30	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Chloroform	4.4	U	4.4	0.19	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Chloromethane	4.4	U	4.4	1.2	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
1,1-Dichloroethane	4.4	U	4.4	1.1	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
1,2-Dichloroethane	4.4	U	4.4	0.18	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
1,1-Dichloroethene	4.4	U	4.4	0.44	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
1,2-Dichloropropane	4.4	U	4.4	0.25	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
cis-1,3-Dichloropropene	4.4	U	4.4	0.24	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
trans-1,3-Dichloropropene	4.4	U	4.4	0.19	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Ethylbenzene	4.4	U	4.4	0.28	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
2-Hexanone	18	U	18	0.62	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Methylene Chloride	4.4	U	4.4	0.94	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
4-Methyl-2-pentanone (MIBK)	18	U	18	0.26	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Styrene	4.4	U	4.4	0.24	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
1,1,2,2-Tetrachloroethane	4.4	U	4.4	0.14	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Tetrachloroethene	4.4	U	4.4	0.29	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Toluene	4.4	U	4.4	0.24	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Trichloroethene	4.4	U	4.4	0.23	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Vinyl chloride	4.4	U	4.4	0.35	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Xylenes, Total	8.9	U	8.9	0.56	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
1,1,1-Trichloroethane	4.4	U	4.4	0.23	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
1,1,2-Trichloroethane	4.4	U	4.4	0.44	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Cyclohexane	8.9	U	8.9	0.26	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
1,2-Dibromo-3-Chloropropane	8.9	U	8.9	1.7	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Ethylene Dibromide	4.4	U	4.4	0.22	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Dichlorodifluoromethane	4.4	U	4.4	0.36	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
cis-1,2-Dichloroethene	4.4	U	4.4	0.25	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
trans-1,2-Dichloroethene	4.4	U	4.4	0.33	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Isopropylbenzene	4.4	U	4.4	0.27	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Methyl acetate	8.9	U	8.9	2.0	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Methyl tert-butyl ether	4.4	U	4.4	0.13	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	4.4	U	4.4	0.35	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
1,2,4-Trichlorobenzene	4.4	U	4.4	0.35	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
1,2-Dichlorobenzene	4.4	U	4.4	0.34	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
1,3-Dichlorobenzene	4.4	U	4.4	0.36	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
1,4-Dichlorobenzene	4.4	U	4.4	0.36	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Trichlorofluoromethane	4.4	U	4.4	0.23	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Chlorodibromomethane	4.4	U	4.4	0.14	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1
Methylcyclohexane	8.9	U	8.9	0.29	ug/Kg	☼	10/06/15 20:02	10/10/15 08:41	1

Client Sample ID: VAP-1 (1-2)

Date Collected: 10/02/15 07:55
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-12

Matrix: Solid
Percent Solids: 83.6

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*64 - 120*	*10/06/15 20:02*	*10/10/15 08:41*	*1*
4-Bromofluorobenzene (Surr)	*113*		*64 - 130*	*10/06/15 20:02*	*10/10/15 08:41*	*1*
Toluene-d8 (Surr)	*99*		*69 - 128*	*10/06/15 20:02*	*10/10/15 08:41*	*1*
Dibromofluoromethane (Surr)	*101*		*68 - 120*	*10/06/15 20:02*	*10/10/15 08:41*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	60	U	60	4.2	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
bis (2-chloroisopropyl) ether	120	U	120	11	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
2,4,5-Trichlorophenol	180	U	180	30	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
2,4,6-Trichlorophenol	180	U	180	11	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
2,4-Dichlorophenol	180	U	180	24	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
2,4-Dimethylphenol	180	U	180	24	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
2,4-Dinitrophenol	400	U	400	25	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
2,4-Dinitrotoluene	240	U	240	20	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
2,6-Dinitrotoluene	240	U	240	25	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
2-Chloronaphthalene	60	U	60	0.54	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
2-Chlorophenol	60	U	60	9.8	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
2-Methylnaphthalene	8.0	U	8.0	0.60	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
2-Methylphenol	240	U	240	13	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
2-Nitroaniline	240	U	240	11	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
2-Nitrophenol	60	U	60	10	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
3,3'-Dichlorobenzidine	120	U	120	22	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
3-Nitroaniline	240	U	240	19	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
4,6-Dinitro-2-methylphenol	180	U	180	11	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
4-Bromophenyl phenyl ether	60	U	60	16	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
4-Chloro-3-methylphenol	180	U	180	25	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
4-Chloroaniline	180	U	180	20	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
4-Chlorophenyl phenyl ether	60	U	60	16	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
4-Nitroaniline	240	U	240	31	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
4-Nitrophenol	400	U	400	20	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Acenaphthene	8.0	U	8.0	0.91	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Acenaphthylene	8.0	U	8.0	0.42	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Acetophenone	120	U	120	11	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Anthracene	8.0	U	8.0	0.94	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Atrazine	240	U	240	11	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Benzaldehyde	120	U	120	14	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Benzo[a]anthracene	8.0	U	8.0	0.76	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Benzo[a]pyrene	8.0	U	8.0	0.77	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Benzo[b]fluoranthene	8.0	U	8.0	0.71	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Benzo[g,h,i]perylene	8.0	U	8.0	0.42	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Benzo[k]fluoranthene	8.0	U	8.0	0.82	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Bis(2-chloroethoxy)methane	120	U	120	26	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Bis(2-chloroethyl)ether	120	U	120	2.4	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Bis(2-ethylhexyl) phthalate	**36**	**J**	84	23	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Butyl benzyl phthalate	84	U	84	12	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Caprolactam	**52**	**J**	400	44	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Carbazole	60	U	60	32	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Chrysene	8.0	U	8.0	1.3	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Dibenz(a,h)anthracene	8.0	U	8.0	0.79	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1

Client Sample ID: VAP-1 (1-2)

Date Collected: 10/02/15 07:55
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-12

Matrix: Solid
Percent Solids: 83.6

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	60	U	60	0.79	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Diethyl phthalate	84	U	84	19	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Dimethyl phthalate	84	U	84	20	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Di-n-butyl phthalate	84	U	84	18	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Di-n-octyl phthalate	84	U	84	9.5	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Fluoranthene	8.0	U	8.0	0.66	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Fluorene	8.0	U	8.0	0.64	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Hexachlorobenzene	8.0	U	8.0	2.5	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Hexachlorobutadiene	60	U	60	6.7	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Hexachlorocyclopentadiene	400	U F1	400	9.7	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Hexachloroethane	60	U	60	11	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Indeno[1,2,3-cd]pyrene	8.0	U	8.0	0.42	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Isophorone	60	U	60	16	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Naphthalene	8.0	U	8.0	0.98	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Nitrobenzene	120	U	120	2.6	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
N-Nitrosodi-n-propylamine	60	U	60	7.6	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
N-Nitrosodiphenylamine	60	U	60	25	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Pentachlorophenol	180	U F1 F2	180	11	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Phenol	60	U	60	8.8	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Phenanthrene	8.0	U	8.0	0.88	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
Pyrene	8.0	U	8.0	0.53	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1
3 & 4 Methylphenol	480	U	480	24	ug/Kg	☼	10/06/15 07:57	10/08/15 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*24 - 110*	*10/06/15 07:57*	*10/08/15 14:49*	*1*
2-Fluorophenol (Surr)	*64*		*24 - 110*	*10/06/15 07:57*	*10/08/15 14:49*	*1*
2,4,6-Tribromophenol (Surr)	*21*		*10 - 110*	*10/06/15 07:57*	*10/08/15 14:49*	*1*
Nitrobenzene-d5 (Surr)	*55*		*20 - 110*	*10/06/15 07:57*	*10/08/15 14:49*	*1*
Phenol-d5 (Surr)	*62*		*26 - 110*	*10/06/15 07:57*	*10/08/15 14:49*	*1*
Terphenyl-d14 (Surr)	*78*		*36 - 110*	*10/06/15 07:57*	*10/08/15 14:49*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**9.1**		0.96	0.39	mg/Kg	☼	10/07/15 11:19	10/08/15 17:26	1
Barium	**79**		19	0.39	mg/Kg	☼	10/07/15 11:19	10/08/15 17:26	1
Cadmium	**0.058**	**J B**	0.19	0.020	mg/Kg	☼	10/07/15 11:19	10/08/15 17:26	1
Chromium	**14**		0.48	0.072	mg/Kg	☼	10/07/15 11:19	10/08/15 17:26	1
Lead	**14**		0.29	0.19	mg/Kg	☼	10/07/15 11:19	10/08/15 17:26	1
Selenium	**0.43**	**J**	0.48	0.33	mg/Kg	☼	10/07/15 11:19	10/09/15 20:18	1
Silver	**0.098**	**J B**	0.48	0.060	mg/Kg	☼	10/07/15 11:19	10/08/15 17:26	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.046**	**J**	0.11	0.016	mg/Kg	☼	10/07/15 16:25	10/09/15 11:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.96	U	0.96	0.31	mg/Kg	☼	10/07/15 10:18	10/08/15 11:06	1
Percent Solids	**84**		0.10	0.10	%			10/05/15 10:13	1
Percent Moisture	**16**		0.10	0.10	%			10/05/15 10:13	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Client Sample ID: VAP-1-GW (12-13')
Date Collected: 10/02/15 08:00
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**2.9**	**J**	10	0.94	ug/L			10/12/15 15:23	1
Benzene	1.0	U	1.0	0.35	ug/L			10/12/15 15:23	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/12/15 15:23	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/12/15 15:23	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/12/15 15:23	1
2-Butanone (MEK)	**0.72**	**J**	10	0.53	ug/L			10/12/15 15:23	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/12/15 15:23	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/12/15 15:23	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 15:23	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/12/15 15:23	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/12/15 15:23	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/12/15 15:23	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/12/15 15:23	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/12/15 15:23	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/12/15 15:23	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/12/15 15:23	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/12/15 15:23	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/12/15 15:23	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/12/15 15:23	1
2-Hexanone	10	U	10	0.48	ug/L			10/12/15 15:23	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/12/15 15:23	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/12/15 15:23	1
Styrene	1.0	U	1.0	0.45	ug/L			10/12/15 15:23	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/12/15 15:23	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/12/15 15:23	1
Toluene	1.0	U	1.0	0.23	ug/L			10/12/15 15:23	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/12/15 15:23	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/12/15 15:23	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/12/15 15:23	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/12/15 15:23	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/12/15 15:23	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/12/15 15:23	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/12/15 15:23	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/12/15 15:23	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/12/15 15:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/12/15 15:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/12/15 15:23	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/12/15 15:23	1
Methyl acetate	10	U	10	2.3	ug/L			10/12/15 15:23	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/12/15 15:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/12/15 15:23	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/12/15 15:23	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 15:23	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/12/15 15:23	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/12/15 15:23	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/12/15 15:23	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/12/15 15:23	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/12/15 15:23	1

Client Sample ID: VAP-1-GW (12-13')

Date Collected: 10/02/15 08:00
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-13

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*78 - 125*		*10/12/15 15:23*	*1*
4-Bromofluorobenzene (Surr)	*102*		*61 - 120*		*10/12/15 15:23*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/12/15 15:23*	*1*
Dibromofluoromethane (Surr)	*99*		*79 - 120*		*10/12/15 15:23*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 15:51	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/06/15 08:39	10/07/15 15:51	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/06/15 08:39	10/07/15 15:51	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/06/15 08:39	10/07/15 15:51	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/06/15 08:39	10/07/15 15:51	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/06/15 08:39	10/07/15 15:51	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/06/15 08:39	10/07/15 15:51	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/06/15 08:39	10/07/15 15:51	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/06/15 08:39	10/07/15 15:51	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 15:51	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/06/15 08:39	10/07/15 15:51	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/06/15 08:39	10/07/15 15:51	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/06/15 08:39	10/07/15 15:51	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/06/15 08:39	10/07/15 15:51	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/06/15 08:39	10/07/15 15:51	1
3,3'-Dichlorobenzidine	4.6	U	4.6	0.33	ug/L		10/06/15 08:39	10/07/15 15:51	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/06/15 08:39	10/07/15 15:51	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/06/15 08:39	10/07/15 15:51	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/06/15 08:39	10/07/15 15:51	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/06/15 08:39	10/07/15 15:51	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/06/15 08:39	10/07/15 15:51	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/06/15 08:39	10/07/15 15:51	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/06/15 08:39	10/07/15 15:51	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/06/15 08:39	10/07/15 15:51	1
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/06/15 08:39	10/07/15 15:51	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/06/15 08:39	10/07/15 15:51	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/06/15 08:39	10/07/15 15:51	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/06/15 08:39	10/07/15 15:51	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 15:51	1
Benzaldehyde	0.93	U *	0.93	0.27	ug/L		10/06/15 08:39	10/07/15 15:51	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/06/15 08:39	10/07/15 15:51	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/06/15 08:39	10/07/15 15:51	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/06/15 08:39	10/07/15 15:51	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/06/15 08:39	10/07/15 15:51	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/06/15 08:39	10/07/15 15:51	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/06/15 08:39	10/07/15 15:51	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/06/15 08:39	10/07/15 15:51	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	1.4	ug/L		10/06/15 08:39	10/07/15 15:51	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/06/15 08:39	10/07/15 15:51	1
Caprolactam	**28**		4.6	0.34	ug/L		10/06/15 08:39	10/07/15 15:51	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/06/15 08:39	10/07/15 15:51	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/06/15 08:39	10/07/15 15:51	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/06/15 08:39	10/07/15 15:51	1

Client Sample ID: VAP-1-GW (12-13')

Date Collected: 10/02/15 08:00
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-13
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/06/15 08:39	10/07/15 15:51	1
Diethyl phthalate	0.93	U	0.93	0.12	ug/L		10/06/15 08:39	10/07/15 15:51	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/06/15 08:39	10/07/15 15:51	1
Di-n-butyl phthalate	**0.59**	**J B**	0.93	0.37	ug/L		10/06/15 08:39	10/07/15 15:51	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/06/15 08:39	10/07/15 15:51	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/06/15 08:39	10/07/15 15:51	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/06/15 08:39	10/07/15 15:51	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 15:51	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/06/15 08:39	10/07/15 15:51	1
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/06/15 08:39	10/07/15 15:51	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/06/15 08:39	10/07/15 15:51	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/06/15 08:39	10/07/15 15:51	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/06/15 08:39	10/07/15 15:51	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/06/15 08:39	10/07/15 15:51	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 15:51	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/06/15 08:39	10/07/15 15:51	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/06/15 08:39	10/07/15 15:51	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/06/15 08:39	10/07/15 15:51	1
Phenol	0.93	U	0.93	0.14	ug/L		10/06/15 08:39	10/07/15 15:51	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/06/15 08:39	10/07/15 15:51	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/06/15 08:39	10/07/15 15:51	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/06/15 08:39	10/07/15 15:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*50*		*29 - 110*	*10/06/15 08:39*	*10/07/15 15:51*	*1*
2-Fluorophenol (Surr)	*48*		*15 - 110*	*10/06/15 08:39*	*10/07/15 15:51*	*1*
2,4,6-Tribromophenol (Surr)	*40*		*21 - 128*	*10/06/15 08:39*	*10/07/15 15:51*	*1*
Nitrobenzene-d5 (Surr)	*52*		*31 - 110*	*10/06/15 08:39*	*10/07/15 15:51*	*1*
Phenol-d5 (Surr)	*38*		*10 - 110*	*10/06/15 08:39*	*10/07/15 15:51*	*1*
Terphenyl-d14 (Surr)	*38*		*31 - 115*	*10/06/15 08:39*	*10/07/15 15:51*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**60**		10	2.9	ug/L		10/06/15 10:16	10/07/15 19:22	1
Barium	**370**	**B**	200	1.0	ug/L		10/06/15 10:16	10/07/15 19:22	1
Cadmium	**1.0**	**J**	2.0	0.14	ug/L		10/06/15 10:16	10/07/15 19:22	1
Chromium	**120**		5.0	0.55	ug/L		10/06/15 10:16	10/07/15 19:22	1
Lead	**42**		3.0	1.9	ug/L		10/06/15 10:16	10/07/15 19:22	1
Selenium	5.0	U	5.0	4.0	ug/L		10/06/15 10:16	10/07/15 19:22	1
Silver	5.0	U	5.0	0.92	ug/L		10/06/15 10:16	10/07/15 19:22	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.11**	**J**	0.20	0.090	ug/L		10/06/15 14:00	10/13/15 11:35	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Client Sample ID: VAP-1-GW (15-16')
Date Collected: 10/02/15 08:47
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-14
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**6.6**	**J**	10	0.94	ug/L			10/12/15 15:46	1
Benzene	1.0	U	1.0	0.35	ug/L			10/12/15 15:46	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/12/15 15:46	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/12/15 15:46	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/12/15 15:46	1
2-Butanone (MEK)	**0.56**	**J**	10	0.53	ug/L			10/12/15 15:46	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/12/15 15:46	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/12/15 15:46	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 15:46	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/12/15 15:46	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/12/15 15:46	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/12/15 15:46	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/12/15 15:46	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/12/15 15:46	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/12/15 15:46	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/12/15 15:46	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/12/15 15:46	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/12/15 15:46	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/12/15 15:46	1
2-Hexanone	10	U	10	0.48	ug/L			10/12/15 15:46	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/12/15 15:46	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/12/15 15:46	1
Styrene	1.0	U	1.0	0.45	ug/L			10/12/15 15:46	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/12/15 15:46	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/12/15 15:46	1
Toluene	1.0	U	1.0	0.23	ug/L			10/12/15 15:46	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/12/15 15:46	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/12/15 15:46	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/12/15 15:46	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/12/15 15:46	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/12/15 15:46	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/12/15 15:46	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/12/15 15:46	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/12/15 15:46	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/12/15 15:46	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/12/15 15:46	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/12/15 15:46	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/12/15 15:46	1
Methyl acetate	10	U	10	2.3	ug/L			10/12/15 15:46	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/12/15 15:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/12/15 15:46	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/12/15 15:46	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 15:46	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/12/15 15:46	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/12/15 15:46	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/12/15 15:46	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/12/15 15:46	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/12/15 15:46	1

Client Sample ID: VAP-1-GW (15-16')

Date Collected: 10/02/15 08:47
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-14

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*78 - 125*		*10/12/15 15:46*	*1*
4-Bromofluorobenzene (Surr)	*103*		*61 - 120*		*10/12/15 15:46*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*10/12/15 15:46*	*1*
Dibromofluoromethane (Surr)	*95*		*79 - 120*		*10/12/15 15:46*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/06/15 08:39	10/07/15 16:14	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/06/15 08:39	10/07/15 16:14	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/06/15 08:39	10/07/15 16:14	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/06/15 08:39	10/07/15 16:14	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/06/15 08:39	10/07/15 16:14	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/06/15 08:39	10/07/15 16:14	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/06/15 08:39	10/07/15 16:14	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/06/15 08:39	10/07/15 16:14	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/06/15 08:39	10/07/15 16:14	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/06/15 08:39	10/07/15 16:14	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/06/15 08:39	10/07/15 16:14	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/06/15 08:39	10/07/15 16:14	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/06/15 08:39	10/07/15 16:14	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/06/15 08:39	10/07/15 16:14	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/06/15 08:39	10/07/15 16:14	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/06/15 08:39	10/07/15 16:14	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/06/15 08:39	10/07/15 16:14	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/06/15 08:39	10/07/15 16:14	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/06/15 08:39	10/07/15 16:14	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/06/15 08:39	10/07/15 16:14	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/06/15 08:39	10/07/15 16:14	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/06/15 08:39	10/07/15 16:14	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/06/15 08:39	10/07/15 16:14	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/06/15 08:39	10/07/15 16:14	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/06/15 08:39	10/07/15 16:14	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/06/15 08:39	10/07/15 16:14	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/06/15 08:39	10/07/15 16:14	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/06/15 08:39	10/07/15 16:14	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/06/15 08:39	10/07/15 16:14	1
Benzaldehyde	0.96	U *	0.96	0.28	ug/L		10/06/15 08:39	10/07/15 16:14	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/06/15 08:39	10/07/15 16:14	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/06/15 08:39	10/07/15 16:14	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/06/15 08:39	10/07/15 16:14	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/06/15 08:39	10/07/15 16:14	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/06/15 08:39	10/07/15 16:14	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/06/15 08:39	10/07/15 16:14	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/06/15 08:39	10/07/15 16:14	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	1.5	ug/L		10/06/15 08:39	10/07/15 16:14	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/06/15 08:39	10/07/15 16:14	1
Caprolactam	**35**		4.8	0.36	ug/L		10/06/15 08:39	10/07/15 16:14	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/06/15 08:39	10/07/15 16:14	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/06/15 08:39	10/07/15 16:14	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/06/15 08:39	10/07/15 16:14	1

Client Sample ID: VAP-1-GW (15-16')

Date Collected: 10/02/15 08:47
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-14
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/06/15 08:39	10/07/15 16:14	1
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/06/15 08:39	10/07/15 16:14	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/06/15 08:39	10/07/15 16:14	1
Di-n-butyl phthalate	**0.38**	**J B**	0.96	0.38	ug/L		10/06/15 08:39	10/07/15 16:14	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/06/15 08:39	10/07/15 16:14	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/06/15 08:39	10/07/15 16:14	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/06/15 08:39	10/07/15 16:14	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/06/15 08:39	10/07/15 16:14	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/06/15 08:39	10/07/15 16:14	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/06/15 08:39	10/07/15 16:14	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/06/15 08:39	10/07/15 16:14	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/06/15 08:39	10/07/15 16:14	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/06/15 08:39	10/07/15 16:14	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/06/15 08:39	10/07/15 16:14	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/06/15 08:39	10/07/15 16:14	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/06/15 08:39	10/07/15 16:14	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/06/15 08:39	10/07/15 16:14	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/06/15 08:39	10/07/15 16:14	1
Phenol	0.96	U	0.96	0.14	ug/L		10/06/15 08:39	10/07/15 16:14	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/06/15 08:39	10/07/15 16:14	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/06/15 08:39	10/07/15 16:14	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/06/15 08:39	10/07/15 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*34*		*29 - 110*	*10/06/15 08:39*	*10/07/15 16:14*	*1*
2-Fluorophenol (Surr)	*43*		*15 - 110*	*10/06/15 08:39*	*10/07/15 16:14*	*1*
2,4,6-Tribromophenol (Surr)	*27*		*21 - 128*	*10/06/15 08:39*	*10/07/15 16:14*	*1*
Nitrobenzene-d5 (Surr)	*37*		*31 - 110*	*10/06/15 08:39*	*10/07/15 16:14*	*1*
Phenol-d5 (Surr)	*35*		*10 - 110*	*10/06/15 08:39*	*10/07/15 16:14*	*1*
Terphenyl-d14 (Surr)	*36*		*31 - 115*	*10/06/15 08:39*	*10/07/15 16:14*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10	U	10	2.9	ug/L		10/06/15 10:16	10/07/15 19:26	1
Barium	**34**	**J B**	200	1.0	ug/L		10/06/15 10:16	10/07/15 19:26	1
Cadmium	2.0	U	2.0	0.14	ug/L		10/06/15 10:16	10/07/15 19:26	1
Chromium	**14**		5.0	0.55	ug/L		10/06/15 10:16	10/07/15 19:26	1
Lead	**3.5**		3.0	1.9	ug/L		10/06/15 10:16	10/09/15 17:13	1
Selenium	5.0	U	5.0	4.0	ug/L		10/06/15 10:16	10/07/15 19:26	1
Silver	5.0	U	5.0	0.92	ug/L		10/06/15 10:16	10/07/15 19:26	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/06/15 14:00	10/13/15 11:37	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Client Sample ID: VAP-1-GW (20-21')
Date Collected: 10/02/15 09:15
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-15
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**4.9**	**J**	10	0.94	ug/L			10/12/15 16:09	1
Benzene	1.0	U	1.0	0.35	ug/L			10/12/15 16:09	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/12/15 16:09	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/12/15 16:09	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/12/15 16:09	1
2-Butanone (MEK)	**0.79**	**J**	10	0.53	ug/L			10/12/15 16:09	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/12/15 16:09	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/12/15 16:09	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 16:09	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/12/15 16:09	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/12/15 16:09	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/12/15 16:09	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/12/15 16:09	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/12/15 16:09	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/12/15 16:09	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/12/15 16:09	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/12/15 16:09	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/12/15 16:09	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/12/15 16:09	1
2-Hexanone	10	U	10	0.48	ug/L			10/12/15 16:09	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/12/15 16:09	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/12/15 16:09	1
Styrene	1.0	U	1.0	0.45	ug/L			10/12/15 16:09	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/12/15 16:09	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/12/15 16:09	1
Toluene	1.0	U	1.0	0.23	ug/L			10/12/15 16:09	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/12/15 16:09	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/12/15 16:09	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/12/15 16:09	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/12/15 16:09	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/12/15 16:09	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/12/15 16:09	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/12/15 16:09	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/12/15 16:09	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/12/15 16:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/12/15 16:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/12/15 16:09	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/12/15 16:09	1
Methyl acetate	10	U	10	2.3	ug/L			10/12/15 16:09	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/12/15 16:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/12/15 16:09	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/12/15 16:09	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 16:09	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/12/15 16:09	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/12/15 16:09	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/12/15 16:09	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/12/15 16:09	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/12/15 16:09	1

Client Sample ID: VAP-1-GW (20-21')

Date Collected: 10/02/15 09:15
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-15

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*78 - 125*		*10/12/15 16:09*	*1*
4-Bromofluorobenzene (Surr)	*105*		*61 - 120*		*10/12/15 16:09*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/12/15 16:09*	*1*
Dibromofluoromethane (Surr)	*94*		*79 - 120*		*10/12/15 16:09*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/06/15 08:39	10/07/15 16:37	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/06/15 08:39	10/07/15 16:37	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/06/15 08:39	10/07/15 16:37	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/06/15 08:39	10/07/15 16:37	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/06/15 08:39	10/07/15 16:37	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/06/15 08:39	10/07/15 16:37	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/06/15 08:39	10/07/15 16:37	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/06/15 08:39	10/07/15 16:37	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/06/15 08:39	10/07/15 16:37	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/06/15 08:39	10/07/15 16:37	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/06/15 08:39	10/07/15 16:37	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/06/15 08:39	10/07/15 16:37	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/06/15 08:39	10/07/15 16:37	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/06/15 08:39	10/07/15 16:37	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/06/15 08:39	10/07/15 16:37	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/06/15 08:39	10/07/15 16:37	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/06/15 08:39	10/07/15 16:37	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/06/15 08:39	10/07/15 16:37	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/06/15 08:39	10/07/15 16:37	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/06/15 08:39	10/07/15 16:37	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/06/15 08:39	10/07/15 16:37	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/06/15 08:39	10/07/15 16:37	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/06/15 08:39	10/07/15 16:37	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/06/15 08:39	10/07/15 16:37	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/06/15 08:39	10/07/15 16:37	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/06/15 08:39	10/07/15 16:37	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/06/15 08:39	10/07/15 16:37	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/06/15 08:39	10/07/15 16:37	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/06/15 08:39	10/07/15 16:37	1
Benzaldehyde	0.96	U *	0.96	0.28	ug/L		10/06/15 08:39	10/07/15 16:37	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/06/15 08:39	10/07/15 16:37	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/06/15 08:39	10/07/15 16:37	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/06/15 08:39	10/07/15 16:37	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/06/15 08:39	10/07/15 16:37	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/06/15 08:39	10/07/15 16:37	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/06/15 08:39	10/07/15 16:37	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/06/15 08:39	10/07/15 16:37	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	1.5	ug/L		10/06/15 08:39	10/07/15 16:37	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/06/15 08:39	10/07/15 16:37	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/06/15 08:39	10/07/15 16:37	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/06/15 08:39	10/07/15 16:37	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/06/15 08:39	10/07/15 16:37	1
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/06/15 08:39	10/07/15 16:37	1

Client Sample ID: VAP-1-GW (20-21')

Date Collected: 10/02/15 09:15
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-15
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/06/15 08:39	10/07/15 16:37	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/06/15 08:39	10/07/15 16:37	1
Di-n-butyl phthalate	**0.87**	**J B**	0.96	0.38	ug/L		10/06/15 08:39	10/07/15 16:37	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/06/15 08:39	10/07/15 16:37	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/06/15 08:39	10/07/15 16:37	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/06/15 08:39	10/07/15 16:37	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/06/15 08:39	10/07/15 16:37	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/06/15 08:39	10/07/15 16:37	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/06/15 08:39	10/07/15 16:37	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/06/15 08:39	10/07/15 16:37	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/06/15 08:39	10/07/15 16:37	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/06/15 08:39	10/07/15 16:37	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/06/15 08:39	10/07/15 16:37	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/06/15 08:39	10/07/15 16:37	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/06/15 08:39	10/07/15 16:37	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/06/15 08:39	10/07/15 16:37	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/06/15 08:39	10/07/15 16:37	1
Phenol	0.96	U	0.96	0.14	ug/L		10/06/15 08:39	10/07/15 16:37	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/06/15 08:39	10/07/15 16:37	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/06/15 08:39	10/07/15 16:37	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/06/15 08:39	10/07/15 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*13*	*X*	*29 - 110*	*10/06/15 08:39*	*10/07/15 16:37*	*1*
2-Fluorophenol (Surr)	*33*		*15 - 110*	*10/06/15 08:39*	*10/07/15 16:37*	*1*
2,4,6-Tribromophenol (Surr)	*11*	*X*	*21 - 128*	*10/06/15 08:39*	*10/07/15 16:37*	*1*
Nitrobenzene-d5 (Surr)	*18*	*X*	*31 - 110*	*10/06/15 08:39*	*10/07/15 16:37*	*1*
Phenol-d5 (Surr)	*31*		*10 - 110*	*10/06/15 08:39*	*10/07/15 16:37*	*1*
Terphenyl-d14 (Surr)	*15*	*X*	*31 - 115*	*10/06/15 08:39*	*10/07/15 16:37*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**100**		9.6	0.72	ug/L		10/06/15 08:39	10/08/15 14:48	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*13*	*X*	*29 - 110*	*10/06/15 08:39*	*10/08/15 14:48*	*2*
2-Fluorophenol (Surr)	*33*		*15 - 110*	*10/06/15 08:39*	*10/08/15 14:48*	*2*
2,4,6-Tribromophenol (Surr)	*8*	*X*	*21 - 128*	*10/06/15 08:39*	*10/08/15 14:48*	*2*
Nitrobenzene-d5 (Surr)	*17*	*X*	*31 - 110*	*10/06/15 08:39*	*10/08/15 14:48*	*2*
Phenol-d5 (Surr)	*30*		*10 - 110*	*10/06/15 08:39*	*10/08/15 14:48*	*2*
Terphenyl-d14 (Surr)	*15*	*X*	*31 - 115*	*10/06/15 08:39*	*10/08/15 14:48*	*2*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10	U	10	2.9	ug/L		10/06/15 10:16	10/07/15 19:30	1
Barium	**50**	**J B**	200	1.0	ug/L		10/06/15 10:16	10/07/15 19:30	1
Cadmium	**0.14**	**J**	2.0	0.14	ug/L		10/06/15 10:16	10/07/15 19:30	1
Chromium	**18**		5.0	0.55	ug/L		10/06/15 10:16	10/07/15 19:30	1
Lead	**4.3**		3.0	1.9	ug/L		10/06/15 10:16	10/09/15 17:17	1
Selenium	5.0	U	5.0	4.0	ug/L		10/06/15 10:16	10/07/15 19:30	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Client Sample ID: VAP-1-GW (20-21')
Date Collected: 10/02/15 09:15
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-15
Matrix: Water

Method: 6010B - Metals (ICP) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0	0.92	ug/L		10/06/15 10:16	10/07/15 19:30	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/06/15 14:00	10/08/15 07:59	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Client Sample ID: VAP-1-GW (25-26')
Date Collected: 10/02/15 09:43
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-16
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.1	J	10	0.94	ug/L			10/12/15 16:32	1
Benzene	1.0	U	1.0	0.35	ug/L			10/12/15 16:32	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/12/15 16:32	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/12/15 16:32	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/12/15 16:32	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/12/15 16:32	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/12/15 16:32	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/12/15 16:32	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 16:32	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/12/15 16:32	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/12/15 16:32	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/12/15 16:32	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/12/15 16:32	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/12/15 16:32	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/12/15 16:32	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/12/15 16:32	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/12/15 16:32	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/12/15 16:32	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/12/15 16:32	1
2-Hexanone	10	U	10	0.48	ug/L			10/12/15 16:32	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/12/15 16:32	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/12/15 16:32	1
Styrene	1.0	U	1.0	0.45	ug/L			10/12/15 16:32	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/12/15 16:32	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/12/15 16:32	1
Toluene	1.0	U	1.0	0.23	ug/L			10/12/15 16:32	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/12/15 16:32	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/12/15 16:32	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/12/15 16:32	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/12/15 16:32	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/12/15 16:32	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/12/15 16:32	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/12/15 16:32	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/12/15 16:32	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/12/15 16:32	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/12/15 16:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/12/15 16:32	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/12/15 16:32	1
Methyl acetate	10	U	10	2.3	ug/L			10/12/15 16:32	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/12/15 16:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/12/15 16:32	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/12/15 16:32	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 16:32	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/12/15 16:32	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/12/15 16:32	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/12/15 16:32	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/12/15 16:32	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/12/15 16:32	1

Client Sample ID: VAP-1-GW (25-26')

Date Collected: 10/02/15 09:43
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-16

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*78 - 125*		*10/12/15 16:32*	*1*
4-Bromofluorobenzene (Surr)	*103*		*61 - 120*		*10/12/15 16:32*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/12/15 16:32*	*1*
Dibromofluoromethane (Surr)	*100*		*79 - 120*		*10/12/15 16:32*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/08/15 11:15	10/09/15 13:56	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/08/15 11:15	10/09/15 13:56	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/08/15 11:15	10/09/15 13:56	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/08/15 11:15	10/09/15 13:56	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/08/15 11:15	10/09/15 13:56	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/08/15 11:15	10/09/15 13:56	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/08/15 11:15	10/09/15 13:56	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/08/15 11:15	10/09/15 13:56	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/08/15 11:15	10/09/15 13:56	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/08/15 11:15	10/09/15 13:56	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/08/15 11:15	10/09/15 13:56	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/08/15 11:15	10/09/15 13:56	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/08/15 11:15	10/09/15 13:56	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/08/15 11:15	10/09/15 13:56	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/08/15 11:15	10/09/15 13:56	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/08/15 11:15	10/09/15 13:56	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/08/15 11:15	10/09/15 13:56	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/08/15 11:15	10/09/15 13:56	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/08/15 11:15	10/09/15 13:56	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/08/15 11:15	10/09/15 13:56	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/08/15 11:15	10/09/15 13:56	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/08/15 11:15	10/09/15 13:56	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/08/15 11:15	10/09/15 13:56	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/08/15 11:15	10/09/15 13:56	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/08/15 11:15	10/09/15 13:56	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/08/15 11:15	10/09/15 13:56	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/08/15 11:15	10/09/15 13:56	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/08/15 11:15	10/09/15 13:56	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/08/15 11:15	10/09/15 13:56	1
Benzaldehyde	0.96	U	0.96	0.28	ug/L		10/08/15 11:15	10/09/15 13:56	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/08/15 11:15	10/09/15 13:56	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/08/15 11:15	10/09/15 13:56	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/08/15 11:15	10/09/15 13:56	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/08/15 11:15	10/09/15 13:56	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/08/15 11:15	10/09/15 13:56	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/08/15 11:15	10/09/15 13:56	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/08/15 11:15	10/09/15 13:56	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	1.5	ug/L		10/08/15 11:15	10/09/15 13:56	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/08/15 11:15	10/09/15 13:56	1
Caprolactam	**14**	**B**	4.8	0.36	ug/L		10/08/15 11:15	10/09/15 13:56	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/08/15 11:15	10/09/15 13:56	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/08/15 11:15	10/09/15 13:56	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/08/15 11:15	10/09/15 13:56	1

Client Sample ID: VAP-1-GW (25-26')

Date Collected: 10/02/15 09:43
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-16
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/08/15 11:15	10/09/15 13:56	1
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/08/15 11:15	10/09/15 13:56	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/08/15 11:15	10/09/15 13:56	1
Di-n-butyl phthalate	**0.84**	**J B**	0.96	0.38	ug/L		10/08/15 11:15	10/09/15 13:56	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/08/15 11:15	10/09/15 13:56	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/08/15 11:15	10/09/15 13:56	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/08/15 11:15	10/09/15 13:56	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/08/15 11:15	10/09/15 13:56	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/08/15 11:15	10/09/15 13:56	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/08/15 11:15	10/09/15 13:56	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/08/15 11:15	10/09/15 13:56	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/08/15 11:15	10/09/15 13:56	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/08/15 11:15	10/09/15 13:56	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/08/15 11:15	10/09/15 13:56	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/08/15 11:15	10/09/15 13:56	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/08/15 11:15	10/09/15 13:56	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/08/15 11:15	10/09/15 13:56	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/08/15 11:15	10/09/15 13:56	1
Phenol	0.96	U	0.96	0.14	ug/L		10/08/15 11:15	10/09/15 13:56	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/08/15 11:15	10/09/15 13:56	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/08/15 11:15	10/09/15 13:56	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/08/15 11:15	10/09/15 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*44*		*29 - 110*	*10/08/15 11:15*	*10/09/15 13:56*	*1*
2-Fluorophenol (Surr)	*40*		*15 - 110*	*10/08/15 11:15*	*10/09/15 13:56*	*1*
2,4,6-Tribromophenol (Surr)	*44*		*21 - 128*	*10/08/15 11:15*	*10/09/15 13:56*	*1*
Nitrobenzene-d5 (Surr)	*47*		*31 - 110*	*10/08/15 11:15*	*10/09/15 13:56*	*1*
Phenol-d5 (Surr)	*28*		*10 - 110*	*10/08/15 11:15*	*10/09/15 13:56*	*1*
Terphenyl-d14 (Surr)	*34*		*31 - 115*	*10/08/15 11:15*	*10/09/15 13:56*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**30**		10	2.9	ug/L		10/06/15 10:16	10/07/15 19:35	1
Barium	**520**	**B**	200	1.0	ug/L		10/06/15 10:16	10/07/15 19:35	1
Cadmium	**1.4**	**J**	2.0	0.14	ug/L		10/06/15 10:16	10/07/15 19:35	1
Chromium	**200**		5.0	0.55	ug/L		10/06/15 10:16	10/07/15 19:35	1
Lead	**82**		3.0	1.9	ug/L		10/06/15 10:16	10/07/15 19:35	1
Selenium	**7.7**		5.0	4.0	ug/L		10/06/15 10:16	10/09/15 17:21	1
Silver	5.0	U	5.0	0.92	ug/L		10/06/15 10:16	10/07/15 19:35	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/06/15 14:00	10/08/15 08:00	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Client Sample ID: VAP-1-GW (30-31')
Date Collected: 10/02/15 10:03
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-17
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	4.0	J	10	0.94	ug/L			10/12/15 16:54	1
Benzene	1.0	U	1.0	0.35	ug/L			10/12/15 16:54	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/12/15 16:54	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/12/15 16:54	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/12/15 16:54	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/12/15 16:54	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/12/15 16:54	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/12/15 16:54	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 16:54	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/12/15 16:54	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/12/15 16:54	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/12/15 16:54	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/12/15 16:54	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/12/15 16:54	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/12/15 16:54	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/12/15 16:54	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/12/15 16:54	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/12/15 16:54	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/12/15 16:54	1
2-Hexanone	10	U	10	0.48	ug/L			10/12/15 16:54	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/12/15 16:54	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/12/15 16:54	1
Styrene	1.0	U	1.0	0.45	ug/L			10/12/15 16:54	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/12/15 16:54	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/12/15 16:54	1
Toluene	1.0	U	1.0	0.23	ug/L			10/12/15 16:54	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/12/15 16:54	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/12/15 16:54	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/12/15 16:54	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/12/15 16:54	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/12/15 16:54	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/12/15 16:54	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/12/15 16:54	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/12/15 16:54	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/12/15 16:54	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/12/15 16:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/12/15 16:54	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/12/15 16:54	1
Methyl acetate	10	U	10	2.3	ug/L			10/12/15 16:54	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/12/15 16:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/12/15 16:54	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/12/15 16:54	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 16:54	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/12/15 16:54	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/12/15 16:54	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/12/15 16:54	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/12/15 16:54	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/12/15 16:54	1

Client Sample ID: VAP-1-GW (30-31')

Date Collected: 10/02/15 10:03
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-17

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*78 - 125*		*10/12/15 16:54*	*1*
4-Bromofluorobenzene (Surr)	*98*		*61 - 120*		*10/12/15 16:54*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/12/15 16:54*	*1*
Dibromofluoromethane (Surr)	*99*		*79 - 120*		*10/12/15 16:54*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 17:23	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/06/15 08:39	10/07/15 17:23	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/06/15 08:39	10/07/15 17:23	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/06/15 08:39	10/07/15 17:23	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/06/15 08:39	10/07/15 17:23	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/06/15 08:39	10/07/15 17:23	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/06/15 08:39	10/07/15 17:23	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/06/15 08:39	10/07/15 17:23	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/06/15 08:39	10/07/15 17:23	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 17:23	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/06/15 08:39	10/07/15 17:23	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/06/15 08:39	10/07/15 17:23	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/06/15 08:39	10/07/15 17:23	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/06/15 08:39	10/07/15 17:23	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/06/15 08:39	10/07/15 17:23	1
3,3'-Dichlorobenzidine	4.6	U	4.6	0.33	ug/L		10/06/15 08:39	10/07/15 17:23	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/06/15 08:39	10/07/15 17:23	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/06/15 08:39	10/07/15 17:23	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/06/15 08:39	10/07/15 17:23	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/06/15 08:39	10/07/15 17:23	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/06/15 08:39	10/07/15 17:23	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/06/15 08:39	10/07/15 17:23	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/06/15 08:39	10/07/15 17:23	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/06/15 08:39	10/07/15 17:23	1
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/06/15 08:39	10/07/15 17:23	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/06/15 08:39	10/07/15 17:23	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/06/15 08:39	10/07/15 17:23	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/06/15 08:39	10/07/15 17:23	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 17:23	1
Benzaldehyde	0.93	U *	0.93	0.27	ug/L		10/06/15 08:39	10/07/15 17:23	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/06/15 08:39	10/07/15 17:23	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/06/15 08:39	10/07/15 17:23	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/06/15 08:39	10/07/15 17:23	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/06/15 08:39	10/07/15 17:23	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/06/15 08:39	10/07/15 17:23	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/06/15 08:39	10/07/15 17:23	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/06/15 08:39	10/07/15 17:23	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	1.4	ug/L		10/06/15 08:39	10/07/15 17:23	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/06/15 08:39	10/07/15 17:23	1
Caprolactam	**24**		4.6	0.34	ug/L		10/06/15 08:39	10/07/15 17:23	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/06/15 08:39	10/07/15 17:23	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/06/15 08:39	10/07/15 17:23	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/06/15 08:39	10/07/15 17:23	1

Client Sample ID: VAP-1-GW (30-31')
Date Collected: 10/02/15 10:03
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-17
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/06/15 08:39	10/07/15 17:23	1
Diethyl phthalate	0.93	U	0.93	0.12	ug/L		10/06/15 08:39	10/07/15 17:23	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/06/15 08:39	10/07/15 17:23	1
Di-n-butyl phthalate	**0.80**	**J B**	0.93	0.37	ug/L		10/06/15 08:39	10/07/15 17:23	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/06/15 08:39	10/07/15 17:23	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/06/15 08:39	10/07/15 17:23	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/06/15 08:39	10/07/15 17:23	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 17:23	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/06/15 08:39	10/07/15 17:23	1
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/06/15 08:39	10/07/15 17:23	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/06/15 08:39	10/07/15 17:23	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/06/15 08:39	10/07/15 17:23	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/06/15 08:39	10/07/15 17:23	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/06/15 08:39	10/07/15 17:23	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 17:23	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/06/15 08:39	10/07/15 17:23	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/06/15 08:39	10/07/15 17:23	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/06/15 08:39	10/07/15 17:23	1
Phenol	0.93	U	0.93	0.14	ug/L		10/06/15 08:39	10/07/15 17:23	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/06/15 08:39	10/07/15 17:23	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/06/15 08:39	10/07/15 17:23	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/06/15 08:39	10/07/15 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*22*	*X*	*29 - 110*	*10/06/15 08:39*	*10/07/15 17:23*	*1*
2-Fluorophenol (Surr)	*31*		*15 - 110*	*10/06/15 08:39*	*10/07/15 17:23*	*1*
2,4,6-Tribromophenol (Surr)	*19*	*X*	*21 - 128*	*10/06/15 08:39*	*10/07/15 17:23*	*1*
Nitrobenzene-d5 (Surr)	*23*	*X*	*31 - 110*	*10/06/15 08:39*	*10/07/15 17:23*	*1*
Phenol-d5 (Surr)	*27*		*10 - 110*	*10/06/15 08:39*	*10/07/15 17:23*	*1*
Terphenyl-d14 (Surr)	*23*	*X*	*31 - 115*	*10/06/15 08:39*	*10/07/15 17:23*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**12**		10	2.9	ug/L		10/06/15 10:16	10/07/15 19:39	1
Barium	**830**	**B**	200	1.0	ug/L		10/06/15 10:16	10/07/15 19:39	1
Cadmium	**0.71**	**J**	2.0	0.14	ug/L		10/06/15 10:16	10/07/15 19:39	1
Chromium	**280**		5.0	0.55	ug/L		10/06/15 10:16	10/07/15 19:39	1
Lead	**45**		3.0	1.9	ug/L		10/06/15 10:16	10/07/15 19:39	1
Selenium	5.0	U	5.0	4.0	ug/L		10/06/15 10:16	10/07/15 19:39	1
Silver	5.0	U	5.0	0.92	ug/L		10/06/15 10:16	10/07/15 19:39	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/06/15 14:00	10/08/15 08:02	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Client Sample ID: VAP-1-GW (35-36')
Date Collected: 10/02/15 10:27
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-18
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/12/15 17:17	1
Benzene	1.0	U	1.0	0.35	ug/L			10/12/15 17:17	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/12/15 17:17	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/12/15 17:17	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/12/15 17:17	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/12/15 17:17	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/12/15 17:17	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/12/15 17:17	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 17:17	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/12/15 17:17	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/12/15 17:17	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/12/15 17:17	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/12/15 17:17	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/12/15 17:17	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/12/15 17:17	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/12/15 17:17	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/12/15 17:17	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/12/15 17:17	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/12/15 17:17	1
2-Hexanone	10	U	10	0.48	ug/L			10/12/15 17:17	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/12/15 17:17	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/12/15 17:17	1
Styrene	1.0	U	1.0	0.45	ug/L			10/12/15 17:17	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/12/15 17:17	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/12/15 17:17	1
Toluene	1.0	U	1.0	0.23	ug/L			10/12/15 17:17	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/12/15 17:17	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/12/15 17:17	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/12/15 17:17	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/12/15 17:17	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/12/15 17:17	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/12/15 17:17	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/12/15 17:17	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/12/15 17:17	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/12/15 17:17	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/12/15 17:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/12/15 17:17	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/12/15 17:17	1
Methyl acetate	10	U	10	2.3	ug/L			10/12/15 17:17	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/12/15 17:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/12/15 17:17	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/12/15 17:17	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 17:17	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/12/15 17:17	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/12/15 17:17	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/12/15 17:17	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/12/15 17:17	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/12/15 17:17	1

Client Sample ID: VAP-1-GW (35-36')

Date Collected: 10/02/15 10:27
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-18

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*78 - 125*		*10/12/15 17:17*	*1*
4-Bromofluorobenzene (Surr)	*102*		*61 - 120*		*10/12/15 17:17*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/12/15 17:17*	*1*
Dibromofluoromethane (Surr)	*98*		*79 - 120*		*10/12/15 17:17*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.94	U	0.94	0.12	ug/L		10/08/15 11:15	10/09/15 14:42	1
bis (2-chloroisopropyl) ether	0.94	U	0.94	0.17	ug/L		10/08/15 11:15	10/09/15 14:42	1
2,4,5-Trichlorophenol	4.7	U	4.7	0.35	ug/L		10/08/15 11:15	10/09/15 14:42	1
2,4,6-Trichlorophenol	4.7	U	4.7	0.25	ug/L		10/08/15 11:15	10/09/15 14:42	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/08/15 11:15	10/09/15 14:42	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/08/15 11:15	10/09/15 14:42	1
2,4-Dinitrophenol	38	U	38	5.8	ug/L		10/08/15 11:15	10/09/15 14:42	1
2,4-Dinitrotoluene	4.7	U	4.7	0.24	ug/L		10/08/15 11:15	10/09/15 14:42	1
2,6-Dinitrotoluene	4.7	U	4.7	0.22	ug/L		10/08/15 11:15	10/09/15 14:42	1
2-Chloronaphthalene	0.94	U	0.94	0.11	ug/L		10/08/15 11:15	10/09/15 14:42	1
2-Chlorophenol	0.94	U	0.94	0.12	ug/L		10/08/15 11:15	10/09/15 14:42	1
2-Methylnaphthalene	0.19	U	0.19	0.035	ug/L		10/08/15 11:15	10/09/15 14:42	1
2-Methylphenol	0.94	U	0.94	0.18	ug/L		10/08/15 11:15	10/09/15 14:42	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/08/15 11:15	10/09/15 14:42	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/08/15 11:15	10/09/15 14:42	1
3,3'-Dichlorobenzidine	4.7	U	4.7	0.33	ug/L		10/08/15 11:15	10/09/15 14:42	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/08/15 11:15	10/09/15 14:42	1
4,6-Dinitro-2-methylphenol	4.7	U	4.7	0.50	ug/L		10/08/15 11:15	10/09/15 14:42	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/08/15 11:15	10/09/15 14:42	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/08/15 11:15	10/09/15 14:42	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/08/15 11:15	10/09/15 14:42	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/08/15 11:15	10/09/15 14:42	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/08/15 11:15	10/09/15 14:42	1
4-Nitrophenol	4.7	U	4.7	0.55	ug/L		10/08/15 11:15	10/09/15 14:42	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/08/15 11:15	10/09/15 14:42	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/08/15 11:15	10/09/15 14:42	1
Acetophenone	0.94	U	0.94	0.13	ug/L		10/08/15 11:15	10/09/15 14:42	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/08/15 11:15	10/09/15 14:42	1
Atrazine	0.94	U	0.94	0.11	ug/L		10/08/15 11:15	10/09/15 14:42	1
Benzaldehyde	0.94	U	0.94	0.28	ug/L		10/08/15 11:15	10/09/15 14:42	1
Benzo[a]anthracene	0.19	U	0.19	0.056	ug/L		10/08/15 11:15	10/09/15 14:42	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/08/15 11:15	10/09/15 14:42	1
Benzo[b]fluoranthene	0.19	U	0.19	0.056	ug/L		10/08/15 11:15	10/09/15 14:42	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.047	ug/L		10/08/15 11:15	10/09/15 14:42	1
Benzo[k]fluoranthene	0.19	U	0.19	0.045	ug/L		10/08/15 11:15	10/09/15 14:42	1
Bis(2-chloroethoxy)methane	0.94	U	0.94	0.035	ug/L		10/08/15 11:15	10/09/15 14:42	1
Bis(2-chloroethyl)ether	0.94	U	0.94	0.18	ug/L		10/08/15 11:15	10/09/15 14:42	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	1.4	ug/L		10/08/15 11:15	10/09/15 14:42	1
Butyl benzyl phthalate	0.94	U	0.94	0.20	ug/L		10/08/15 11:15	10/09/15 14:42	1
Caprolactam	**25**	**B**	4.7	0.35	ug/L		10/08/15 11:15	10/09/15 14:42	1
Carbazole	0.94	U	0.94	0.099	ug/L		10/08/15 11:15	10/09/15 14:42	1
Chrysene	0.19	U	0.19	0.033	ug/L		10/08/15 11:15	10/09/15 14:42	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/08/15 11:15	10/09/15 14:42	1

Client Sample ID: VAP-1-GW (35-36')

Lab Sample ID: 240-56145-18

Date Collected: 10/02/15 10:27

Matrix: Water

Date Received: 10/03/15 09:30

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.94	U	0.94	0.13	ug/L		10/08/15 11:15	10/09/15 14:42	1
Diethyl phthalate	0.94	U	0.94	0.12	ug/L		10/08/15 11:15	10/09/15 14:42	1
Dimethyl phthalate	0.94	U	0.94	0.095	ug/L		10/08/15 11:15	10/09/15 14:42	1
Di-n-butyl phthalate	**0.79**	**J B**	0.94	0.38	ug/L		10/08/15 11:15	10/09/15 14:42	1
Di-n-octyl phthalate	0.94	U	0.94	0.34	ug/L		10/08/15 11:15	10/09/15 14:42	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/08/15 11:15	10/09/15 14:42	1
Fluorene	0.19	U	0.19	0.032	ug/L		10/08/15 11:15	10/09/15 14:42	1
Hexachlorobenzene	0.94	U	0.94	0.11	ug/L		10/08/15 11:15	10/09/15 14:42	1
Hexachlorobutadiene	0.94	U	0.94	0.13	ug/L		10/08/15 11:15	10/09/15 14:42	1
Hexachlorocyclopentadiene	9.4	U	9.4	2.3	ug/L		10/08/15 11:15	10/09/15 14:42	1
Hexachloroethane	0.94	U	0.94	0.21	ug/L		10/08/15 11:15	10/09/15 14:42	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.045	ug/L		10/08/15 11:15	10/09/15 14:42	1
Isophorone	0.94	U	0.94	0.040	ug/L		10/08/15 11:15	10/09/15 14:42	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/08/15 11:15	10/09/15 14:42	1
Nitrobenzene	0.94	U	0.94	0.11	ug/L		10/08/15 11:15	10/09/15 14:42	1
N-Nitrosodi-n-propylamine	0.94	U	0.94	0.15	ug/L		10/08/15 11:15	10/09/15 14:42	1
N-Nitrosodiphenylamine	0.94	U	0.94	0.11	ug/L		10/08/15 11:15	10/09/15 14:42	1
Pentachlorophenol	38	U	38	5.2	ug/L		10/08/15 11:15	10/09/15 14:42	1
Phenol	0.94	U	0.94	0.14	ug/L		10/08/15 11:15	10/09/15 14:42	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/08/15 11:15	10/09/15 14:42	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/08/15 11:15	10/09/15 14:42	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/08/15 11:15	10/09/15 14:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*41*		*29 - 110*	*10/08/15 11:15*	*10/09/15 14:42*	*1*
2-Fluorophenol (Surr)	*41*		*15 - 110*	*10/08/15 11:15*	*10/09/15 14:42*	*1*
2,4,6-Tribromophenol (Surr)	*39*		*21 - 128*	*10/08/15 11:15*	*10/09/15 14:42*	*1*
Nitrobenzene-d5 (Surr)	*39*		*31 - 110*	*10/08/15 11:15*	*10/09/15 14:42*	*1*
Phenol-d5 (Surr)	*29*		*10 - 110*	*10/08/15 11:15*	*10/09/15 14:42*	*1*
Terphenyl-d14 (Surr)	*41*		*31 - 115*	*10/08/15 11:15*	*10/09/15 14:42*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**24**		10	2.9	ug/L		10/06/15 10:16	10/07/15 19:43	1
Barium	**360**	**B**	200	1.0	ug/L		10/06/15 10:16	10/07/15 19:43	1
Cadmium	**0.67**	**J**	2.0	0.14	ug/L		10/06/15 10:16	10/07/15 19:43	1
Chromium	**320**		5.0	0.55	ug/L		10/06/15 10:16	10/07/15 19:43	1
Lead	**81**		3.0	1.9	ug/L		10/06/15 10:16	10/07/15 19:43	1
Selenium	5.0	U	5.0	4.0	ug/L		10/06/15 10:16	10/07/15 19:43	1
Silver	5.0	U	5.0	0.92	ug/L		10/06/15 10:16	10/07/15 19:43	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/06/15 14:00	10/08/15 08:03	1

Client Sample ID: VAP-1-GW (40-41')

Date Collected: 10/02/15 10:55
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-19

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**14**		10	0.94	ug/L			10/12/15 17:39	1
Benzene	1.0	U	1.0	0.35	ug/L			10/12/15 17:39	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/12/15 17:39	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/12/15 17:39	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/12/15 17:39	1
2-Butanone (MEK)	**0.91**	**J**	10	0.53	ug/L			10/12/15 17:39	1
Carbon disulfide	**0.47**	**J**	1.0	0.38	ug/L			10/12/15 17:39	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/12/15 17:39	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 17:39	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/12/15 17:39	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/12/15 17:39	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/12/15 17:39	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/12/15 17:39	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/12/15 17:39	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/12/15 17:39	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/12/15 17:39	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/12/15 17:39	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/12/15 17:39	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/12/15 17:39	1
2-Hexanone	10	U	10	0.48	ug/L			10/12/15 17:39	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/12/15 17:39	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/12/15 17:39	1
Styrene	1.0	U	1.0	0.45	ug/L			10/12/15 17:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/12/15 17:39	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/12/15 17:39	1
Toluene	1.0	U	1.0	0.23	ug/L			10/12/15 17:39	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/12/15 17:39	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/12/15 17:39	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/12/15 17:39	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/12/15 17:39	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/12/15 17:39	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/12/15 17:39	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/12/15 17:39	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/12/15 17:39	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/12/15 17:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/12/15 17:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/12/15 17:39	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/12/15 17:39	1
Methyl acetate	10	U	10	2.3	ug/L			10/12/15 17:39	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/12/15 17:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/12/15 17:39	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/12/15 17:39	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 17:39	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/12/15 17:39	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/12/15 17:39	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/12/15 17:39	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/12/15 17:39	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/12/15 17:39	1

Client Sample ID: VAP-1-GW (40-41')

Date Collected: 10/02/15 10:55
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-19

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*78 - 125*		*10/12/15 17:39*	*1*
4-Bromofluorobenzene (Surr)	*102*		*61 - 120*		*10/12/15 17:39*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/12/15 17:39*	*1*
Dibromofluoromethane (Surr)	*94*		*79 - 120*		*10/12/15 17:39*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/08/15 11:15	10/09/15 15:05	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/08/15 11:15	10/09/15 15:05	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/08/15 11:15	10/09/15 15:05	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/08/15 11:15	10/09/15 15:05	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/08/15 11:15	10/09/15 15:05	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/08/15 11:15	10/09/15 15:05	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/08/15 11:15	10/09/15 15:05	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/08/15 11:15	10/09/15 15:05	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/08/15 11:15	10/09/15 15:05	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/08/15 11:15	10/09/15 15:05	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/08/15 11:15	10/09/15 15:05	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/08/15 11:15	10/09/15 15:05	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/08/15 11:15	10/09/15 15:05	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/08/15 11:15	10/09/15 15:05	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/08/15 11:15	10/09/15 15:05	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/08/15 11:15	10/09/15 15:05	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/08/15 11:15	10/09/15 15:05	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/08/15 11:15	10/09/15 15:05	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/08/15 11:15	10/09/15 15:05	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/08/15 11:15	10/09/15 15:05	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/08/15 11:15	10/09/15 15:05	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/08/15 11:15	10/09/15 15:05	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/08/15 11:15	10/09/15 15:05	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/08/15 11:15	10/09/15 15:05	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/08/15 11:15	10/09/15 15:05	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/08/15 11:15	10/09/15 15:05	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/08/15 11:15	10/09/15 15:05	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/08/15 11:15	10/09/15 15:05	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/08/15 11:15	10/09/15 15:05	1
Benzaldehyde	0.96	U	0.96	0.28	ug/L		10/08/15 11:15	10/09/15 15:05	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/08/15 11:15	10/09/15 15:05	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/08/15 11:15	10/09/15 15:05	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/08/15 11:15	10/09/15 15:05	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/08/15 11:15	10/09/15 15:05	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/08/15 11:15	10/09/15 15:05	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/08/15 11:15	10/09/15 15:05	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/08/15 11:15	10/09/15 15:05	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	1.5	ug/L		10/08/15 11:15	10/09/15 15:05	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/08/15 11:15	10/09/15 15:05	1
Caprolactam	**9.4**	**B**	4.8	0.36	ug/L		10/08/15 11:15	10/09/15 15:05	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/08/15 11:15	10/09/15 15:05	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/08/15 11:15	10/09/15 15:05	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/08/15 11:15	10/09/15 15:05	1

Client Sample ID: VAP-1-GW (40-41')

Date Collected: 10/02/15 10:55
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-19
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/08/15 11:15	10/09/15 15:05	1
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/08/15 11:15	10/09/15 15:05	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/08/15 11:15	10/09/15 15:05	1
Di-n-butyl phthalate	**0.63**	**J B**	0.96	0.38	ug/L		10/08/15 11:15	10/09/15 15:05	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/08/15 11:15	10/09/15 15:05	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/08/15 11:15	10/09/15 15:05	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/08/15 11:15	10/09/15 15:05	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/08/15 11:15	10/09/15 15:05	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/08/15 11:15	10/09/15 15:05	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/08/15 11:15	10/09/15 15:05	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/08/15 11:15	10/09/15 15:05	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/08/15 11:15	10/09/15 15:05	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/08/15 11:15	10/09/15 15:05	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/08/15 11:15	10/09/15 15:05	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/08/15 11:15	10/09/15 15:05	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/08/15 11:15	10/09/15 15:05	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/08/15 11:15	10/09/15 15:05	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/08/15 11:15	10/09/15 15:05	1
Phenol	0.96	U	0.96	0.14	ug/L		10/08/15 11:15	10/09/15 15:05	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/08/15 11:15	10/09/15 15:05	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/08/15 11:15	10/09/15 15:05	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/08/15 11:15	10/09/15 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*41*		*29 - 110*	*10/08/15 11:15*	*10/09/15 15:05*	*1*
2-Fluorophenol (Surr)	*39*		*15 - 110*	*10/08/15 11:15*	*10/09/15 15:05*	*1*
2,4,6-Tribromophenol (Surr)	*39*		*21 - 128*	*10/08/15 11:15*	*10/09/15 15:05*	*1*
Nitrobenzene-d5 (Surr)	*47*		*31 - 110*	*10/08/15 11:15*	*10/09/15 15:05*	*1*
Phenol-d5 (Surr)	*26*		*10 - 110*	*10/08/15 11:15*	*10/09/15 15:05*	*1*
Terphenyl-d14 (Surr)	*39*		*31 - 115*	*10/08/15 11:15*	*10/09/15 15:05*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**38**		10	2.9	ug/L		10/06/15 10:17	10/07/15 19:47	1
Barium	**630**	**B**	200	1.0	ug/L		10/06/15 10:17	10/07/15 19:47	1
Cadmium	**1.2**	**J**	2.0	0.14	ug/L		10/06/15 10:17	10/07/15 19:47	1
Chromium	**430**		5.0	0.55	ug/L		10/06/15 10:17	10/07/15 19:47	1
Lead	**62**		3.0	1.9	ug/L		10/06/15 10:17	10/07/15 19:47	1
Selenium	**4.9**	**J**	5.0	4.0	ug/L		10/06/15 10:17	10/07/15 19:47	1
Silver	5.0	U	5.0	0.92	ug/L		10/06/15 10:17	10/07/15 19:47	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/06/15 14:00	10/08/15 08:05	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Client Sample ID: VAP-1-GW (45-46')
Date Collected: 10/02/15 11:28
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-20
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**1.6**	**J**	10	0.94	ug/L			10/12/15 17:20	1
Benzene	1.0	U	1.0	0.35	ug/L			10/12/15 17:20	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/12/15 17:20	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/12/15 17:20	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/12/15 17:20	1
2-Butanone (MEK)	**0.80**	**J**	10	0.53	ug/L			10/12/15 17:20	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/12/15 17:20	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/12/15 17:20	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 17:20	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/12/15 17:20	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/12/15 17:20	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/12/15 17:20	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/12/15 17:20	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/12/15 17:20	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/12/15 17:20	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/12/15 17:20	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/12/15 17:20	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/12/15 17:20	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/12/15 17:20	1
2-Hexanone	10	U	10	0.48	ug/L			10/12/15 17:20	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/12/15 17:20	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/12/15 17:20	1
Styrene	1.0	U	1.0	0.45	ug/L			10/12/15 17:20	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/12/15 17:20	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/12/15 17:20	1
Toluene	1.0	U	1.0	0.23	ug/L			10/12/15 17:20	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/12/15 17:20	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/12/15 17:20	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/12/15 17:20	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/12/15 17:20	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/12/15 17:20	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/12/15 17:20	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/12/15 17:20	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/12/15 17:20	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/12/15 17:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/12/15 17:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/12/15 17:20	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/12/15 17:20	1
Methyl acetate	10	U	10	2.3	ug/L			10/12/15 17:20	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/12/15 17:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/12/15 17:20	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/12/15 17:20	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 17:20	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/12/15 17:20	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/12/15 17:20	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/12/15 17:20	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/12/15 17:20	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/12/15 17:20	1

Client Sample ID: VAP-1-GW (45-46')

Date Collected: 10/02/15 11:28
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-20

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*78 - 125*		*10/12/15 17:20*	*1*
4-Bromofluorobenzene (Surr)	*85*		*61 - 120*		*10/12/15 17:20*	*1*
Toluene-d8 (Surr)	*82*		*80 - 120*		*10/12/15 17:20*	*1*
Dibromofluoromethane (Surr)	*105*		*79 - 120*		*10/12/15 17:20*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 18:33	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/06/15 08:39	10/07/15 18:33	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/06/15 08:39	10/07/15 18:33	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/06/15 08:39	10/07/15 18:33	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/06/15 08:39	10/07/15 18:33	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/06/15 08:39	10/07/15 18:33	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/06/15 08:39	10/07/15 18:33	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/06/15 08:39	10/07/15 18:33	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/06/15 08:39	10/07/15 18:33	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 18:33	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/06/15 08:39	10/07/15 18:33	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/06/15 08:39	10/07/15 18:33	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/06/15 08:39	10/07/15 18:33	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/06/15 08:39	10/07/15 18:33	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/06/15 08:39	10/07/15 18:33	1
3,3'-Dichlorobenzidine	4.6	U	4.6	0.33	ug/L		10/06/15 08:39	10/07/15 18:33	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/06/15 08:39	10/07/15 18:33	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/06/15 08:39	10/07/15 18:33	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/06/15 08:39	10/07/15 18:33	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/06/15 08:39	10/07/15 18:33	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/06/15 08:39	10/07/15 18:33	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/06/15 08:39	10/07/15 18:33	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/06/15 08:39	10/07/15 18:33	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/06/15 08:39	10/07/15 18:33	1
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/06/15 08:39	10/07/15 18:33	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/06/15 08:39	10/07/15 18:33	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/06/15 08:39	10/07/15 18:33	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/06/15 08:39	10/07/15 18:33	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 18:33	1
Benzaldehyde	0.93	U *	0.93	0.27	ug/L		10/06/15 08:39	10/07/15 18:33	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/06/15 08:39	10/07/15 18:33	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/06/15 08:39	10/07/15 18:33	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/06/15 08:39	10/07/15 18:33	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/06/15 08:39	10/07/15 18:33	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/06/15 08:39	10/07/15 18:33	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/06/15 08:39	10/07/15 18:33	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/06/15 08:39	10/07/15 18:33	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	1.4	ug/L		10/06/15 08:39	10/07/15 18:33	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/06/15 08:39	10/07/15 18:33	1
Caprolactam	**9.5**		4.6	0.34	ug/L		10/06/15 08:39	10/07/15 18:33	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/06/15 08:39	10/07/15 18:33	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/06/15 08:39	10/07/15 18:33	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/06/15 08:39	10/07/15 18:33	1

Client Sample ID: VAP-1-GW (45-46')

Date Collected: 10/02/15 11:28
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-20
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/06/15 08:39	10/07/15 18:33	1
Diethyl phthalate	0.93	U	0.93	0.12	ug/L		10/06/15 08:39	10/07/15 18:33	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/06/15 08:39	10/07/15 18:33	1
Di-n-butyl phthalate	**0.70**	**J B**	0.93	0.37	ug/L		10/06/15 08:39	10/07/15 18:33	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/06/15 08:39	10/07/15 18:33	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/06/15 08:39	10/07/15 18:33	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/06/15 08:39	10/07/15 18:33	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 18:33	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/06/15 08:39	10/07/15 18:33	1
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/06/15 08:39	10/07/15 18:33	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/06/15 08:39	10/07/15 18:33	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/06/15 08:39	10/07/15 18:33	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/06/15 08:39	10/07/15 18:33	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/06/15 08:39	10/07/15 18:33	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/06/15 08:39	10/07/15 18:33	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/06/15 08:39	10/07/15 18:33	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/06/15 08:39	10/07/15 18:33	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/06/15 08:39	10/07/15 18:33	1
Phenol	0.93	U	0.93	0.14	ug/L		10/06/15 08:39	10/07/15 18:33	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/06/15 08:39	10/07/15 18:33	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/06/15 08:39	10/07/15 18:33	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/06/15 08:39	10/07/15 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*14*	*X*	*29 - 110*	*10/06/15 08:39*	*10/07/15 18:33*	*1*
2-Fluorophenol (Surr)	*23*		*15 - 110*	*10/06/15 08:39*	*10/07/15 18:33*	*1*
2,4,6-Tribromophenol (Surr)	*9*	*X*	*21 - 128*	*10/06/15 08:39*	*10/07/15 18:33*	*1*
Nitrobenzene-d5 (Surr)	*16*	*X*	*31 - 110*	*10/06/15 08:39*	*10/07/15 18:33*	*1*
Phenol-d5 (Surr)	*20*		*10 - 110*	*10/06/15 08:39*	*10/07/15 18:33*	*1*
Terphenyl-d14 (Surr)	*15*	*X*	*31 - 115*	*10/06/15 08:39*	*10/07/15 18:33*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.2**	**J**	10	2.9	ug/L		10/06/15 10:17	10/07/15 19:51	1
Barium	**660**	**B**	200	1.0	ug/L		10/06/15 10:17	10/07/15 19:51	1
Cadmium	**1.0**	**J**	2.0	0.14	ug/L		10/06/15 10:17	10/07/15 19:51	1
Chromium	**210**		5.0	0.55	ug/L		10/06/15 10:17	10/07/15 19:51	1
Lead	**75**		3.0	1.9	ug/L		10/06/15 10:17	10/07/15 19:51	1
Selenium	**4.9**	**J**	5.0	4.0	ug/L		10/06/15 10:17	10/07/15 19:51	1
Silver	5.0	U	5.0	0.92	ug/L		10/06/15 10:17	10/07/15 19:51	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/06/15 14:00	10/08/15 08:06	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Client Sample ID: VAP-1-GW (49-50')
Date Collected: 10/02/15 12:00
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-21
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**3.2**	**J**	10	0.94	ug/L			10/12/15 17:43	1
Benzene	1.0	U	1.0	0.35	ug/L			10/12/15 17:43	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/12/15 17:43	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/12/15 17:43	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/12/15 17:43	1
2-Butanone (MEK)	**0.59**	**J**	10	0.53	ug/L			10/12/15 17:43	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/12/15 17:43	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/12/15 17:43	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 17:43	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/12/15 17:43	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/12/15 17:43	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/12/15 17:43	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/12/15 17:43	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/12/15 17:43	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/12/15 17:43	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/12/15 17:43	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/12/15 17:43	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/12/15 17:43	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/12/15 17:43	1
2-Hexanone	10	U	10	0.48	ug/L			10/12/15 17:43	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/12/15 17:43	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/12/15 17:43	1
Styrene	1.0	U	1.0	0.45	ug/L			10/12/15 17:43	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/12/15 17:43	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/12/15 17:43	1
Toluene	1.0	U	1.0	0.23	ug/L			10/12/15 17:43	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/12/15 17:43	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/12/15 17:43	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/12/15 17:43	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/12/15 17:43	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/12/15 17:43	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/12/15 17:43	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/12/15 17:43	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/12/15 17:43	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/12/15 17:43	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/12/15 17:43	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/12/15 17:43	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/12/15 17:43	1
Methyl acetate	10	U	10	2.3	ug/L			10/12/15 17:43	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/12/15 17:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/12/15 17:43	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/12/15 17:43	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 17:43	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/12/15 17:43	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/12/15 17:43	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/12/15 17:43	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/12/15 17:43	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/12/15 17:43	1

Client Sample ID: VAP-1-GW (49-50')

Date Collected: 10/02/15 12:00
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-21

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*78 - 125*		*10/12/15 17:43*	*1*
4-Bromofluorobenzene (Surr)	*82*		*61 - 120*		*10/12/15 17:43*	*1*
Toluene-d8 (Surr)	*82*		*80 - 120*		*10/12/15 17:43*	*1*
Dibromofluoromethane (Surr)	*106*		*79 - 120*		*10/12/15 17:43*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 18:56	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/06/15 08:39	10/07/15 18:56	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/06/15 08:39	10/07/15 18:56	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/06/15 08:39	10/07/15 18:56	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/06/15 08:39	10/07/15 18:56	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/06/15 08:39	10/07/15 18:56	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/06/15 08:39	10/07/15 18:56	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/06/15 08:39	10/07/15 18:56	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/06/15 08:39	10/07/15 18:56	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 18:56	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/06/15 08:39	10/07/15 18:56	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/06/15 08:39	10/07/15 18:56	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/06/15 08:39	10/07/15 18:56	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/06/15 08:39	10/07/15 18:56	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/06/15 08:39	10/07/15 18:56	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/06/15 08:39	10/07/15 18:56	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/06/15 08:39	10/07/15 18:56	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/06/15 08:39	10/07/15 18:56	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/06/15 08:39	10/07/15 18:56	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/06/15 08:39	10/07/15 18:56	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/06/15 08:39	10/07/15 18:56	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/06/15 08:39	10/07/15 18:56	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/06/15 08:39	10/07/15 18:56	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/06/15 08:39	10/07/15 18:56	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/06/15 08:39	10/07/15 18:56	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/06/15 08:39	10/07/15 18:56	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/06/15 08:39	10/07/15 18:56	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/06/15 08:39	10/07/15 18:56	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 18:56	1
Benzaldehyde	1.0	U *	1.0	0.30	ug/L		10/06/15 08:39	10/07/15 18:56	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/06/15 08:39	10/07/15 18:56	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/06/15 08:39	10/07/15 18:56	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/06/15 08:39	10/07/15 18:56	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/06/15 08:39	10/07/15 18:56	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/06/15 08:39	10/07/15 18:56	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/06/15 08:39	10/07/15 18:56	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/06/15 08:39	10/07/15 18:56	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	1.5	ug/L		10/06/15 08:39	10/07/15 18:56	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/06/15 08:39	10/07/15 18:56	1
Caprolactam	**28**		5.0	0.37	ug/L		10/06/15 08:39	10/07/15 18:56	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/06/15 08:39	10/07/15 18:56	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/06/15 08:39	10/07/15 18:56	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/06/15 08:39	10/07/15 18:56	1

Client Sample ID: VAP-1-GW (49-50')

Date Collected: 10/02/15 12:00
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-21
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/06/15 08:39	10/07/15 18:56	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/06/15 08:39	10/07/15 18:56	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/06/15 08:39	10/07/15 18:56	1
Di-n-butyl phthalate	**0.84**	**J B**	1.0	0.40	ug/L		10/06/15 08:39	10/07/15 18:56	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/06/15 08:39	10/07/15 18:56	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/06/15 08:39	10/07/15 18:56	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/06/15 08:39	10/07/15 18:56	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 18:56	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/06/15 08:39	10/07/15 18:56	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/06/15 08:39	10/07/15 18:56	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/06/15 08:39	10/07/15 18:56	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/06/15 08:39	10/07/15 18:56	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/06/15 08:39	10/07/15 18:56	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/06/15 08:39	10/07/15 18:56	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 18:56	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/06/15 08:39	10/07/15 18:56	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/06/15 08:39	10/07/15 18:56	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/06/15 08:39	10/07/15 18:56	1
Phenol	1.0	U	1.0	0.15	ug/L		10/06/15 08:39	10/07/15 18:56	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/06/15 08:39	10/07/15 18:56	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/06/15 08:39	10/07/15 18:56	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/06/15 08:39	10/07/15 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*16*	*X*	*29 - 110*	*10/06/15 08:39*	*10/07/15 18:56*	*1*
2-Fluorophenol (Surr)	*27*		*15 - 110*	*10/06/15 08:39*	*10/07/15 18:56*	*1*
2,4,6-Tribromophenol (Surr)	*13*	*X*	*21 - 128*	*10/06/15 08:39*	*10/07/15 18:56*	*1*
Nitrobenzene-d5 (Surr)	*21*	*X*	*31 - 110*	*10/06/15 08:39*	*10/07/15 18:56*	*1*
Phenol-d5 (Surr)	*23*		*10 - 110*	*10/06/15 08:39*	*10/07/15 18:56*	*1*
Terphenyl-d14 (Surr)	*14*	*X*	*31 - 115*	*10/06/15 08:39*	*10/07/15 18:56*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**12**		10	2.9	ug/L		10/06/15 10:17	10/07/15 20:03	1
Barium	**490**	**B**	200	1.0	ug/L		10/06/15 10:17	10/07/15 20:03	1
Cadmium	**0.89**	**J**	2.0	0.14	ug/L		10/06/15 10:17	10/07/15 20:03	1
Chromium	**200**		5.0	0.55	ug/L		10/06/15 10:17	10/07/15 20:03	1
Lead	**31**		3.0	1.9	ug/L		10/06/15 10:17	10/07/15 20:03	1
Selenium	5.0	U	5.0	4.0	ug/L		10/06/15 10:17	10/07/15 20:03	1
Silver	5.0	U	5.0	0.92	ug/L		10/06/15 10:17	10/07/15 20:03	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/06/15 14:00	10/08/15 08:08	1

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(64-120)	(64-130)	(69-128)	(68-120)
240-56145-1	VAP-9 (2-4)	102	116	101	100
240-56145-10	DUP-01 (100115)	107	120	103	102
240-56145-12	VAP-1 (1-2)	104	113	99	101
LCS 240-201259/5	Lab Control Sample	96	110	102	98
MB 240-201259/7	Method Blank	99	116	104	98

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(78-125)	(61-120)	(80-120)	(79-120)
240-56145-2	VAP-9-GW (15-16')	116	76	84	108
240-56145-3	VAP-9-GW (20-21')	101	84	84	103
240-56145-4	VAP-9-GW (25-26')	118	75	85	107
240-56145-5	VAP-9-GW (30-31')	99	85	91	102
240-56145-6	VAP-9-GW (35-36')	104	99	93	97
240-56145-7	VAP-9-GW (40-41')	104	94	95	97
240-56145-8	VAP-9-GW (45-46')	105	97	96	97
240-56145-9	VAP-9-GW (49-50')	103	100	91	97
240-56145-11	TB-01 (100115)	106	98	94	96
240-56145-13	VAP-1-GW (12-13')	108	102	94	99
240-56145-14	VAP-1-GW (15-16')	101	103	93	95
240-56145-15	VAP-1-GW (20-21')	103	105	94	94
240-56145-16	VAP-1-GW (25-26')	104	103	95	100
240-56145-17	VAP-1-GW (30-31')	103	98	94	99
240-56145-18	VAP-1-GW (35-36')	103	102	95	98
240-56145-19	VAP-1-GW (40-41')	103	102	96	94
240-56145-20	VAP-1-GW (45-46')	88	85	82	105
240-56145-21	VAP-1-GW (49-50')	91	82	82	106
LCS 240-200552/4	Lab Control Sample	96	97	98	95
LCS 240-201138/4	Lab Control Sample	93	95	99	94
LCS 240-201374/4	Lab Control Sample	95	87	87	101
LCS 240-201375/4	Lab Control Sample	96	111	97	101
MB 240-200552/6	Method Blank	108	74	85	100
MB 240-201138/6	Method Blank	98	86	90	97
MB 240-201374/6	Method Blank	94	87	87	108
MB 240-201375/6	Method Blank	102	104	96	97

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(24-110)	(24-110)	(10-110)	(20-110)	(26-110)	(36-110)
240-56145-1	VAP-9 (2-4)	67	58	26	55	65	78
240-56145-10	DUP-01 (100115)	61	54	24	50	59	76
240-56145-12	VAP-1 (1-2)	67	64	21	55	62	78
240-56145-12 MS	VAP-1 (1-2)	68	66	32	63	69	72
240-56145-12 MSD	VAP-1 (1-2)	67	58	35	57	62	83
LCS 240-200464/14-A	Lab Control Sample	64	65	50	65	68	79
MB 240-200464/13-A	Method Blank	74	72	49	70	77	83

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(29-110)	(15-110)	(21-128)	(31-110)	(10-110)	(31-115)
240-56145-2	VAP-9-GW (15-16')	32	32	22	33	26	28 X
240-56145-3	VAP-9-GW (20-21')	29	33	24	33	27	21 X
240-56145-4	VAP-9-GW (25-26')	44	39	49	51	25	31
240-56145-5	VAP-9-GW (30-31')	18 X	18	19 X	19 X	15	16 X
240-56145-6	VAP-9-GW (35-36')	57	53	50	59	43	63
240-56145-7	VAP-9-GW (40-41')	27 X	32	21	31	27	21 X
240-56145-8	VAP-9-GW (45-46')	30	33	22	33	27	25 X
240-56145-9	VAP-9-GW (49-50')	43	41	34	45	32	25 X
240-56145-13	VAP-1-GW (12-13')	50	48	40	52	38	38
240-56145-14	VAP-1-GW (15-16')	34	43	27	37	35	36
240-56145-15	VAP-1-GW (20-21')	13 X	33	11 X	18 X	31	15 X
240-56145-15 - RA	VAP-1-GW (20-21')	13 X	33	8 X	17 X	30	15 X
240-56145-16	VAP-1-GW (25-26')	44	40	44	47	28	34
240-56145-17	VAP-1-GW (30-31')	22 X	31	19 X	23 X	27	23 X
240-56145-18	VAP-1-GW (35-36')	41	41	39	39	29	41
240-56145-19	VAP-1-GW (40-41')	41	39	39	47	26	39
240-56145-20	VAP-1-GW (45-46')	14 X	23	9 X	16 X	20	15 X
240-56145-21	VAP-1-GW (49-50')	16 X	27	13 X	21 X	23	14 X
LCS 240-200483/19-A	Lab Control Sample	90	72	90	95	51	96
LCS 240-200940/12-A	Lab Control Sample	69	73	81	81	59	86
MB 240-200483/18-A	Method Blank	69	52	70	70	35	79
MB 240-200940/11-A	Method Blank	57	54	47	57	43	64

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-200552/6
Matrix: Water
Analysis Batch: 200552

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1.49	J	10	0.94	ug/L			10/06/15 16:25	1
Benzene	1.0	U	1.0	0.35	ug/L			10/06/15 16:25	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/06/15 16:25	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/06/15 16:25	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/06/15 16:25	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/06/15 16:25	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/06/15 16:25	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/06/15 16:25	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/06/15 16:25	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/06/15 16:25	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/06/15 16:25	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/06/15 16:25	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/06/15 16:25	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/06/15 16:25	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/06/15 16:25	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/06/15 16:25	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/06/15 16:25	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/06/15 16:25	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/06/15 16:25	1
2-Hexanone	10	U	10	0.48	ug/L			10/06/15 16:25	1
Methylene Chloride	1.26		1.0	0.33	ug/L			10/06/15 16:25	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/06/15 16:25	1
Styrene	1.0	U	1.0	0.45	ug/L			10/06/15 16:25	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/06/15 16:25	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/06/15 16:25	1
Toluene	1.0	U	1.0	0.23	ug/L			10/06/15 16:25	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/06/15 16:25	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/06/15 16:25	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/06/15 16:25	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/06/15 16:25	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/06/15 16:25	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/06/15 16:25	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/06/15 16:25	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/06/15 16:25	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/06/15 16:25	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/06/15 16:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/06/15 16:25	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/06/15 16:25	1
Methyl acetate	10	U	10	2.3	ug/L			10/06/15 16:25	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/06/15 16:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/06/15 16:25	1
1,2,4-Trichlorobenzene	0.362	J	1.0	0.32	ug/L			10/06/15 16:25	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/06/15 16:25	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/06/15 16:25	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/06/15 16:25	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/06/15 16:25	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/06/15 16:25	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/06/15 16:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*108*		*78 - 125*		*10/06/15 16:25*	*1*
4-Bromofluorobenzene (Surr)	*74*		*61 - 120*		*10/06/15 16:25*	*1*
Toluene-d8 (Surr)	*85*		*80 - 120*		*10/06/15 16:25*	*1*
Dibromofluoromethane (Surr)	*100*		*79 - 120*		*10/06/15 16:25*	*1*

Lab Sample ID: LCS 240-200552/4
Matrix: Water
Analysis Batch: 200552

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	17.8		ug/L		89	34 - 148
Benzene	10.0	10.2		ug/L		102	80 - 120
Dichlorobromomethane	10.0	10.0		ug/L		100	80 - 120
Bromoform	10.0	10.8		ug/L		108	56 - 122
Bromomethane	10.0	9.14		ug/L		91	38 - 132
2-Butanone (MEK)	20.0	17.3		ug/L		87	56 - 138
Carbon disulfide	10.0	9.52		ug/L		95	65 - 144
Carbon tetrachloride	10.0	10.8		ug/L		108	77 - 131
Chlorobenzene	10.0	11.5		ug/L		115	80 - 120
Chloroethane	10.0	6.91		ug/L		69	36 - 126
Chloroform	10.0	10.6		ug/L		106	80 - 120
Chloromethane	10.0	8.86		ug/L		89	48 - 133
1,1-Dichloroethane	10.0	9.69		ug/L		97	79 - 125
1,2-Dichloroethane	10.0	11.0		ug/L		110	80 - 120
1,1-Dichloroethene	10.0	9.80		ug/L		98	76 - 124
1,2-Dichloropropane	10.0	10.2		ug/L		102	78 - 124
cis-1,3-Dichloropropene	10.0	9.83		ug/L		98	74 - 126
trans-1,3-Dichloropropene	10.0	11.1		ug/L		111	75 - 131
Ethylbenzene	10.0	11.3		ug/L		113	80 - 120
2-Hexanone	20.0	18.3		ug/L		92	55 - 141
Methylene Chloride	10.0	12.8		ug/L		128	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	16.7		ug/L		83	64 - 135
Styrene	10.0	11.6		ug/L		116	76 - 122
1,1,2,2-Tetrachloroethane	10.0	9.59		ug/L		96	71 - 123
Tetrachloroethene	10.0	12.0		ug/L		120	78 - 121
Toluene	10.0	11.3		ug/L		113	80 - 120
Trichloroethene	10.0	11.3		ug/L		113	80 - 121
Vinyl chloride	10.0	8.67		ug/L		87	52 - 121
Xylenes, Total	20.0	23.4		ug/L		117	80 - 120
1,1,1-Trichloroethane	10.0	9.34		ug/L		93	77 - 123
1,1,2-Trichloroethane	10.0	11.0		ug/L		110	80 - 120
Cyclohexane	10.0	8.95		ug/L		89	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	9.01		ug/L		90	50 - 132
Ethylene Dibromide	10.0	11.3		ug/L		113	80 - 120
Dichlorodifluoromethane	10.0	10.1		ug/L		101	23 - 136
cis-1,2-Dichloroethene	10.0	10.0		ug/L		100	79 - 120
trans-1,2-Dichloroethene	10.0	10.2		ug/L		102	80 - 124
Isopropylbenzene	10.0	11.8		ug/L		118	77 - 120
Methyl acetate	50.0	48.0		ug/L		96	67 - 131
Methyl tert-butyl ether	10.0	8.89		ug/L		89	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	11.7		ug/L		117	67 - 138
1,2,4-Trichlorobenzene	10.0	8.95		ug/L		90	61 - 120
1,2-Dichlorobenzene	10.0	11.0		ug/L		110	79 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-200552/4
Matrix: Water
Analysis Batch: 200552

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	10.0	10.9		ug/L		109	79 - 120
1,4-Dichlorobenzene	10.0	11.1		ug/L		111	79 - 120
Trichlorofluoromethane	10.0	10.1		ug/L		101	61 - 133
Methylcyclohexane	10.0	8.65		ug/L		86	61 - 134
m-Xylene & p-Xylene	10.0	11.8		ug/L		118	80 - 120
o-Xylene	10.0	11.6		ug/L		116	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*78 - 125*
4-Bromofluorobenzene (Surr)	*97*		*61 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*95*		*79 - 120*

Lab Sample ID: MB 240-201138/6
Matrix: Water
Analysis Batch: 201138

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/09/15 12:31	1
Benzene	1.0	U	1.0	0.35	ug/L			10/09/15 12:31	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/09/15 12:31	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/09/15 12:31	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/09/15 12:31	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/09/15 12:31	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/09/15 12:31	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/09/15 12:31	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/09/15 12:31	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/09/15 12:31	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/09/15 12:31	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/09/15 12:31	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/09/15 12:31	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/09/15 12:31	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/09/15 12:31	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/09/15 12:31	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/09/15 12:31	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/09/15 12:31	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/09/15 12:31	1
2-Hexanone	10	U	10	0.48	ug/L			10/09/15 12:31	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/09/15 12:31	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/09/15 12:31	1
Styrene	1.0	U	1.0	0.45	ug/L			10/09/15 12:31	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/09/15 12:31	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/09/15 12:31	1
Toluene	1.0	U	1.0	0.23	ug/L			10/09/15 12:31	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/09/15 12:31	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/09/15 12:31	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/09/15 12:31	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/09/15 12:31	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201138/6
Matrix: Water
Analysis Batch: 201138

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/09/15 12:31	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/09/15 12:31	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/09/15 12:31	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/09/15 12:31	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/09/15 12:31	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/09/15 12:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/09/15 12:31	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/09/15 12:31	1
Methyl acetate	10	U	10	2.3	ug/L			10/09/15 12:31	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/09/15 12:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/09/15 12:31	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/09/15 12:31	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/09/15 12:31	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/09/15 12:31	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/09/15 12:31	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/09/15 12:31	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/09/15 12:31	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/09/15 12:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*78 - 125*		*10/09/15 12:31*	*1*
4-Bromofluorobenzene (Surr)	*86*		*61 - 120*		*10/09/15 12:31*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*10/09/15 12:31*	*1*
Dibromofluoromethane (Surr)	*97*		*79 - 120*		*10/09/15 12:31*	*1*

Lab Sample ID: LCS 240-201138/4
Matrix: Water
Analysis Batch: 201138

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	17.8		ug/L		89	34 - 148
Benzene	10.0	9.74		ug/L		97	80 - 120
Dichlorobromomethane	10.0	9.32		ug/L		93	80 - 120
Bromoform	10.0	8.33		ug/L		83	56 - 122
Bromomethane	10.0	7.42		ug/L		74	38 - 132
2-Butanone (MEK)	20.0	19.9		ug/L		99	56 - 138
Carbon disulfide	10.0	10.3		ug/L		103	65 - 144
Carbon tetrachloride	10.0	9.82		ug/L		98	77 - 131
Chlorobenzene	10.0	9.77		ug/L		98	80 - 120
Chloroethane	10.0	7.95		ug/L		80	36 - 126
Chloroform	10.0	9.99		ug/L		100	80 - 120
Chloromethane	10.0	8.38		ug/L		84	48 - 133
1,1-Dichloroethane	10.0	10.2		ug/L		102	79 - 125
1,2-Dichloroethane	10.0	9.91		ug/L		99	80 - 120
1,1-Dichloroethene	10.0	9.96		ug/L		100	76 - 124
1,2-Dichloropropane	10.0	9.98		ug/L		100	78 - 124
cis-1,3-Dichloropropene	10.0	9.35		ug/L		94	74 - 126
trans-1,3-Dichloropropene	10.0	9.85		ug/L		98	75 - 131

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201138/4
Matrix: Water
Analysis Batch: 201138

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	10.0	10.1		ug/L		101	80 - 120
2-Hexanone	20.0	21.8		ug/L		109	55 - 141
Methylene Chloride	10.0	10.2		ug/L		102	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	21.1		ug/L		105	64 - 135
Styrene	10.0	9.84		ug/L		98	76 - 122
1,1,2,2-Tetrachloroethane	10.0	9.18		ug/L		92	71 - 123
Tetrachloroethene	10.0	10.3		ug/L		103	78 - 121
Toluene	10.0	10.2		ug/L		102	80 - 120
Trichloroethene	10.0	10.5		ug/L		105	80 - 121
Vinyl chloride	10.0	9.34		ug/L		93	52 - 121
Xylenes, Total	20.0	20.3		ug/L		102	80 - 120
1,1,1-Trichloroethane	10.0	10.0		ug/L		100	77 - 123
1,1,2-Trichloroethane	10.0	9.81		ug/L		98	80 - 120
Cyclohexane	10.0	10.7		ug/L		107	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	8.88		ug/L		89	50 - 132
Ethylene Dibromide	10.0	9.66		ug/L		97	80 - 120
Dichlorodifluoromethane	10.0	9.35		ug/L		93	23 - 136
cis-1,2-Dichloroethene	10.0	9.92		ug/L		99	79 - 120
trans-1,2-Dichloroethene	10.0	10.3		ug/L		103	80 - 124
Isopropylbenzene	10.0	10.3		ug/L		103	77 - 120
Methyl acetate	50.0	51.7		ug/L		103	67 - 131
Methyl tert-butyl ether	10.0	9.71		ug/L		97	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.5		ug/L		105	67 - 138
1,2,4-Trichlorobenzene	10.0	9.80		ug/L		98	61 - 120
1,2-Dichlorobenzene	10.0	9.85		ug/L		99	79 - 120
1,3-Dichlorobenzene	10.0	9.68		ug/L		97	79 - 120
1,4-Dichlorobenzene	10.0	9.66		ug/L		97	79 - 120
Trichlorofluoromethane	10.0	7.64		ug/L		76	61 - 133
Methylcyclohexane	10.0	10.7		ug/L		107	61 - 134
m-Xylene & p-Xylene	10.0	10.2		ug/L		102	80 - 120
o-Xylene	10.0	10.1		ug/L		101	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*78 - 125*
4-Bromofluorobenzene (Surr)	*95*		*61 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*94*		*79 - 120*

Lab Sample ID: MB 240-201259/7
Matrix: Solid
Analysis Batch: 201259

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	20	U	20	1.6	ug/Kg			10/10/15 04:46	1
Benzene	5.0	U	5.0	0.24	ug/Kg			10/10/15 04:46	1
Dichlorobromomethane	5.0	U	5.0	0.21	ug/Kg			10/10/15 04:46	1
Bromoform	5.0	U	5.0	0.38	ug/Kg			10/10/15 04:46	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201259/7
Matrix: Solid
Analysis Batch: 201259

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	5.0	U	5.0	0.71	ug/Kg			10/10/15 04:46	1
2-Butanone (MEK)	0.672	J	20	0.48	ug/Kg			10/10/15 04:46	1
Carbon disulfide	5.0	U	5.0	0.34	ug/Kg			10/10/15 04:46	1
Carbon tetrachloride	5.0	U	5.0	0.33	ug/Kg			10/10/15 04:46	1
Chlorobenzene	5.0	U	5.0	0.29	ug/Kg			10/10/15 04:46	1
Chloroethane	5.0	U	5.0	0.34	ug/Kg			10/10/15 04:46	1
Chloroform	5.0	U	5.0	0.21	ug/Kg			10/10/15 04:46	1
Chloromethane	5.0	U	5.0	1.3	ug/Kg			10/10/15 04:46	1
1,1-Dichloroethane	5.0	U	5.0	1.2	ug/Kg			10/10/15 04:46	1
1,2-Dichloroethane	5.0	U	5.0	0.20	ug/Kg			10/10/15 04:46	1
1,1-Dichloroethene	5.0	U	5.0	0.49	ug/Kg			10/10/15 04:46	1
1,2-Dichloropropane	5.0	U	5.0	0.28	ug/Kg			10/10/15 04:46	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.27	ug/Kg			10/10/15 04:46	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.21	ug/Kg			10/10/15 04:46	1
Ethylbenzene	5.0	U	5.0	0.32	ug/Kg			10/10/15 04:46	1
2-Hexanone	20	U	20	0.70	ug/Kg			10/10/15 04:46	1
Methylene Chloride	5.0	U	5.0	1.1	ug/Kg			10/10/15 04:46	1
4-Methyl-2-pentanone (MIBK)	20	U	20	0.29	ug/Kg			10/10/15 04:46	1
Styrene	5.0	U	5.0	0.27	ug/Kg			10/10/15 04:46	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.16	ug/Kg			10/10/15 04:46	1
Tetrachloroethene	5.0	U	5.0	0.33	ug/Kg			10/10/15 04:46	1
Toluene	5.0	U	5.0	0.27	ug/Kg			10/10/15 04:46	1
Trichloroethene	5.0	U	5.0	0.26	ug/Kg			10/10/15 04:46	1
Vinyl chloride	5.0	U	5.0	0.39	ug/Kg			10/10/15 04:46	1
Xylenes, Total	10	U	10	0.63	ug/Kg			10/10/15 04:46	1
1,1,1-Trichloroethane	5.0	U	5.0	0.26	ug/Kg			10/10/15 04:46	1
1,1,2-Trichloroethane	5.0	U	5.0	0.49	ug/Kg			10/10/15 04:46	1
Cyclohexane	10	U	10	0.29	ug/Kg			10/10/15 04:46	1
1,2-Dibromo-3-Chloropropane	10	U	10	1.9	ug/Kg			10/10/15 04:46	1
Ethylene Dibromide	5.0	U	5.0	0.25	ug/Kg			10/10/15 04:46	1
Dichlorodifluoromethane	5.0	U	5.0	0.40	ug/Kg			10/10/15 04:46	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.28	ug/Kg			10/10/15 04:46	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.37	ug/Kg			10/10/15 04:46	1
Isopropylbenzene	5.0	U	5.0	0.30	ug/Kg			10/10/15 04:46	1
Methyl acetate	10	U	10	2.3	ug/Kg			10/10/15 04:46	1
Methyl tert-butyl ether	5.0	U	5.0	0.15	ug/Kg			10/10/15 04:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	0.39	ug/Kg			10/10/15 04:46	1
1,2,4-Trichlorobenzene	5.0	U	5.0	0.39	ug/Kg			10/10/15 04:46	1
1,2-Dichlorobenzene	5.0	U	5.0	0.38	ug/Kg			10/10/15 04:46	1
1,3-Dichlorobenzene	5.0	U	5.0	0.40	ug/Kg			10/10/15 04:46	1
1,4-Dichlorobenzene	5.0	U	5.0	0.41	ug/Kg			10/10/15 04:46	1
Trichlorofluoromethane	5.0	U	5.0	0.26	ug/Kg			10/10/15 04:46	1
Chlorodibromomethane	5.0	U	5.0	0.16	ug/Kg			10/10/15 04:46	1
Methylcyclohexane	10	U	10	0.33	ug/Kg			10/10/15 04:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*64 - 120*		*10/10/15 04:46*	*1*
4-Bromofluorobenzene (Surr)	*116*		*64 - 130*		*10/10/15 04:46*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201259/7
Matrix: Solid
Analysis Batch: 201259

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	104		69 - 128		10/10/15 04:46	1
Dibromofluoromethane (Surr)	98		68 - 120		10/10/15 04:46	1

Lab Sample ID: LCS 240-201259/5
Matrix: Solid
Analysis Batch: 201259

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	57.0		ug/Kg		114	62 - 133
Benzene	25.0	24.0		ug/Kg		96	80 - 121
Dichlorobromomethane	25.0	24.0		ug/Kg		96	80 - 136
Bromoform	25.0	22.2		ug/Kg		89	71 - 135
Bromomethane	25.0	23.4		ug/Kg		94	57 - 120
2-Butanone (MEK)	50.0	49.1		ug/Kg		98	67 - 124
Carbon disulfide	25.0	22.4		ug/Kg		90	80 - 152
Carbon tetrachloride	25.0	23.0		ug/Kg		92	80 - 141
Chlorobenzene	25.0	24.5		ug/Kg		98	80 - 120
Chloroethane	25.0	25.9		ug/Kg		104	66 - 122
Chloroform	25.0	24.1		ug/Kg		96	80 - 120
Chloromethane	25.0	23.5		ug/Kg		94	62 - 120
1,1-Dichloroethane	25.0	24.0		ug/Kg		96	80 - 126
1,2-Dichloroethane	25.0	24.8		ug/Kg		99	76 - 132
1,1-Dichloroethene	25.0	23.3		ug/Kg		93	77 - 130
1,2-Dichloropropane	25.0	23.9		ug/Kg		96	80 - 128
cis-1,3-Dichloropropene	25.0	24.3		ug/Kg		97	73 - 139
trans-1,3-Dichloropropene	25.0	23.0		ug/Kg		92	71 - 151
Ethylbenzene	25.0	25.1		ug/Kg		100	80 - 132
2-Hexanone	50.0	52.9		ug/Kg		106	72 - 143
Methylene Chloride	25.0	23.9		ug/Kg		95	74 - 127
4-Methyl-2-pentanone (MIBK)	50.0	53.0		ug/Kg		106	74 - 139
Styrene	25.0	24.4		ug/Kg		98	80 - 135
1,1,2,2-Tetrachloroethane	25.0	23.1		ug/Kg		93	80 - 123
Tetrachloroethene	25.0	24.8		ug/Kg		99	80 - 128
Toluene	25.0	23.7		ug/Kg		95	80 - 129
Trichloroethene	25.0	24.7		ug/Kg		99	59 - 124
Vinyl chloride	25.0	23.0		ug/Kg		92	65 - 127
Xylenes, Total	50.0	50.0		ug/Kg		100	80 - 131
1,1,1-Trichloroethane	25.0	24.2		ug/Kg		97	80 - 134
1,1,2-Trichloroethane	25.0	22.9		ug/Kg		92	80 - 121
Cyclohexane	25.0	23.9		ug/Kg		95	80 - 138
1,2-Dibromo-3-Chloropropane	25.0	19.0		ug/Kg		76	65 - 132
Ethylene Dibromide	25.0	23.9		ug/Kg		96	47 - 123
Dichlorodifluoromethane	25.0	27.6		ug/Kg		110	30 - 149
cis-1,2-Dichloroethene	25.0	24.1		ug/Kg		96	80 - 123
trans-1,2-Dichloroethene	25.0	24.1		ug/Kg		96	80 - 125
Isopropylbenzene	25.0	25.4		ug/Kg		101	80 - 132
Methyl acetate	125	159		ug/Kg		127	61 - 135
Methyl tert-butyl ether	25.0	24.5		ug/Kg		98	75 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201259/5
Matrix: Solid
Analysis Batch: 201259

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.0		ug/Kg		100	80 - 142
1,2,4-Trichlorobenzene	25.0	22.9		ug/Kg		92	70 - 125
1,2-Dichlorobenzene	25.0	23.7		ug/Kg		95	80 - 121
1,3-Dichlorobenzene	25.0	24.3		ug/Kg		97	80 - 127
1,4-Dichlorobenzene	25.0	23.0		ug/Kg		92	79 - 120
Trichlorofluoromethane	25.0	25.2		ug/Kg		101	72 - 142
Methylcyclohexane	25.0	24.1		ug/Kg		97	80 - 137
m-Xylene & p-Xylene	25.0	24.8		ug/Kg		99	80 - 133
o-Xylene	25.0	25.2		ug/Kg		101	80 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*64 - 120*
4-Bromofluorobenzene (Surr)	*110*		*64 - 130*
Toluene-d8 (Surr)	*102*		*69 - 128*
Dibromofluoromethane (Surr)	*98*		*68 - 120*

Lab Sample ID: MB 240-201374/6
Matrix: Water
Analysis Batch: 201374

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/12/15 10:05	1
Benzene	1.0	U	1.0	0.35	ug/L			10/12/15 10:05	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/12/15 10:05	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/12/15 10:05	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/12/15 10:05	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/12/15 10:05	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/12/15 10:05	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/12/15 10:05	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 10:05	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/12/15 10:05	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/12/15 10:05	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/12/15 10:05	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/12/15 10:05	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/12/15 10:05	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/12/15 10:05	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/12/15 10:05	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/12/15 10:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/12/15 10:05	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/12/15 10:05	1
2-Hexanone	10	U	10	0.48	ug/L			10/12/15 10:05	1
Methylene Chloride	0.457	J	1.0	0.33	ug/L			10/12/15 10:05	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/12/15 10:05	1
Styrene	1.0	U	1.0	0.45	ug/L			10/12/15 10:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/12/15 10:05	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/12/15 10:05	1
Toluene	1.0	U	1.0	0.23	ug/L			10/12/15 10:05	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201374/6
Matrix: Water
Analysis Batch: 201374

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/12/15 10:05	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/12/15 10:05	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/12/15 10:05	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/12/15 10:05	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/12/15 10:05	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/12/15 10:05	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/12/15 10:05	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/12/15 10:05	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/12/15 10:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/12/15 10:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/12/15 10:05	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/12/15 10:05	1
Methyl acetate	10	U	10	2.3	ug/L			10/12/15 10:05	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/12/15 10:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/12/15 10:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/12/15 10:05	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 10:05	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/12/15 10:05	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/12/15 10:05	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/12/15 10:05	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/12/15 10:05	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/12/15 10:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*78 - 125*		*10/12/15 10:05*	*1*
4-Bromofluorobenzene (Surr)	*87*		*61 - 120*		*10/12/15 10:05*	*1*
Toluene-d8 (Surr)	*87*		*80 - 120*		*10/12/15 10:05*	*1*
Dibromofluoromethane (Surr)	*108*		*79 - 120*		*10/12/15 10:05*	*1*

Lab Sample ID: LCS 240-201374/4
Matrix: Water
Analysis Batch: 201374

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	13.0		ug/L		65	34 - 148
Benzene	10.0	9.27		ug/L		93	80 - 120
Dichlorobromomethane	10.0	9.73		ug/L		97	80 - 120
Bromoform	10.0	10.0		ug/L		100	56 - 122
Bromomethane	10.0	7.58		ug/L		76	38 - 132
2-Butanone (MEK)	20.0	15.7		ug/L		78	56 - 138
Carbon disulfide	10.0	9.32		ug/L		93	65 - 144
Carbon tetrachloride	10.0	11.6		ug/L		116	77 - 131
Chlorobenzene	10.0	9.16		ug/L		92	80 - 120
Chloroethane	10.0	7.49		ug/L		75	36 - 126
Chloroform	10.0	9.11		ug/L		91	80 - 120
Chloromethane	10.0	9.02		ug/L		90	48 - 133
1,1-Dichloroethane	10.0	9.67		ug/L		97	79 - 125
1,2-Dichloroethane	10.0	8.70		ug/L		87	80 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201374/4
Matrix: Water
Analysis Batch: 201374

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethene	10.0	8.78		ug/L		88	76 - 124
1,2-Dichloropropane	10.0	9.01		ug/L		90	78 - 124
cis-1,3-Dichloropropene	10.0	9.48		ug/L		95	74 - 126
trans-1,3-Dichloropropene	10.0	8.63		ug/L		86	75 - 131
Ethylbenzene	10.0	8.98		ug/L		90	80 - 120
2-Hexanone	20.0	13.0		ug/L		65	55 - 141
Methylene Chloride	10.0	9.71		ug/L		97	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	16.5		ug/L		82	64 - 135
Styrene	10.0	8.44		ug/L		84	76 - 122
1,1,2,2-Tetrachloroethane	10.0	8.62		ug/L		86	71 - 123
Tetrachloroethene	10.0	9.70		ug/L		97	78 - 121
Toluene	10.0	8.31		ug/L		83	80 - 120
Trichloroethene	10.0	10.3		ug/L		103	80 - 121
Vinyl chloride	10.0	8.01		ug/L		80	52 - 121
Xylenes, Total	20.0	18.1		ug/L		90	80 - 120
1,1,1-Trichloroethane	10.0	9.43		ug/L		94	77 - 123
1,1,2-Trichloroethane	10.0	8.33		ug/L		83	80 - 120
Cyclohexane	10.0	8.49		ug/L		85	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	8.81		ug/L		88	50 - 132
Ethylene Dibromide	10.0	8.60		ug/L		86	80 - 120
Dichlorodifluoromethane	10.0	9.61		ug/L		96	23 - 136
cis-1,2-Dichloroethene	10.0	9.77		ug/L		98	79 - 120
trans-1,2-Dichloroethene	10.0	10.2		ug/L		102	80 - 124
Isopropylbenzene	10.0	8.61		ug/L		86	77 - 120
Methyl acetate	50.0	44.2		ug/L		88	67 - 131
Methyl tert-butyl ether	10.0	9.17		ug/L		92	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.3		ug/L		103	67 - 138
1,2,4-Trichlorobenzene	10.0	8.27		ug/L		83	61 - 120
1,2-Dichlorobenzene	10.0	8.60		ug/L		86	79 - 120
1,3-Dichlorobenzene	10.0	8.82		ug/L		88	79 - 120
1,4-Dichlorobenzene	10.0	8.83		ug/L		88	79 - 120
Trichlorofluoromethane	10.0	9.12		ug/L		91	61 - 133
Methylcyclohexane	10.0	8.76		ug/L		88	61 - 134
m-Xylene & p-Xylene	10.0	9.06		ug/L		91	80 - 120
o-Xylene	10.0	9.02		ug/L		90	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*78 - 125*
4-Bromofluorobenzene (Surr)	*87*		*61 - 120*
Toluene-d8 (Surr)	*87*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*79 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201375/6
Matrix: Water
Analysis Batch: 201375

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/12/15 10:08	1
Benzene	1.0	U	1.0	0.35	ug/L			10/12/15 10:08	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/12/15 10:08	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/12/15 10:08	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/12/15 10:08	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/12/15 10:08	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/12/15 10:08	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/12/15 10:08	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 10:08	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/12/15 10:08	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/12/15 10:08	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/12/15 10:08	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/12/15 10:08	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/12/15 10:08	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/12/15 10:08	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/12/15 10:08	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/12/15 10:08	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/12/15 10:08	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/12/15 10:08	1
2-Hexanone	10	U	10	0.48	ug/L			10/12/15 10:08	1
Methylene Chloride	0.690	J	1.0	0.33	ug/L			10/12/15 10:08	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/12/15 10:08	1
Styrene	1.0	U	1.0	0.45	ug/L			10/12/15 10:08	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/12/15 10:08	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/12/15 10:08	1
Toluene	1.0	U	1.0	0.23	ug/L			10/12/15 10:08	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/12/15 10:08	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/12/15 10:08	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/12/15 10:08	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/12/15 10:08	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/12/15 10:08	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/12/15 10:08	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/12/15 10:08	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/12/15 10:08	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/12/15 10:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/12/15 10:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/12/15 10:08	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/12/15 10:08	1
Methyl acetate	10	U	10	2.3	ug/L			10/12/15 10:08	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/12/15 10:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/12/15 10:08	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/12/15 10:08	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/12/15 10:08	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/12/15 10:08	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/12/15 10:08	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/12/15 10:08	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/12/15 10:08	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/12/15 10:08	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*102*		*78 - 125*		*10/12/15 10:08*	*1*
4-Bromofluorobenzene (Surr)	*104*		*61 - 120*		*10/12/15 10:08*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/12/15 10:08*	*1*
Dibromofluoromethane (Surr)	*97*		*79 - 120*		*10/12/15 10:08*	*1*

Lab Sample ID: LCS 240-201375/4
Matrix: Water
Analysis Batch: 201375

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	19.5		ug/L		97	34 - 148
Benzene	10.0	10.3		ug/L		103	80 - 120
Dichlorobromomethane	10.0	10.7		ug/L		107	80 - 120
Bromoform	10.0	10.3		ug/L		103	56 - 122
Bromomethane	10.0	10.6		ug/L		106	38 - 132
2-Butanone (MEK)	20.0	19.5		ug/L		97	56 - 138
Carbon disulfide	10.0	10.9		ug/L		109	65 - 144
Carbon tetrachloride	10.0	11.5		ug/L		115	77 - 131
Chlorobenzene	10.0	9.74		ug/L		97	80 - 120
Chloroethane	10.0	10.4		ug/L		104	36 - 126
Chloroform	10.0	10.5		ug/L		105	80 - 120
Chloromethane	10.0	9.83		ug/L		98	48 - 133
1,1-Dichloroethane	10.0	10.9		ug/L		109	79 - 125
1,2-Dichloroethane	10.0	10.0		ug/L		100	80 - 120
1,1-Dichloroethene	10.0	10.3		ug/L		103	76 - 124
1,2-Dichloropropane	10.0	10.2		ug/L		102	78 - 124
cis-1,3-Dichloropropene	10.0	9.34		ug/L		93	74 - 126
trans-1,3-Dichloropropene	10.0	10.2		ug/L		102	75 - 131
Ethylbenzene	10.0	10.3		ug/L		103	80 - 120
2-Hexanone	20.0	21.1		ug/L		105	55 - 141
Methylene Chloride	10.0	11.0		ug/L		110	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	21.2		ug/L		106	64 - 135
Styrene	10.0	9.93		ug/L		99	76 - 122
1,1,2,2-Tetrachloroethane	10.0	9.74		ug/L		97	71 - 123
Tetrachloroethene	10.0	9.49		ug/L		95	78 - 121
Toluene	10.0	10.1		ug/L		101	80 - 120
Trichloroethene	10.0	10.4		ug/L		104	80 - 121
Vinyl chloride	10.0	10.1		ug/L		101	52 - 121
Xylenes, Total	20.0	20.7		ug/L		104	80 - 120
1,1,1-Trichloroethane	10.0	11.2		ug/L		112	77 - 123
1,1,2-Trichloroethane	10.0	9.77		ug/L		98	80 - 120
Cyclohexane	10.0	10.2		ug/L		102	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	8.23		ug/L		82	50 - 132
Ethylene Dibromide	10.0	9.45		ug/L		95	80 - 120
Dichlorodifluoromethane	10.0	9.10		ug/L		91	23 - 136
cis-1,2-Dichloroethene	10.0	10.6		ug/L		106	79 - 120
trans-1,2-Dichloroethene	10.0	10.8		ug/L		108	80 - 124
Isopropylbenzene	10.0	10.4		ug/L		104	77 - 120
Methyl acetate	50.0	50.3		ug/L		101	67 - 131
Methyl tert-butyl ether	10.0	10.3		ug/L		103	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.87		ug/L		99	67 - 138
1,2,4-Trichlorobenzene	10.0	9.07		ug/L		91	61 - 120
1,2-Dichlorobenzene	10.0	9.65		ug/L		97	79 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201375/4
Matrix: Water
Analysis Batch: 201375

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	10.0	9.62		ug/L		96	79 - 120
1,4-Dichlorobenzene	10.0	9.52		ug/L		95	79 - 120
Trichlorofluoromethane	10.0	9.75		ug/L		98	61 - 133
Methylcyclohexane	10.0	9.82		ug/L		98	61 - 134
m-Xylene & p-Xylene	10.0	10.3		ug/L		103	80 - 120
o-Xylene	10.0	10.4		ug/L		104	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*78 - 125*
4-Bromofluorobenzene (Surr)	*111*		*61 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*79 - 120*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-200464/13-A
Matrix: Solid
Analysis Batch: 200852

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 200464

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	50	U	50	3.5	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
bis (2-chloroisopropyl) ether	100	U	100	9.5	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
2,4,5-Trichlorophenol	150	U	150	25	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
2,4,6-Trichlorophenol	150	U	150	8.9	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
2,4-Dichlorophenol	150	U	150	20	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
2,4-Dimethylphenol	150	U	150	20	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
2,4-Dinitrophenol	330	U	330	21	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
2,4-Dinitrotoluene	200	U	200	17	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
2,6-Dinitrotoluene	200	U	200	21	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
2-Chloronaphthalene	50	U	50	0.45	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
2-Chlorophenol	50	U	50	8.2	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
2-Methylnaphthalene	6.7	U	6.7	0.50	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
2-Methylphenol	200	U	200	11	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
2-Nitroaniline	200	U	200	9.1	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
2-Nitrophenol	50	U	50	8.3	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
3,3'-Dichlorobenzidine	100	U	100	18	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
3-Nitroaniline	200	U	200	16	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
4,6-Dinitro-2-methylphenol	150	U	150	9.2	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
4-Bromophenyl phenyl ether	50	U	50	13	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
4-Chloro-3-methylphenol	150	U	150	21	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
4-Chloroaniline	150	U	150	17	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
4-Chlorophenyl phenyl ether	50	U	50	13	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
4-Nitroaniline	200	U	200	26	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
4-Nitrophenol	330	U	330	17	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Acenaphthene	6.7	U	6.7	0.76	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Acenaphthylene	6.7	U	6.7	0.35	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Acetophenone	100	U	100	9.2	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Anthracene	6.7	U	6.7	0.78	ug/Kg		10/06/15 07:57	10/08/15 09:41	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-200464/13-A
Matrix: Solid
Analysis Batch: 200852

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 200464

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Atrazine	200	U	200	9.1	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Benzaldehyde	100	U	100	12	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Benzo[a]anthracene	6.7	U	6.7	0.63	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Benzo[a]pyrene	6.7	U	6.7	0.64	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Benzo[b]fluoranthene	6.7	U	6.7	0.59	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Benzo[g,h,i]perylene	6.7	U	6.7	0.35	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Benzo[k]fluoranthene	6.7	U	6.7	0.68	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Bis(2-chloroethoxy)methane	100	U	100	22	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Bis(2-chloroethyl)ether	100	U	100	2.0	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Bis(2-ethylhexyl) phthalate	70	U	70	19	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Butyl benzyl phthalate	70	U	70	10	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Caprolactam	330	U	330	37	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Carbazole	50	U	50	27	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Chrysene	6.7	U	6.7	1.1	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Dibenz(a,h)anthracene	6.7	U	6.7	0.66	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Dibenzofuran	50	U	50	0.66	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Diethyl phthalate	70	U	70	16	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Dimethyl phthalate	70	U	70	17	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Di-n-butyl phthalate	70	U	70	15	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Di-n-octyl phthalate	70	U	70	7.9	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Fluoranthene	6.7	U	6.7	0.55	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Fluorene	6.7	U	6.7	0.53	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Hexachlorobenzene	6.7	U	6.7	2.1	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Hexachlorobutadiene	50	U	50	5.6	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Hexachlorocyclopentadiene	330	U	330	8.1	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Hexachloroethane	50	U	50	9.0	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Indeno[1,2,3-cd]pyrene	6.7	U	6.7	0.35	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Isophorone	50	U	50	13	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Naphthalene	6.7	U	6.7	0.82	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Nitrobenzene	100	U	100	2.2	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
N-Nitrosodi-n-propylamine	50	U	50	6.3	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
N-Nitrosodiphenylamine	50	U	50	21	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Pentachlorophenol	150	U	150	9.1	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Phenol	50	U	50	7.3	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Phenanthrene	6.7	U	6.7	0.73	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
Pyrene	6.7	U	6.7	0.44	ug/Kg		10/06/15 07:57	10/08/15 09:41	1
3 & 4 Methylphenol	400	U	400	20	ug/Kg		10/06/15 07:57	10/08/15 09:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*24 - 110*	*10/06/15 07:57*	*10/08/15 09:41*	*1*
2-Fluorophenol (Surr)	*72*		*24 - 110*	*10/06/15 07:57*	*10/08/15 09:41*	*1*
2,4,6-Tribromophenol (Surr)	*49*		*10 - 110*	*10/06/15 07:57*	*10/08/15 09:41*	*1*
Nitrobenzene-d5 (Surr)	*70*		*20 - 110*	*10/06/15 07:57*	*10/08/15 09:41*	*1*
Phenol-d5 (Surr)	*77*		*26 - 110*	*10/06/15 07:57*	*10/08/15 09:41*	*1*
Terphenyl-d14 (Surr)	*83*		*36 - 110*	*10/06/15 07:57*	*10/08/15 09:41*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-200464/14-A
Matrix: Solid
Analysis Batch: 200852

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 200464

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	667	416		ug/Kg		62	35 - 110
bis (2-chloroisopropyl) ether	667	416		ug/Kg		62	29 - 110
2,4,5-Trichlorophenol	667	366		ug/Kg		55	25 - 110
2,4,6-Trichlorophenol	667	309		ug/Kg		46	12 - 110
2,4-Dichlorophenol	667	418		ug/Kg		63	39 - 110
2,4-Dimethylphenol	667	418		ug/Kg		63	29 - 110
2,4-Dinitrophenol	1330	547		ug/Kg		41	10 - 110
2,4-Dinitrotoluene	667	520		ug/Kg		78	48 - 110
2,6-Dinitrotoluene	667	484		ug/Kg		73	45 - 110
2-Chloronaphthalene	667	419		ug/Kg		63	32 - 110
2-Chlorophenol	667	423		ug/Kg		63	37 - 110
2-Methylnaphthalene	667	431		ug/Kg		65	36 - 110
2-Methylphenol	667	405		ug/Kg		61	41 - 110
2-Nitroaniline	667	454		ug/Kg		68	45 - 110
2-Nitrophenol	667	441		ug/Kg		66	34 - 110
3,3'-Dichlorobenzidine	1330	1010		ug/Kg		75	28 - 110
3-Nitroaniline	667	493		ug/Kg		74	44 - 110
4,6-Dinitro-2-methylphenol	1330	762		ug/Kg		57	10 - 110
4-Bromophenyl phenyl ether	667	462		ug/Kg		69	39 - 110
4-Chloro-3-methylphenol	667	440		ug/Kg		66	48 - 110
4-Chloroaniline	667	376		ug/Kg		56	30 - 110
4-Chlorophenyl phenyl ether	667	423		ug/Kg		63	40 - 110
4-Nitroaniline	667	546		ug/Kg		82	48 - 110
4-Nitrophenol	1330	964		ug/Kg		72	28 - 110
Acenaphthene	667	413		ug/Kg		62	38 - 110
Acenaphthylene	667	411		ug/Kg		62	40 - 110
Acetophenone	667	428		ug/Kg		64	40 - 110
Anthracene	667	450		ug/Kg		68	48 - 110
Atrazine	1330	1060		ug/Kg		79	54 - 120
Benzaldehyde	1330	850		ug/Kg		64	32 - 110
Benzo[a]anthracene	667	463		ug/Kg		69	50 - 110
Benzo[a]pyrene	667	494		ug/Kg		74	44 - 110
Benzo[b]fluoranthene	667	483		ug/Kg		72	43 - 110
Benzo[g,h,i]perylene	667	538		ug/Kg		81	51 - 110
Benzo[k]fluoranthene	667	522		ug/Kg		78	38 - 105
Bis(2-chloroethoxy)methane	667	440		ug/Kg		66	32 - 110
Bis(2-chloroethyl)ether	667	435		ug/Kg		65	34 - 110
Bis(2-ethylhexyl) phthalate	667	506		ug/Kg		76	50 - 110
Butyl benzyl phthalate	667	500		ug/Kg		75	51 - 110
Caprolactam	1330	1090		ug/Kg		82	44 - 114
Carbazole	667	521		ug/Kg		78	50 - 110
Chrysene	667	489		ug/Kg		73	50 - 110
Dibenz(a,h)anthracene	667	543		ug/Kg		81	51 - 110
Dibenzofuran	667	429		ug/Kg		64	43 - 110
Diethyl phthalate	667	474		ug/Kg		71	52 - 110
Dimethyl phthalate	667	469		ug/Kg		70	50 - 110
Di-n-butyl phthalate	667	512		ug/Kg		77	51 - 110
Di-n-octyl phthalate	667	501		ug/Kg		75	48 - 110

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-200464/14-A
Matrix: Solid
Analysis Batch: 200852

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 200464

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoranthene	667	476		ug/Kg		71	51 - 110
Fluorene	667	426		ug/Kg		64	46 - 110
Hexachlorobenzene	667	409		ug/Kg		61	43 - 110
Hexachlorobutadiene	667	438		ug/Kg		66	29 - 110
Hexachlorocyclopentadiene	667	289	J	ug/Kg		43	12 - 110
Hexachloroethane	667	418		ug/Kg		63	30 - 110
Indeno[1,2,3-cd]pyrene	667	557		ug/Kg		84	50 - 110
Isophorone	667	440		ug/Kg		66	36 - 110
Naphthalene	667	411		ug/Kg		62	36 - 110
Nitrobenzene	667	441		ug/Kg		66	32 - 110
N-Nitrosodi-n-propylamine	667	437		ug/Kg		66	38 - 110
N-Nitrosodiphenylamine	1330	861		ug/Kg		65	46 - 110
Pentachlorophenol	1330	678		ug/Kg		51	10 - 110
Phenol	667	399		ug/Kg		60	38 - 110
Phenanthrene	667	454		ug/Kg		68	49 - 110
Pyrene	667	490		ug/Kg		74	49 - 110
3 & 4 Methylphenol	667	413		ug/Kg		62	40 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*64*		*24 - 110*
2-Fluorophenol (Surr)	*65*		*24 - 110*
2,4,6-Tribromophenol (Surr)	*50*		*10 - 110*
Nitrobenzene-d5 (Surr)	*65*		*20 - 110*
Phenol-d5 (Surr)	*68*		*26 - 110*
Terphenyl-d14 (Surr)	*79*		*36 - 110*

Lab Sample ID: 240-56145-12 MS
Matrix: Solid
Analysis Batch: 200852

Client Sample ID: VAP-1 (1-2)
Prep Type: Total/NA
Prep Batch: 200464

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	60	U	788	502		ug/Kg	☼	64	32 - 110
bis (2-chloroisopropyl) ether	120	U	788	495		ug/Kg	☼	63	11 - 110
2,4,5-Trichlorophenol	180	U	788	386		ug/Kg	☼	49	10 - 117
2,4,6-Trichlorophenol	180	U	788	270		ug/Kg	☼	34	10 - 110
2,4-Dichlorophenol	180	U	788	466		ug/Kg	☼	59	10 - 110
2,4-Dimethylphenol	180	U	788	453		ug/Kg	☼	57	10 - 110
2,4-Dinitrophenol	400	U	1580	463		ug/Kg	☼	29	10 - 110
2,4-Dinitrotoluene	240	U	788	544		ug/Kg	☼	69	32 - 110
2,6-Dinitrotoluene	240	U	788	542		ug/Kg	☼	69	35 - 110
2-Chloronaphthalene	60	U	788	529		ug/Kg	☼	67	28 - 110
2-Chlorophenol	60	U	788	521		ug/Kg	☼	66	10 - 110
2-Methylnaphthalene	8.0	U	788	515		ug/Kg	☼	65	10 - 133
2-Methylphenol	240	U	788	566		ug/Kg	☼	72	24 - 110
2-Nitroaniline	240	U	788	556		ug/Kg	☼	71	39 - 110
2-Nitrophenol	60	U	788	508		ug/Kg	☼	64	10 - 110
3,3'-Dichlorobenzidine	120	U	1580	1100		ug/Kg	☼	70	10 - 110
3-Nitroaniline	240	U	788	526		ug/Kg	☼	67	10 - 110

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56145-12 MS
Matrix: Solid
Analysis Batch: 200852

Client Sample ID: VAP-1 (1-2)
Prep Type: Total/NA
Prep Batch: 200464

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4,6-Dinitro-2-methylphenol	180	U	1580	562		ug/Kg	☼	36	10 - 110
4-Bromophenyl phenyl ether	60	U	788	548		ug/Kg	☼	70	33 - 110
4-Chloro-3-methylphenol	180	U	788	453		ug/Kg	☼	57	25 - 110
4-Chloroaniline	180	U	788	381		ug/Kg	☼	48	10 - 110
4-Chlorophenyl phenyl ether	60	U	788	525		ug/Kg	☼	67	32 - 110
4-Nitroaniline	240	U	788	567		ug/Kg	☼	72	10 - 110
4-Nitrophenol	400	U	1580	954		ug/Kg	☼	61	10 - 113
Acenaphthene	8.0	U	788	517		ug/Kg	☼	66	22 - 110
Acenaphthylene	8.0	U	788	518		ug/Kg	☼	66	24 - 110
Acetophenone	120	U	788	517		ug/Kg	☼	66	31 - 110
Anthracene	8.0	U	788	517		ug/Kg	☼	66	20 - 110
Atrazine	240	U	1580	1170		ug/Kg	☼	74	45 - 118
Benzaldehyde	120	U	1580	1020		ug/Kg	☼	65	23 - 110
Benzo[a]anthracene	8.0	U	788	513		ug/Kg	☼	65	10 - 122
Benzo[a]pyrene	8.0	U	788	537		ug/Kg	☼	68	10 - 110
Benzo[b]fluoranthene	8.0	U	788	530		ug/Kg	☼	67	12 - 118
Benzo[g,h,i]perylene	8.0	U	788	446		ug/Kg	☼	57	10 - 117
Benzo[k]fluoranthene	8.0	U	788	528		ug/Kg	☼	67	10 - 121
Bis(2-chloroethoxy)methane	120	U	788	525		ug/Kg	☼	67	26 - 110
Bis(2-chloroethyl)ether	120	U	788	546		ug/Kg	☼	69	21 - 110
Bis(2-ethylhexyl) phthalate	36	J	788	584		ug/Kg	☼	70	40 - 110
Butyl benzyl phthalate	84	U	788	518		ug/Kg	☼	66	44 - 110
Caprolactam	52	J	1580	1290		ug/Kg	☼	79	10 - 134
Carbazole	60	U	788	584		ug/Kg	☼	74	34 - 110
Chrysene	8.0	U	788	530		ug/Kg	☼	67	10 - 125
Dibenz(a,h)anthracene	8.0	U	788	521		ug/Kg	☼	66	14 - 113
Dibenzofuran	60	U	788	512		ug/Kg	☼	65	29 - 110
Diethyl phthalate	84	U	788	539		ug/Kg	☼	68	42 - 110
Dimethyl phthalate	84	U	788	539		ug/Kg	☼	68	41 - 110
Di-n-butyl phthalate	84	U	788	584		ug/Kg	☼	74	43 - 110
Di-n-octyl phthalate	84	U	788	572		ug/Kg	☼	73	24 - 119
Fluoranthene	8.0	U	788	537		ug/Kg	☼	68	10 - 110
Fluorene	8.0	U	788	504		ug/Kg	☼	64	23 - 110
Hexachlorobenzene	8.0	U	788	500		ug/Kg	☼	63	34 - 110
Hexachlorobutadiene	60	U	788	513		ug/Kg	☼	65	25 - 110
Hexachlorocyclopentadiene	400	U F1	788	390	U F1	ug/Kg	☼	0	10 - 110
Hexachloroethane	60	U	788	354		ug/Kg	☼	45	12 - 110
Indeno[1,2,3-cd]pyrene	8.0	U	788	500		ug/Kg	☼	63	10 - 114
Isophorone	60	U	788	527		ug/Kg	☼	67	29 - 110
Naphthalene	8.0	U	788	481		ug/Kg	☼	61	10 - 111
Nitrobenzene	120	U	788	513		ug/Kg	☼	65	23 - 110
N-Nitrosodi-n-propylamine	60	U	788	518		ug/Kg	☼	66	26 - 110
N-Nitrosodiphenylamine	60	U	1580	1000		ug/Kg	☼	63	22 - 110
Pentachlorophenol	180	U F1 F2	1580	114	J F1	ug/Kg	☼	7	10 - 110
Phenol	60	U	788	467		ug/Kg	☼	59	17 - 110
Phenanthrene	8.0	U	788	528		ug/Kg	☼	67	10 - 166
Pyrene	8.0	U	788	525		ug/Kg	☼	67	10 - 147
3 & 4 Methylphenol	480	U	788	554		ug/Kg	☼	70	25 - 110

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56145-12 MS
Matrix: Solid
Analysis Batch: 200852

Client Sample ID: VAP-1 (1-2)
Prep Type: Total/NA
Prep Batch: 200464

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*68*		*24 - 110*
2-Fluorophenol (Surr)	*66*		*24 - 110*
2,4,6-Tribromophenol (Surr)	*32*		*10 - 110*
Nitrobenzene-d5 (Surr)	*63*		*20 - 110*
Phenol-d5 (Surr)	*69*		*26 - 110*
Terphenyl-d14 (Surr)	*72*		*36 - 110*

Lab Sample ID: 240-56145-12 MSD
Matrix: Solid
Analysis Batch: 200852

Client Sample ID: VAP-1 (1-2)
Prep Type: Total/NA
Prep Batch: 200464

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1'-Biphenyl	60	U	792	522		ug/Kg	☼	66	32 - 110	4	32
bis (2-chloroisopropyl) ether	120	U	792	437		ug/Kg	☼	55	11 - 110	13	42
2,4,5-Trichlorophenol	180	U	792	429		ug/Kg	☼	54	10 - 117	10	99
2,4,6-Trichlorophenol	180	U	792	327		ug/Kg	☼	41	10 - 110	19	38
2,4-Dichlorophenol	180	U	792	513		ug/Kg	☼	65	10 - 110	10	34
2,4-Dimethylphenol	180	U	792	477		ug/Kg	☼	60	10 - 110	5	31
2,4-Dinitrophenol	400	U	1580	403		ug/Kg	☼	25	10 - 110	14	99
2,4-Dinitrotoluene	240	U	792	621		ug/Kg	☼	78	32 - 110	13	30
2,6-Dinitrotoluene	240	U	792	592		ug/Kg	☼	75	35 - 110	9	30
2-Chloronaphthalene	60	U	792	543		ug/Kg	☼	68	28 - 110	3	30
2-Chlorophenol	60	U	792	459		ug/Kg	☼	58	10 - 110	13	47
2-Methylnaphthalene	8.0	U	792	521		ug/Kg	☼	66	10 - 133	1	42
2-Methylphenol	240	U	792	472		ug/Kg	☼	60	24 - 110	18	51
2-Nitroaniline	240	U	792	585		ug/Kg	☼	74	39 - 110	5	31
2-Nitrophenol	60	U	792	472		ug/Kg	☼	60	10 - 110	7	49
3,3'-Dichlorobenzidine	120	U	1580	1310		ug/Kg	☼	83	10 - 110	18	56
3-Nitroaniline	240	U	792	580		ug/Kg	☼	73	10 - 110	10	30
4,6-Dinitro-2-methylphenol	180	U	1580	562		ug/Kg	☼	35	10 - 110	0	55
4-Bromophenyl phenyl ether	60	U	792	602		ug/Kg	☼	76	33 - 110	9	30
4-Chloro-3-methylphenol	180	U	792	535		ug/Kg	☼	68	25 - 110	17	54
4-Chloroaniline	180	U	792	436		ug/Kg	☼	55	10 - 110	14	36
4-Chlorophenyl phenyl ether	60	U	792	571		ug/Kg	☼	72	32 - 110	8	30
4-Nitroaniline	240	U	792	639		ug/Kg	☼	81	10 - 110	12	48
4-Nitrophenol	400	U	1580	1080		ug/Kg	☼	68	10 - 113	12	49
Acenaphthene	8.0	U	792	565		ug/Kg	☼	71	22 - 110	9	99
Acenaphthylene	8.0	U	792	541		ug/Kg	☼	68	24 - 110	4	99
Acetophenone	120	U	792	445		ug/Kg	☼	56	31 - 110	15	43
Anthracene	8.0	U	792	588		ug/Kg	☼	74	20 - 110	13	99
Atrazine	240	U	1580	1330		ug/Kg	☼	84	45 - 118	13	30
Benzaldehyde	120	U	1580	873		ug/Kg	☼	55	23 - 110	16	42
Benzo[a]anthracene	8.0	U	792	592		ug/Kg	☼	75	10 - 122	14	99
Benzo[a]pyrene	8.0	U	792	604		ug/Kg	☼	76	10 - 110	12	99
Benzo[b]fluoranthene	8.0	U	792	600		ug/Kg	☼	76	12 - 118	12	99
Benzo[g,h,i]perylene	8.0	U	792	464		ug/Kg	☼	59	10 - 117	4	99
Benzo[k]fluoranthene	8.0	U	792	591		ug/Kg	☼	75	10 - 121	11	99
Bis(2-chloroethoxy)methane	120	U	792	475		ug/Kg	☼	60	26 - 110	10	37

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56145-12 MSD
Matrix: Solid
Analysis Batch: 200852

Client Sample ID: VAP-1 (1-2)
Prep Type: Total/NA
Prep Batch: 200464

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether	120	U	792	459		ug/Kg	☼	58	21 - 110	17	55
Bis(2-ethylhexyl) phthalate	36	J	792	675		ug/Kg	☼	81	40 - 110	15	30
Butyl benzyl phthalate	84	U	792	621		ug/Kg	☼	78	44 - 110	18	30
Caprolactam	52	J	1580	1450		ug/Kg	☼	88	10 - 134	11	32
Carbazole	60	U	792	655		ug/Kg	☼	83	34 - 110	11	30
Chrysene	8.0	U	792	607		ug/Kg	☼	77	10 - 125	14	99
Dibenz(a,h)anthracene	8.0	U	792	565		ug/Kg	☼	71	14 - 113	8	99
Dibenzofuran	60	U	792	556		ug/Kg	☼	70	29 - 110	8	30
Diethyl phthalate	84	U	792	595		ug/Kg	☼	75	42 - 110	10	30
Dimethyl phthalate	84	U	792	585		ug/Kg	☼	74	41 - 110	8	30
Di-n-butyl phthalate	84	U	792	666		ug/Kg	☼	84	43 - 110	13	30
Di-n-octyl phthalate	84	U	792	649		ug/Kg	☼	82	24 - 119	13	30
Fluoranthene	8.0	U	792	599		ug/Kg	☼	76	10 - 110	11	99
Fluorene	8.0	U	792	556		ug/Kg	☼	70	23 - 110	10	99
Hexachlorobenzene	8.0	U	792	557		ug/Kg	☼	70	34 - 110	11	30
Hexachlorobutadiene	60	U	792	458		ug/Kg	☼	58	25 - 110	11	34
Hexachlorocyclopentadiene	400	U F1	792	390	U F1	ug/Kg	☼	0	10 - 110	NC	79
Hexachloroethane	60	U	792	296		ug/Kg	☼	37	12 - 110	18	50
Indeno[1,2,3-cd]pyrene	8.0	U	792	542		ug/Kg	☼	68	10 - 114	8	99
Isophorone	60	U	792	492		ug/Kg	☼	62	29 - 110	7	38
Naphthalene	8.0	U	792	448		ug/Kg	☼	57	10 - 111	7	99
Nitrobenzene	120	U	792	452		ug/Kg	☼	57	23 - 110	12	41
N-Nitrosodi-n-propylamine	60	U	792	452		ug/Kg	☼	57	26 - 110	13	42
N-Nitrosodiphenylamine	60	U	1580	1120		ug/Kg	☼	71	22 - 110	12	30
Pentachlorophenol	180	U F1 F2	1580	282	F2	ug/Kg	☼	18	10 - 110	85	50
Phenol	60	U	792	424		ug/Kg	☼	54	17 - 110	9	53
Phenanthrene	8.0	U	792	592		ug/Kg	☼	75	10 - 166	11	99
Pyrene	8.0	U	792	607		ug/Kg	☼	77	10 - 147	14	99
3 & 4 Methylphenol	480	U	792	508		ug/Kg	☼	64	25 - 110	9	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*67*		*24 - 110*
2-Fluorophenol (Surr)	*58*		*24 - 110*
2,4,6-Tribromophenol (Surr)	*35*		*10 - 110*
Nitrobenzene-d5 (Surr)	*57*		*20 - 110*
Phenol-d5 (Surr)	*62*		*26 - 110*
Terphenyl-d14 (Surr)	*83*		*36 - 110*

Lab Sample ID: MB 240-200483/18-A
Matrix: Water
Analysis Batch: 200658

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 200483

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 09:21	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/06/15 08:39	10/07/15 09:21	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/06/15 08:39	10/07/15 09:21	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/06/15 08:39	10/07/15 09:21	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/06/15 08:39	10/07/15 09:21	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-200483/18-A
Matrix: Water
Analysis Batch: 200658

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 200483

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/06/15 08:39	10/07/15 09:21	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/06/15 08:39	10/07/15 09:21	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/06/15 08:39	10/07/15 09:21	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/06/15 08:39	10/07/15 09:21	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 09:21	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/06/15 08:39	10/07/15 09:21	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/06/15 08:39	10/07/15 09:21	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/06/15 08:39	10/07/15 09:21	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/06/15 08:39	10/07/15 09:21	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/06/15 08:39	10/07/15 09:21	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/06/15 08:39	10/07/15 09:21	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/06/15 08:39	10/07/15 09:21	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/06/15 08:39	10/07/15 09:21	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/06/15 08:39	10/07/15 09:21	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/06/15 08:39	10/07/15 09:21	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/06/15 08:39	10/07/15 09:21	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/06/15 08:39	10/07/15 09:21	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/06/15 08:39	10/07/15 09:21	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/06/15 08:39	10/07/15 09:21	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/06/15 08:39	10/07/15 09:21	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/06/15 08:39	10/07/15 09:21	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/06/15 08:39	10/07/15 09:21	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/06/15 08:39	10/07/15 09:21	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 09:21	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/06/15 08:39	10/07/15 09:21	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/06/15 08:39	10/07/15 09:21	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/06/15 08:39	10/07/15 09:21	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/06/15 08:39	10/07/15 09:21	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/06/15 08:39	10/07/15 09:21	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/06/15 08:39	10/07/15 09:21	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/06/15 08:39	10/07/15 09:21	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/06/15 08:39	10/07/15 09:21	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	1.5	ug/L		10/06/15 08:39	10/07/15 09:21	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/06/15 08:39	10/07/15 09:21	1
Caprolactam	5.0	U	5.0	0.37	ug/L		10/06/15 08:39	10/07/15 09:21	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/06/15 08:39	10/07/15 09:21	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/06/15 08:39	10/07/15 09:21	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/06/15 08:39	10/07/15 09:21	1
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/06/15 08:39	10/07/15 09:21	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/06/15 08:39	10/07/15 09:21	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/06/15 08:39	10/07/15 09:21	1
Di-n-butyl phthalate	0.652	J	1.0	0.40	ug/L		10/06/15 08:39	10/07/15 09:21	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/06/15 08:39	10/07/15 09:21	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/06/15 08:39	10/07/15 09:21	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/06/15 08:39	10/07/15 09:21	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 09:21	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/06/15 08:39	10/07/15 09:21	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/06/15 08:39	10/07/15 09:21	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-200483/18-A
Matrix: Water
Analysis Batch: 200658

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 200483

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/06/15 08:39	10/07/15 09:21	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/06/15 08:39	10/07/15 09:21	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/06/15 08:39	10/07/15 09:21	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/06/15 08:39	10/07/15 09:21	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/06/15 08:39	10/07/15 09:21	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/06/15 08:39	10/07/15 09:21	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/06/15 08:39	10/07/15 09:21	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/06/15 08:39	10/07/15 09:21	1
Phenol	1.0	U	1.0	0.15	ug/L		10/06/15 08:39	10/07/15 09:21	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/06/15 08:39	10/07/15 09:21	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/06/15 08:39	10/07/15 09:21	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/06/15 08:39	10/07/15 09:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*69*		*29 - 110*	*10/06/15 08:39*	*10/07/15 09:21*	*1*
2-Fluorophenol (Surr)	*52*		*15 - 110*	*10/06/15 08:39*	*10/07/15 09:21*	*1*
2,4,6-Tribromophenol (Surr)	*70*		*21 - 128*	*10/06/15 08:39*	*10/07/15 09:21*	*1*
Nitrobenzene-d5 (Surr)	*70*		*31 - 110*	*10/06/15 08:39*	*10/07/15 09:21*	*1*
Phenol-d5 (Surr)	*35*		*10 - 110*	*10/06/15 08:39*	*10/07/15 09:21*	*1*
Terphenyl-d14 (Surr)	*79*		*31 - 115*	*10/06/15 08:39*	*10/07/15 09:21*	*1*

Lab Sample ID: LCS 240-200483/19-A
Matrix: Water
Analysis Batch: 200658

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 200483

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	32.0	26.9		ug/L		84	43 - 120
bis (2-chloroisopropyl) ether	32.0	28.6		ug/L		89	45 - 112
2,4,5-Trichlorophenol	32.0	27.8		ug/L		87	49 - 120
2,4,6-Trichlorophenol	32.0	28.4		ug/L		89	50 - 120
2,4-Dichlorophenol	32.0	29.2		ug/L		91	54 - 120
2,4-Dimethylphenol	32.0	31.3		ug/L		98	40 - 125
2,4-Dinitrophenol	64.0	30.4	J	ug/L		48	30 - 120
2,4-Dinitrotoluene	32.0	31.6		ug/L		99	50 - 120
2,6-Dinitrotoluene	32.0	31.2		ug/L		98	52 - 120
2-Chloronaphthalene	32.0	26.9		ug/L		84	43 - 120
2-Chlorophenol	32.0	29.3		ug/L		92	53 - 120
2-Methylnaphthalene	32.0	25.8		ug/L		81	46 - 120
2-Methylphenol	32.0	28.1		ug/L		88	52 - 120
2-Nitroaniline	32.0	31.1		ug/L		97	47 - 120
2-Nitrophenol	32.0	30.9		ug/L		97	53 - 120
3,3'-Dichlorobenzidine	64.0	50.8		ug/L		79	30 - 120
3-Nitroaniline	32.0	34.6		ug/L		108	40 - 144
4,6-Dinitro-2-methylphenol	64.0	52.9		ug/L		83	40 - 120
4-Bromophenyl phenyl ether	32.0	28.4		ug/L		89	49 - 120
4-Chloro-3-methylphenol	32.0	28.9		ug/L		90	55 - 120
4-Chloroaniline	32.0	7.46		ug/L		23	20 - 136
4-Chlorophenyl phenyl ether	32.0	28.6		ug/L		89	48 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-200483/19-A
Matrix: Water
Analysis Batch: 200658

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 200483

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Nitroaniline	32.0	34.8		ug/L		109	40 - 135
4-Nitrophenol	64.0	35.5		ug/L		55	30 - 120
Acenaphthene	32.0	28.0		ug/L		87	48 - 120
Acenaphthylene	32.0	28.5		ug/L		89	47 - 120
Acetophenone	32.0	30.3		ug/L		95	53 - 120
Anthracene	32.0	27.6		ug/L		86	50 - 120
Atrazine	64.0	59.9		ug/L		94	49 - 120
Benzaldehyde	64.0	112	E *	ug/L		175	40 - 160
Benzo[a]anthracene	32.0	27.5		ug/L		86	46 - 120
Benzo[a]pyrene	32.0	29.9		ug/L		93	49 - 120
Benzo[b]fluoranthene	32.0	28.7		ug/L		90	49 - 120
Benzo[g,h,i]perylene	32.0	21.2		ug/L		66	48 - 120
Benzo[k]fluoranthene	32.0	32.5		ug/L		101	50 - 120
Bis(2-chloroethoxy)methane	32.0	30.6		ug/L		96	54 - 120
Bis(2-chloroethyl)ether	32.0	29.6		ug/L		92	51 - 120
Bis(2-ethylhexyl) phthalate	32.0	29.9		ug/L		93	30 - 156
Butyl benzyl phthalate	32.0	29.2		ug/L		91	40 - 125
Caprolactam	64.0	15.9		ug/L		25	10 - 120
Carbazole	32.0	29.5		ug/L		92	46 - 127
Chrysene	32.0	28.7		ug/L		90	45 - 120
Dibenz(a,h)anthracene	32.0	19.0		ug/L		59	49 - 120
Dibenzofuran	32.0	28.1		ug/L		88	45 - 120
Diethyl phthalate	32.0	30.3		ug/L		95	48 - 121
Dimethyl phthalate	32.0	30.3		ug/L		95	50 - 120
Di-n-butyl phthalate	32.0	30.4		ug/L		95	40 - 160
Di-n-octyl phthalate	32.0	31.0		ug/L		97	40 - 128
Fluoranthene	32.0	28.1		ug/L		88	50 - 120
Fluorene	32.0	28.0		ug/L		88	50 - 120
Hexachlorobenzene	32.0	26.8		ug/L		84	46 - 120
Hexachlorobutadiene	32.0	24.4		ug/L		76	30 - 120
Hexachlorocyclopentadiene	32.0	21.8		ug/L		68	4 - 120
Hexachloroethane	32.0	24.6		ug/L		77	30 - 120
Indeno[1,2,3-cd]pyrene	32.0	23.0		ug/L		72	48 - 140
Isophorone	32.0	33.1		ug/L		103	52 - 120
Naphthalene	32.0	26.5		ug/L		83	45 - 120
Nitrobenzene	32.0	29.5		ug/L		92	54 - 120
N-Nitrosodi-n-propylamine	32.0	31.4		ug/L		98	52 - 117
N-Nitrosodiphenylamine	64.0	56.4		ug/L		88	47 - 109
Pentachlorophenol	64.0	43.6		ug/L		68	30 - 120
Phenol	32.0	16.4		ug/L		51	40 - 120
Phenanthrene	32.0	27.3		ug/L		85	50 - 120
Pyrene	32.0	28.1		ug/L		88	49 - 114
3 & 4 Methylphenol	32.0	26.6		ug/L		83	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*90*		*29 - 110*
2-Fluorophenol (Surr)	*72*		*15 - 110*
2,4,6-Tribromophenol (Surr)	*90*		*21 - 128*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-200483/19-A
Matrix: Water
Analysis Batch: 200658

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 200483

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*95*		*31 - 110*
Phenol-d5 (Surr)	*51*		*10 - 110*
Terphenyl-d14 (Surr)	*96*		*31 - 115*

Lab Sample ID: MB 240-200940/11-A
Matrix: Water
Analysis Batch: 201067

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 200940

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/08/15 11:15	10/09/15 08:57	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/08/15 11:15	10/09/15 08:57	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/08/15 11:15	10/09/15 08:57	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/08/15 11:15	10/09/15 08:57	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/08/15 11:15	10/09/15 08:57	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/08/15 11:15	10/09/15 08:57	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/08/15 11:15	10/09/15 08:57	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/08/15 11:15	10/09/15 08:57	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/08/15 11:15	10/09/15 08:57	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/08/15 11:15	10/09/15 08:57	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/08/15 11:15	10/09/15 08:57	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/08/15 11:15	10/09/15 08:57	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/08/15 11:15	10/09/15 08:57	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/08/15 11:15	10/09/15 08:57	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/08/15 11:15	10/09/15 08:57	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/08/15 11:15	10/09/15 08:57	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/08/15 11:15	10/09/15 08:57	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/08/15 11:15	10/09/15 08:57	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/08/15 11:15	10/09/15 08:57	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/08/15 11:15	10/09/15 08:57	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/08/15 11:15	10/09/15 08:57	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/08/15 11:15	10/09/15 08:57	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/08/15 11:15	10/09/15 08:57	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/08/15 11:15	10/09/15 08:57	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/08/15 11:15	10/09/15 08:57	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/08/15 11:15	10/09/15 08:57	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/08/15 11:15	10/09/15 08:57	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/08/15 11:15	10/09/15 08:57	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/08/15 11:15	10/09/15 08:57	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/08/15 11:15	10/09/15 08:57	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/08/15 11:15	10/09/15 08:57	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/08/15 11:15	10/09/15 08:57	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/08/15 11:15	10/09/15 08:57	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/08/15 11:15	10/09/15 08:57	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/08/15 11:15	10/09/15 08:57	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/08/15 11:15	10/09/15 08:57	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/08/15 11:15	10/09/15 08:57	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	1.5	ug/L		10/08/15 11:15	10/09/15 08:57	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/08/15 11:15	10/09/15 08:57	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-200940/11-A
Matrix: Water
Analysis Batch: 201067

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 200940

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	1.09	J	5.0	0.37	ug/L		10/08/15 11:15	10/09/15 08:57	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/08/15 11:15	10/09/15 08:57	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/08/15 11:15	10/09/15 08:57	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/08/15 11:15	10/09/15 08:57	1
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/08/15 11:15	10/09/15 08:57	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/08/15 11:15	10/09/15 08:57	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/08/15 11:15	10/09/15 08:57	1
Di-n-butyl phthalate	0.445	J	1.0	0.40	ug/L		10/08/15 11:15	10/09/15 08:57	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/08/15 11:15	10/09/15 08:57	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/08/15 11:15	10/09/15 08:57	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/08/15 11:15	10/09/15 08:57	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/08/15 11:15	10/09/15 08:57	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/08/15 11:15	10/09/15 08:57	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/08/15 11:15	10/09/15 08:57	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/08/15 11:15	10/09/15 08:57	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/08/15 11:15	10/09/15 08:57	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/08/15 11:15	10/09/15 08:57	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/08/15 11:15	10/09/15 08:57	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/08/15 11:15	10/09/15 08:57	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/08/15 11:15	10/09/15 08:57	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/08/15 11:15	10/09/15 08:57	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/08/15 11:15	10/09/15 08:57	1
Phenol	1.0	U	1.0	0.15	ug/L		10/08/15 11:15	10/09/15 08:57	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/08/15 11:15	10/09/15 08:57	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/08/15 11:15	10/09/15 08:57	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/08/15 11:15	10/09/15 08:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*57*		*29 - 110*	*10/08/15 11:15*	*10/09/15 08:57*	*1*
2-Fluorophenol (Surr)	*54*		*15 - 110*	*10/08/15 11:15*	*10/09/15 08:57*	*1*
2,4,6-Tribromophenol (Surr)	*47*		*21 - 128*	*10/08/15 11:15*	*10/09/15 08:57*	*1*
Nitrobenzene-d5 (Surr)	*57*		*31 - 110*	*10/08/15 11:15*	*10/09/15 08:57*	*1*
Phenol-d5 (Surr)	*43*		*10 - 110*	*10/08/15 11:15*	*10/09/15 08:57*	*1*
Terphenyl-d14 (Surr)	*64*		*31 - 115*	*10/08/15 11:15*	*10/09/15 08:57*	*1*

Lab Sample ID: LCS 240-200940/12-A
Matrix: Water
Analysis Batch: 201067

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 200940

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	32.0	19.0		ug/L		59	43 - 120
bis (2-chloroisopropyl) ether	32.0	23.7		ug/L		74	45 - 112
2,4,5-Trichlorophenol	32.0	25.2		ug/L		79	49 - 120
2,4,6-Trichlorophenol	32.0	25.3		ug/L		79	50 - 120
2,4-Dichlorophenol	32.0	25.6		ug/L		80	54 - 120
2,4-Dimethylphenol	32.0	27.4		ug/L		86	40 - 125
2,4-Dinitrophenol	64.0	37.1	J	ug/L		58	30 - 120
2,4-Dinitrotoluene	32.0	27.9		ug/L		87	50 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-200940/12-A
Matrix: Water
Analysis Batch: 201067

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 200940

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,6-Dinitrotoluene	32.0	26.8		ug/L		84	52 - 120
2-Chloronaphthalene	32.0	18.5		ug/L		58	43 - 120
2-Chlorophenol	32.0	26.2		ug/L		82	53 - 120
2-Methylnaphthalene	32.0	18.0		ug/L		56	46 - 120
2-Methylphenol	32.0	26.2		ug/L		82	52 - 120
2-Nitroaniline	32.0	26.9		ug/L		84	47 - 120
2-Nitrophenol	32.0	26.5		ug/L		83	53 - 120
3,3'-Dichlorobenzidine	64.0	44.8		ug/L		70	30 - 120
3-Nitroaniline	32.0	29.6		ug/L		93	40 - 144
4,6-Dinitro-2-methylphenol	64.0	43.9		ug/L		69	40 - 120
4-Bromophenyl phenyl ether	32.0	22.2		ug/L		69	49 - 120
4-Chloro-3-methylphenol	32.0	25.3		ug/L		79	55 - 120
4-Chloroaniline	32.0	12.9		ug/L		40	20 - 136
4-Chlorophenyl phenyl ether	32.0	21.6		ug/L		68	48 - 120
4-Nitroaniline	32.0	28.9		ug/L		90	40 - 135
4-Nitrophenol	64.0	36.9		ug/L		58	30 - 120
Acenaphthene	32.0	20.7		ug/L		65	48 - 120
Acenaphthylene	32.0	21.9		ug/L		69	47 - 120
Acetophenone	32.0	26.6		ug/L		83	53 - 120
Anthracene	32.0	23.8		ug/L		75	50 - 120
Atrazine	64.0	53.6		ug/L		84	49 - 120
Benzaldehyde	64.0	86.8	E	ug/L		136	40 - 160
Benzo[a]anthracene	32.0	24.8		ug/L		77	46 - 120
Benzo[a]pyrene	32.0	26.2		ug/L		82	49 - 120
Benzo[b]fluoranthene	32.0	24.2		ug/L		76	49 - 120
Benzo[g,h,i]perylene	32.0	29.4		ug/L		92	48 - 120
Benzo[k]fluoranthene	32.0	27.1		ug/L		85	50 - 120
Bis(2-chloroethoxy)methane	32.0	27.0		ug/L		84	54 - 120
Bis(2-chloroethyl)ether	32.0	26.0		ug/L		81	51 - 120
Bis(2-ethylhexyl) phthalate	32.0	27.5		ug/L		86	30 - 156
Butyl benzyl phthalate	32.0	26.1		ug/L		82	40 - 125
Caprolactam	64.0	21.4		ug/L		33	10 - 120
Carbazole	32.0	26.2		ug/L		82	46 - 127
Chrysene	32.0	25.8		ug/L		81	45 - 120
Dibenz(a,h)anthracene	32.0	25.2		ug/L		79	49 - 120
Dibenzofuran	32.0	21.6		ug/L		67	45 - 120
Diethyl phthalate	32.0	26.9		ug/L		84	48 - 121
Dimethyl phthalate	32.0	26.6		ug/L		83	50 - 120
Di-n-butyl phthalate	32.0	27.1		ug/L		85	40 - 160
Di-n-octyl phthalate	32.0	26.7		ug/L		83	40 - 128
Fluoranthene	32.0	24.6		ug/L		77	50 - 120
Fluorene	32.0	22.3		ug/L		70	50 - 120
Hexachlorobenzene	32.0	22.2		ug/L		70	46 - 120
Hexachlorobutadiene	32.0	13.8		ug/L		43	30 - 120
Hexachlorocyclopentadiene	32.0	10.6		ug/L		33	4 - 120
Hexachloroethane	32.0	15.1		ug/L		47	30 - 120
Indeno[1,2,3-cd]pyrene	32.0	29.3		ug/L		92	48 - 140
Isophorone	32.0	29.0		ug/L		91	52 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-200940/12-A
Matrix: Water
Analysis Batch: 201067

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 200940

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	32.0	18.8		ug/L		59	45 - 120
Nitrobenzene	32.0	25.6		ug/L		80	54 - 120
N-Nitrosodi-n-propylamine	32.0	27.9		ug/L		87	52 - 117
N-Nitrosodiphenylamine	64.0	48.4		ug/L		76	47 - 109
Pentachlorophenol	64.0	38.5	J	ug/L		60	30 - 120
Phenol	32.0	18.8		ug/L		59	40 - 120
Phenanthrene	32.0	23.4		ug/L		73	50 - 120
Pyrene	32.0	25.0		ug/L		78	49 - 114
3 & 4 Methylphenol	32.0	25.5		ug/L		80	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*69*		*29 - 110*
2-Fluorophenol (Surr)	*73*		*15 - 110*
2,4,6-Tribromophenol (Surr)	*81*		*21 - 128*
Nitrobenzene-d5 (Surr)	*81*		*31 - 110*
Phenol-d5 (Surr)	*59*		*10 - 110*
Terphenyl-d14 (Surr)	*86*		*31 - 115*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-200730/1-A
Matrix: Solid
Analysis Batch: 200956

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 200730

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0	0.41	mg/Kg		10/07/15 11:19	10/08/15 14:18	1
Barium	20	U	20	0.41	mg/Kg		10/07/15 11:19	10/08/15 14:18	1
Cadmium	0.0224	J	0.20	0.021	mg/Kg		10/07/15 11:19	10/08/15 14:18	1
Chromium	0.50	U	0.50	0.075	mg/Kg		10/07/15 11:19	10/08/15 14:18	1
Lead	0.30	U	0.30	0.20	mg/Kg		10/07/15 11:19	10/08/15 14:18	1
Selenium	0.50	U	0.50	0.34	mg/Kg		10/07/15 11:19	10/08/15 14:18	1
Silver	0.0759	J	0.50	0.063	mg/Kg		10/07/15 11:19	10/08/15 14:18	1

Lab Sample ID: LCS 240-200730/2-A
Matrix: Solid
Analysis Batch: 200956

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 200730

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	188		mg/Kg		94	80 - 120
Barium	200	173		mg/Kg		86	80 - 120
Cadmium	5.00	4.73		mg/Kg		95	80 - 120
Chromium	20.0	18.0		mg/Kg		90	80 - 120
Lead	50.0	45.6		mg/Kg		91	80 - 120
Selenium	200	188		mg/Kg		94	80 - 120
Silver	5.00	4.66		mg/Kg		93	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 240-200509/1-A
Matrix: Water
Analysis Batch: 200740

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 200509

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10	U	10	2.9	ug/L		10/06/15 10:16	10/07/15 18:10	1
Barium	1.69	J	200	1.0	ug/L		10/06/15 10:16	10/07/15 18:10	1
Cadmium	2.0	U	2.0	0.14	ug/L		10/06/15 10:16	10/07/15 18:10	1
Chromium	5.0	U	5.0	0.55	ug/L		10/06/15 10:16	10/07/15 18:10	1
Lead	3.0	U	3.0	1.9	ug/L		10/06/15 10:16	10/07/15 18:10	1
Selenium	5.0	U	5.0	4.0	ug/L		10/06/15 10:16	10/07/15 18:10	1
Silver	5.0	U	5.0	0.92	ug/L		10/06/15 10:16	10/07/15 18:10	1

Lab Sample ID: LCS 240-200509/2-A
Matrix: Water
Analysis Batch: 200740

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 200509

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2000	1950		ug/L		97	80 - 120
Barium	2000	1860		ug/L		93	80 - 120
Cadmium	50.0	49.0		ug/L		98	80 - 120
Chromium	200	187		ug/L		94	80 - 120
Lead	500	465		ug/L		93	80 - 120
Selenium	2000	1990		ug/L		99	80 - 120
Silver	50.0	49.2		ug/L		98	80 - 120

Lab Sample ID: 240-56145-6 MS
Matrix: Water
Analysis Batch: 200740

Client Sample ID: VAP-9-GW (35-36')
Prep Type: Total Recoverable
Prep Batch: 200509

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	10	U	2000	2090		ug/L		104	75 - 125
Barium	120	J B	2000	2140		ug/L		101	75 - 125
Cadmium	0.21	J	50.0	52.2		ug/L		104	75 - 125
Chromium	1.3	J	200	202		ug/L		100	75 - 125
Lead	3.0	U	500	494		ug/L		99	75 - 125
Selenium	5.0	U	2000	2140		ug/L		107	75 - 125
Silver	5.0	U	50.0	52.5		ug/L		105	75 - 125

Lab Sample ID: 240-56145-6 MSD
Matrix: Water
Analysis Batch: 200740

Client Sample ID: VAP-9-GW (35-36')
Prep Type: Total Recoverable
Prep Batch: 200509

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	10	U	2000	2060		ug/L		103	75 - 125	1	20
Barium	120	J B	2000	2070		ug/L		98	75 - 125	3	20
Cadmium	0.21	J	50.0	51.5		ug/L		103	75 - 125	1	20
Chromium	1.3	J	200	197		ug/L		98	75 - 125	2	20
Lead	3.0	U	500	485		ug/L		97	75 - 125	2	20
Selenium	5.0	U	2000	2100		ug/L		105	75 - 125	2	20
Silver	5.0	U	50.0	50.7		ug/L		101	75 - 125	3	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-200510/1-A
Matrix: Water
Analysis Batch: 201659

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 200510

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/06/15 14:00	10/13/15 11:04	1

Lab Sample ID: LCS 240-200510/2-A
Matrix: Water
Analysis Batch: 201659

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 200510

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.71		ug/L		94	80 - 120

Lab Sample ID: 240-56145-6 MS
Matrix: Water
Analysis Batch: 201659

Client Sample ID: VAP-9-GW (35-36')
Prep Type: Total/NA
Prep Batch: 200510

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.20	U	1.00	0.968		ug/L		97	80 - 120

Lab Sample ID: 240-56145-6 MSD
Matrix: Water
Analysis Batch: 201659

Client Sample ID: VAP-9-GW (35-36')
Prep Type: Total/NA
Prep Batch: 200510

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.20	U	1.00	0.967		ug/L		97	80 - 120	0	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 240-200749/1-A
Matrix: Solid
Analysis Batch: 201208

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 200749

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10	U	0.10	0.014	mg/Kg		10/07/15 16:25	10/09/15 10:46	1

Lab Sample ID: LCS 240-200749/2-A
Matrix: Solid
Analysis Batch: 201208

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 200749

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.884		mg/Kg		106	80 - 120

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 240-200719/9-A
Matrix: Solid
Analysis Batch: 200947

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 200719

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.80	U	0.80	0.26	mg/Kg		10/07/15 10:18	10/08/15 00:00	1

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: LCSI 240-200719/11-A
Matrix: Solid
Analysis Batch: 200947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 200719

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	643	541		mg/Kg		84	75 - 125

Lab Sample ID: LCSS 240-200719/10-A
Matrix: Solid
Analysis Batch: 200947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 200719

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	20.0	18.1		mg/Kg		91	90 - 110

Method: Moisture - Percent Moisture

Lab Sample ID: 240-56145-10 DU
Matrix: Solid
Analysis Batch: 200314

Client Sample ID: DUP-01 (100115)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	83		83		%		0.3	20
Percent Moisture	17		17		%		1	20

GC/MS VOA

Analysis Batch: 200552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-2	VAP-9-GW (15-16')	Total/NA	Water	8260B	
240-56145-4	VAP-9-GW (25-26')	Total/NA	Water	8260B	
LCS 240-200552/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-200552/6	Method Blank	Total/NA	Water	8260B	

Prep Batch: 200616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-1	VAP-9 (2-4)	Total/NA	Solid	5035	
240-56145-10	DUP-01 (100115)	Total/NA	Solid	5035	
240-56145-12	VAP-1 (1-2)	Total/NA	Solid	5035	

Analysis Batch: 201138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-3	VAP-9-GW (20-21')	Total/NA	Water	8260B	
240-56145-5	VAP-9-GW (30-31')	Total/NA	Water	8260B	
LCS 240-201138/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-201138/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 201259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-1	VAP-9 (2-4)	Total/NA	Solid	8260B	200616
240-56145-10	DUP-01 (100115)	Total/NA	Solid	8260B	200616
240-56145-12	VAP-1 (1-2)	Total/NA	Solid	8260B	200616
LCS 240-201259/5	Lab Control Sample	Total/NA	Solid	8260B	
MB 240-201259/7	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 201374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-20	VAP-1-GW (45-46')	Total/NA	Water	8260B	
240-56145-21	VAP-1-GW (49-50')	Total/NA	Water	8260B	
LCS 240-201374/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-201374/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 201375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-6	VAP-9-GW (35-36')	Total/NA	Water	8260B	
240-56145-7	VAP-9-GW (40-41')	Total/NA	Water	8260B	
240-56145-8	VAP-9-GW (45-46')	Total/NA	Water	8260B	
240-56145-9	VAP-9-GW (49-50')	Total/NA	Water	8260B	
240-56145-11	TB-01 (100115)	Total/NA	Water	8260B	
240-56145-13	VAP-1-GW (12-13')	Total/NA	Water	8260B	
240-56145-14	VAP-1-GW (15-16')	Total/NA	Water	8260B	
240-56145-15	VAP-1-GW (20-21')	Total/NA	Water	8260B	
240-56145-16	VAP-1-GW (25-26')	Total/NA	Water	8260B	
240-56145-17	VAP-1-GW (30-31')	Total/NA	Water	8260B	
240-56145-18	VAP-1-GW (35-36')	Total/NA	Water	8260B	
240-56145-19	VAP-1-GW (40-41')	Total/NA	Water	8260B	
LCS 240-201375/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-201375/6	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 200464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-1	VAP-9 (2-4)	Total/NA	Solid	3540C	
240-56145-10	DUP-01 (100115)	Total/NA	Solid	3540C	
240-56145-12	VAP-1 (1-2)	Total/NA	Solid	3540C	
240-56145-12 MS	VAP-1 (1-2)	Total/NA	Solid	3540C	
240-56145-12 MSD	VAP-1 (1-2)	Total/NA	Solid	3540C	
LCS 240-200464/14-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-200464/13-A	Method Blank	Total/NA	Solid	3540C	

Prep Batch: 200483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-2	VAP-9-GW (15-16')	Total/NA	Water	3510C	
240-56145-3	VAP-9-GW (20-21')	Total/NA	Water	3510C	
240-56145-5	VAP-9-GW (30-31')	Total/NA	Water	3510C	
240-56145-6	VAP-9-GW (35-36')	Total/NA	Water	3510C	
240-56145-7	VAP-9-GW (40-41')	Total/NA	Water	3510C	
240-56145-8	VAP-9-GW (45-46')	Total/NA	Water	3510C	
240-56145-9	VAP-9-GW (49-50')	Total/NA	Water	3510C	
240-56145-13	VAP-1-GW (12-13')	Total/NA	Water	3510C	
240-56145-14	VAP-1-GW (15-16')	Total/NA	Water	3510C	
240-56145-15	VAP-1-GW (20-21')	Total/NA	Water	3510C	
240-56145-15 - RA	VAP-1-GW (20-21')	Total/NA	Water	3510C	
240-56145-17	VAP-1-GW (30-31')	Total/NA	Water	3510C	
240-56145-20	VAP-1-GW (45-46')	Total/NA	Water	3510C	
240-56145-21	VAP-1-GW (49-50')	Total/NA	Water	3510C	
LCS 240-200483/19-A	Lab Control Sample	Total/NA	Water	3510C	
MB 240-200483/18-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 200658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-2	VAP-9-GW (15-16')	Total/NA	Water	8270C	200483
240-56145-3	VAP-9-GW (20-21')	Total/NA	Water	8270C	200483
240-56145-5	VAP-9-GW (30-31')	Total/NA	Water	8270C	200483
240-56145-6	VAP-9-GW (35-36')	Total/NA	Water	8270C	200483
240-56145-7	VAP-9-GW (40-41')	Total/NA	Water	8270C	200483
240-56145-8	VAP-9-GW (45-46')	Total/NA	Water	8270C	200483
240-56145-9	VAP-9-GW (49-50')	Total/NA	Water	8270C	200483
240-56145-13	VAP-1-GW (12-13')	Total/NA	Water	8270C	200483
240-56145-14	VAP-1-GW (15-16')	Total/NA	Water	8270C	200483
240-56145-15	VAP-1-GW (20-21')	Total/NA	Water	8270C	200483
240-56145-17	VAP-1-GW (30-31')	Total/NA	Water	8270C	200483
240-56145-20	VAP-1-GW (45-46')	Total/NA	Water	8270C	200483
240-56145-21	VAP-1-GW (49-50')	Total/NA	Water	8270C	200483
LCS 240-200483/19-A	Lab Control Sample	Total/NA	Water	8270C	200483
MB 240-200483/18-A	Method Blank	Total/NA	Water	8270C	200483

Analysis Batch: 200833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-15 - RA	VAP-1-GW (20-21')	Total/NA	Water	8270C	200483

GC/MS Semi VOA (Continued)

Analysis Batch: 200852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-1	VAP-9 (2-4)	Total/NA	Solid	8270C	200464
240-56145-10	DUP-01 (100115)	Total/NA	Solid	8270C	200464
240-56145-12	VAP-1 (1-2)	Total/NA	Solid	8270C	200464
240-56145-12 MS	VAP-1 (1-2)	Total/NA	Solid	8270C	200464
240-56145-12 MSD	VAP-1 (1-2)	Total/NA	Solid	8270C	200464
LCS 240-200464/14-A	Lab Control Sample	Total/NA	Solid	8270C	200464
MB 240-200464/13-A	Method Blank	Total/NA	Solid	8270C	200464

Prep Batch: 200940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-4	VAP-9-GW (25-26')	Total/NA	Water	3510C	
240-56145-16	VAP-1-GW (25-26')	Total/NA	Water	3510C	
240-56145-18	VAP-1-GW (35-36')	Total/NA	Water	3510C	
240-56145-19	VAP-1-GW (40-41')	Total/NA	Water	3510C	
LCS 240-200940/12-A	Lab Control Sample	Total/NA	Water	3510C	
MB 240-200940/11-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 201067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-4	VAP-9-GW (25-26')	Total/NA	Water	8270C	200940
240-56145-16	VAP-1-GW (25-26')	Total/NA	Water	8270C	200940
240-56145-18	VAP-1-GW (35-36')	Total/NA	Water	8270C	200940
240-56145-19	VAP-1-GW (40-41')	Total/NA	Water	8270C	200940
LCS 240-200940/12-A	Lab Control Sample	Total/NA	Water	8270C	200940
MB 240-200940/11-A	Method Blank	Total/NA	Water	8270C	200940

Metals

Prep Batch: 200509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-2	VAP-9-GW (15-16')	Total Recoverable	Water	3005A	
240-56145-3	VAP-9-GW (20-21')	Total Recoverable	Water	3005A	
240-56145-4	VAP-9-GW (25-26')	Total Recoverable	Water	3005A	
240-56145-5	VAP-9-GW (30-31')	Total Recoverable	Water	3005A	
240-56145-6	VAP-9-GW (35-36')	Total Recoverable	Water	3005A	
240-56145-6 MS	VAP-9-GW (35-36')	Total Recoverable	Water	3005A	
240-56145-6 MSD	VAP-9-GW (35-36')	Total Recoverable	Water	3005A	
240-56145-7	VAP-9-GW (40-41')	Total Recoverable	Water	3005A	
240-56145-8	VAP-9-GW (45-46')	Total Recoverable	Water	3005A	
240-56145-9	VAP-9-GW (49-50')	Total Recoverable	Water	3005A	
240-56145-13	VAP-1-GW (12-13')	Total Recoverable	Water	3005A	
240-56145-14	VAP-1-GW (15-16')	Total Recoverable	Water	3005A	
240-56145-15	VAP-1-GW (20-21')	Total Recoverable	Water	3005A	
240-56145-16	VAP-1-GW (25-26')	Total Recoverable	Water	3005A	
240-56145-17	VAP-1-GW (30-31')	Total Recoverable	Water	3005A	
240-56145-18	VAP-1-GW (35-36')	Total Recoverable	Water	3005A	
240-56145-19	VAP-1-GW (40-41')	Total Recoverable	Water	3005A	
240-56145-20	VAP-1-GW (45-46')	Total Recoverable	Water	3005A	
240-56145-21	VAP-1-GW (49-50')	Total Recoverable	Water	3005A	
LCS 240-200509/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Metals (Continued)

Prep Batch: 200509 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-200509/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 200510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-2	VAP-9-GW (15-16')	Total/NA	Water	7470A	
240-56145-3	VAP-9-GW (20-21')	Total/NA	Water	7470A	
240-56145-4	VAP-9-GW (25-26')	Total/NA	Water	7470A	
240-56145-5	VAP-9-GW (30-31')	Total/NA	Water	7470A	
240-56145-6	VAP-9-GW (35-36')	Total/NA	Water	7470A	
240-56145-6 MS	VAP-9-GW (35-36')	Total/NA	Water	7470A	
240-56145-6 MSD	VAP-9-GW (35-36')	Total/NA	Water	7470A	
240-56145-7	VAP-9-GW (40-41')	Total/NA	Water	7470A	
240-56145-8	VAP-9-GW (45-46')	Total/NA	Water	7470A	
240-56145-9	VAP-9-GW (49-50')	Total/NA	Water	7470A	
240-56145-13	VAP-1-GW (12-13')	Total/NA	Water	7470A	
240-56145-14	VAP-1-GW (15-16')	Total/NA	Water	7470A	
240-56145-15	VAP-1-GW (20-21')	Total/NA	Water	7470A	
240-56145-16	VAP-1-GW (25-26')	Total/NA	Water	7470A	
240-56145-17	VAP-1-GW (30-31')	Total/NA	Water	7470A	
240-56145-18	VAP-1-GW (35-36')	Total/NA	Water	7470A	
240-56145-19	VAP-1-GW (40-41')	Total/NA	Water	7470A	
240-56145-20	VAP-1-GW (45-46')	Total/NA	Water	7470A	
240-56145-21	VAP-1-GW (49-50')	Total/NA	Water	7470A	
LCS 240-200510/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 240-200510/1-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 200730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-1	VAP-9 (2-4)	Total/NA	Solid	3050B	
240-56145-10	DUP-01 (100115)	Total/NA	Solid	3050B	
240-56145-12	VAP-1 (1-2)	Total/NA	Solid	3050B	
LCS 240-200730/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 240-200730/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 200740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-2	VAP-9-GW (15-16')	Total Recoverable	Water	6010B	200509
240-56145-3	VAP-9-GW (20-21')	Total Recoverable	Water	6010B	200509
240-56145-4	VAP-9-GW (25-26')	Total Recoverable	Water	6010B	200509
240-56145-5	VAP-9-GW (30-31')	Total Recoverable	Water	6010B	200509
240-56145-6	VAP-9-GW (35-36')	Total Recoverable	Water	6010B	200509
240-56145-6 MS	VAP-9-GW (35-36')	Total Recoverable	Water	6010B	200509
240-56145-6 MSD	VAP-9-GW (35-36')	Total Recoverable	Water	6010B	200509
240-56145-7	VAP-9-GW (40-41')	Total Recoverable	Water	6010B	200509
240-56145-8	VAP-9-GW (45-46')	Total Recoverable	Water	6010B	200509
240-56145-9	VAP-9-GW (49-50')	Total Recoverable	Water	6010B	200509
240-56145-13	VAP-1-GW (12-13')	Total Recoverable	Water	6010B	200509
240-56145-14	VAP-1-GW (15-16')	Total Recoverable	Water	6010B	200509
240-56145-15	VAP-1-GW (20-21')	Total Recoverable	Water	6010B	200509
240-56145-16	VAP-1-GW (25-26')	Total Recoverable	Water	6010B	200509
240-56145-17	VAP-1-GW (30-31')	Total Recoverable	Water	6010B	200509

Metals (Continued)

Analysis Batch: 200740 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-18	VAP-1-GW (35-36')	Total Recoverable	Water	6010B	200509
240-56145-19	VAP-1-GW (40-41')	Total Recoverable	Water	6010B	200509
240-56145-20	VAP-1-GW (45-46')	Total Recoverable	Water	6010B	200509
240-56145-21	VAP-1-GW (49-50')	Total Recoverable	Water	6010B	200509
LCS 240-200509/2-A	Lab Control Sample	Total Recoverable	Water	6010B	200509
MB 240-200509/1-A	Method Blank	Total Recoverable	Water	6010B	200509

Prep Batch: 200749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-1	VAP-9 (2-4)	Total/NA	Solid	7471A	
240-56145-10	DUP-01 (100115)	Total/NA	Solid	7471A	
240-56145-12	VAP-1 (1-2)	Total/NA	Solid	7471A	
LCS 240-200749/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 240-200749/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 200956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-1	VAP-9 (2-4)	Total/NA	Solid	6010B	200730
240-56145-12	VAP-1 (1-2)	Total/NA	Solid	6010B	200730
LCS 240-200730/2-A	Lab Control Sample	Total/NA	Solid	6010B	200730
MB 240-200730/1-A	Method Blank	Total/NA	Solid	6010B	200730

Analysis Batch: 201017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-15	VAP-1-GW (20-21')	Total/NA	Water	7470A	200510
240-56145-16	VAP-1-GW (25-26')	Total/NA	Water	7470A	200510
240-56145-17	VAP-1-GW (30-31')	Total/NA	Water	7470A	200510
240-56145-18	VAP-1-GW (35-36')	Total/NA	Water	7470A	200510
240-56145-19	VAP-1-GW (40-41')	Total/NA	Water	7470A	200510
240-56145-20	VAP-1-GW (45-46')	Total/NA	Water	7470A	200510
240-56145-21	VAP-1-GW (49-50')	Total/NA	Water	7470A	200510

Analysis Batch: 201208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-1	VAP-9 (2-4)	Total/NA	Solid	7471A	200749
240-56145-10	DUP-01 (100115)	Total/NA	Solid	7471A	200749
240-56145-12	VAP-1 (1-2)	Total/NA	Solid	7471A	200749
LCS 240-200749/2-A	Lab Control Sample	Total/NA	Solid	7471A	200749
MB 240-200749/1-A	Method Blank	Total/NA	Solid	7471A	200749

Analysis Batch: 201368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-10	DUP-01 (100115)	Total/NA	Solid	6010B	200730
240-56145-12	VAP-1 (1-2)	Total/NA	Solid	6010B	200730
240-56145-14	VAP-1-GW (15-16')	Total Recoverable	Water	6010B	200509
240-56145-15	VAP-1-GW (20-21')	Total Recoverable	Water	6010B	200509
240-56145-16	VAP-1-GW (25-26')	Total Recoverable	Water	6010B	200509

Analysis Batch: 201659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-2	VAP-9-GW (15-16')	Total/NA	Water	7470A	200510

Metals (Continued)

Analysis Batch: 201659 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-3	VAP-9-GW (20-21')	Total/NA	Water	7470A	200510
240-56145-4	VAP-9-GW (25-26')	Total/NA	Water	7470A	200510
240-56145-5	VAP-9-GW (30-31')	Total/NA	Water	7470A	200510
240-56145-6	VAP-9-GW (35-36')	Total/NA	Water	7470A	200510
240-56145-6 MS	VAP-9-GW (35-36')	Total/NA	Water	7470A	200510
240-56145-6 MSD	VAP-9-GW (35-36')	Total/NA	Water	7470A	200510
240-56145-7	VAP-9-GW (40-41')	Total/NA	Water	7470A	200510
240-56145-8	VAP-9-GW (45-46')	Total/NA	Water	7470A	200510
240-56145-9	VAP-9-GW (49-50')	Total/NA	Water	7470A	200510
240-56145-13	VAP-1-GW (12-13')	Total/NA	Water	7470A	200510
240-56145-14	VAP-1-GW (15-16')	Total/NA	Water	7470A	200510
LCS 240-200510/2-A	Lab Control Sample	Total/NA	Water	7470A	200510
MB 240-200510/1-A	Method Blank	Total/NA	Water	7470A	200510

General Chemistry

Analysis Batch: 200314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-1	VAP-9 (2-4)	Total/NA	Solid	Moisture	
240-56145-10	DUP-01 (100115)	Total/NA	Solid	Moisture	
240-56145-10 DU	DUP-01 (100115)	Total/NA	Solid	Moisture	
240-56145-12	VAP-1 (1-2)	Total/NA	Solid	Moisture	

Prep Batch: 200719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-1	VAP-9 (2-4)	Total/NA	Solid	3060A	
240-56145-10	DUP-01 (100115)	Total/NA	Solid	3060A	
240-56145-12	VAP-1 (1-2)	Total/NA	Solid	3060A	
LCSI 240-200719/11-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 240-200719/10-A	Lab Control Sample	Total/NA	Solid	3060A	
MB 240-200719/9-A	Method Blank	Total/NA	Solid	3060A	

Analysis Batch: 200947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56145-1	VAP-9 (2-4)	Total/NA	Solid	7196A	200719
240-56145-10	DUP-01 (100115)	Total/NA	Solid	7196A	200719
240-56145-12	VAP-1 (1-2)	Total/NA	Solid	7196A	200719
LCSI 240-200719/11-A	Lab Control Sample	Total/NA	Solid	7196A	200719
LCSS 240-200719/10-A	Lab Control Sample	Total/NA	Solid	7196A	200719
MB 240-200719/9-A	Method Blank	Total/NA	Solid	7196A	200719

Client Sample ID: VAP-9 (2-4)
Date Collected: 10/01/15 13:17
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	200314	10/05/15 10:13	DTN	TAL CAN

Client Sample ID: VAP-9 (2-4)
Date Collected: 10/01/15 13:17
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-1
Matrix: Solid
Percent Solids: 82.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			200616	10/06/15 20:02	LAM	TAL CAN
Total/NA	Analysis	8260B		1	201259	10/10/15 07:58	TJL2	TAL CAN
Total/NA	Prep	3540C			200464	10/06/15 07:57	NAK	TAL CAN
Total/NA	Analysis	8270C		1	200852	10/08/15 13:58	MRU	TAL CAN
Total/NA	Prep	3050B			200730	10/07/15 11:19	DEE	TAL CAN
Total/NA	Analysis	6010B		1	200956	10/08/15 17:17	WAL	TAL CAN
Total/NA	Prep	7471A			200749	10/07/15 16:25	DEE	TAL CAN
Total/NA	Analysis	7471A		1	201208	10/09/15 11:01	WAL	TAL CAN
Total/NA	Prep	3060A			200719	10/07/15 10:18	GNR	TAL CAN
Total/NA	Analysis	7196A		1	200947	10/08/15 11:02	GNR	TAL CAN

Client Sample ID: VAP-9-GW (15-16')
Date Collected: 10/01/15 14:00
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	200552	10/06/15 21:33	LRW	TAL CAN
Total/NA	Prep	3510C			200483	10/06/15 08:39	CS	TAL CAN
Total/NA	Analysis	8270C		1	200658	10/07/15 12:47	TMH	TAL CAN
Total Recoverable	Prep	3005A			200509	10/06/15 10:16	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	200740	10/07/15 18:46	WAL	TAL CAN
Total/NA	Prep	7470A			200510	10/06/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201659	10/13/15 11:15	WAL	TAL CAN

Client Sample ID: VAP-9-GW (20-21')
Date Collected: 10/01/15 14:30
Date Received: 10/03/15 09:30

Lab Sample ID: 240-56145-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201138	10/09/15 19:41	RJQ	TAL CAN
Total/NA	Prep	3510C			200483	10/06/15 08:39	CS	TAL CAN
Total/NA	Analysis	8270C		1	200658	10/07/15 13:10	TMH	TAL CAN
Total Recoverable	Prep	3005A			200509	10/06/15 10:16	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	200740	10/07/15 18:50	WAL	TAL CAN
Total/NA	Prep	7470A			200510	10/06/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201659	10/13/15 11:17	WAL	TAL CAN

Client Sample ID: VAP-9-GW (25-26')

Lab Sample ID: 240-56145-4

Date Collected: 10/01/15 15:08

Matrix: Water

Date Received: 10/03/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	200552	10/06/15 21:56	LRW	TAL CAN
Total/NA	Prep	3510C			200940	10/08/15 11:15	CS	TAL CAN
Total/NA	Analysis	8270C		1	201067	10/09/15 12:24	TMH	TAL CAN
Total Recoverable	Prep	3005A			200509	10/06/15 10:16	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	200740	10/07/15 18:54	WAL	TAL CAN
Total/NA	Prep	7470A			200510	10/06/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201659	10/13/15 11:24	WAL	TAL CAN

Client Sample ID: VAP-9-GW (30-31')

Lab Sample ID: 240-56145-5

Date Collected: 10/01/15 15:57

Matrix: Water

Date Received: 10/03/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201138	10/09/15 20:03	RJQ	TAL CAN
Total/NA	Prep	3510C			200483	10/06/15 08:39	CS	TAL CAN
Total/NA	Analysis	8270C		1	200658	10/07/15 13:56	TMH	TAL CAN
Total Recoverable	Prep	3005A			200509	10/06/15 10:16	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	200740	10/07/15 18:58	WAL	TAL CAN
Total/NA	Prep	7470A			200510	10/06/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201659	10/13/15 11:26	WAL	TAL CAN

Client Sample ID: VAP-9-GW (35-36')

Lab Sample ID: 240-56145-6

Date Collected: 10/01/15 16:42

Matrix: Water

Date Received: 10/03/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201375	10/12/15 13:31	LEE	TAL CAN
Total/NA	Prep	3510C			200483	10/06/15 08:39	CS	TAL CAN
Total/NA	Analysis	8270C		1	200658	10/07/15 14:19	TMH	TAL CAN
Total Recoverable	Prep	3005A			200509	10/06/15 10:16	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	200740	10/07/15 18:26	WAL	TAL CAN
Total/NA	Prep	7470A			200510	10/06/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201659	10/13/15 11:09	WAL	TAL CAN

Client Sample ID: VAP-9-GW (40-41')

Lab Sample ID: 240-56145-7

Date Collected: 10/01/15 16:55

Matrix: Water

Date Received: 10/03/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201375	10/12/15 13:53	LEE	TAL CAN
Total/NA	Prep	3510C			200483	10/06/15 08:39	CS	TAL CAN
Total/NA	Analysis	8270C		1	200658	10/07/15 14:42	TMH	TAL CAN

Client Sample ID: VAP-9-GW (40-41')

Lab Sample ID: 240-56145-7

Date Collected: 10/01/15 16:55

Matrix: Water

Date Received: 10/03/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			200509	10/06/15 10:16	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	200740	10/07/15 19:02	WAL	TAL CAN
Total/NA	Prep	7470A			200510	10/06/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201659	10/13/15 11:28	WAL	TAL CAN

Client Sample ID: VAP-9-GW (45-46')

Lab Sample ID: 240-56145-8

Date Collected: 10/01/15 17:28

Matrix: Water

Date Received: 10/03/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201375	10/12/15 14:15	LEE	TAL CAN
Total/NA	Prep	3510C			200483	10/06/15 08:39	CS	TAL CAN
Total/NA	Analysis	8270C		1	200658	10/07/15 15:05	TMH	TAL CAN
Total Recoverable	Prep	3005A			200509	10/06/15 10:16	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	200740	10/07/15 19:14	WAL	TAL CAN
Total/NA	Prep	7470A			200510	10/06/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201659	10/13/15 11:30	WAL	TAL CAN

Client Sample ID: VAP-9-GW (49-50')

Lab Sample ID: 240-56145-9

Date Collected: 10/01/15 18:00

Matrix: Water

Date Received: 10/03/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201375	10/12/15 14:38	LEE	TAL CAN
Total/NA	Prep	3510C			200483	10/06/15 08:39	CS	TAL CAN
Total/NA	Analysis	8270C		1	200658	10/07/15 15:28	TMH	TAL CAN
Total Recoverable	Prep	3005A			200509	10/06/15 10:16	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	200740	10/07/15 19:18	WAL	TAL CAN
Total/NA	Prep	7470A			200510	10/06/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201659	10/13/15 11:32	WAL	TAL CAN

Client Sample ID: DUP-01 (100115)

Lab Sample ID: 240-56145-10

Date Collected: 10/01/15 00:00

Matrix: Solid

Date Received: 10/03/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	200314	10/05/15 10:13	DTN	TAL CAN

Client Sample ID: DUP-01 (100115)

Lab Sample ID: 240-56145-10
Date Collected: 10/01/15 00:00
Matrix: Solid
Date Received: 10/03/15 09:30
Percent Solids: 83.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			200616	10/06/15 20:02	LAM	TAL CAN
Total/NA	Analysis	8260B		1	201259	10/10/15 08:20	TJL2	TAL CAN
Total/NA	Prep	3540C			200464	10/06/15 07:57	NAK	TAL CAN
Total/NA	Analysis	8270C		1	200852	10/08/15 14:23	MRU	TAL CAN
Total/NA	Prep	3050B			200730	10/07/15 11:19	DEE	TAL CAN
Total/NA	Analysis	6010B		2	201368	10/09/15 20:14	KLC	TAL CAN
Total/NA	Prep	7471A			200749	10/07/15 16:25	DEE	TAL CAN
Total/NA	Analysis	7471A		1	201208	10/09/15 11:10	WAL	TAL CAN
Total/NA	Prep	3060A			200719	10/07/15 10:18	GNR	TAL CAN
Total/NA	Analysis	7196A		1	200947	10/08/15 11:04	GNR	TAL CAN

Client Sample ID: TB-01 (100115)

Lab Sample ID: 240-56145-11
Date Collected: 10/01/15 00:00
Matrix: Water
Date Received: 10/03/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201375	10/12/15 15:01	LEE	TAL CAN

Client Sample ID: VAP-1 (1-2)

Lab Sample ID: 240-56145-12
Date Collected: 10/02/15 07:55
Matrix: Solid
Date Received: 10/03/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	200314	10/05/15 10:13	DTN	TAL CAN

Client Sample ID: VAP-1 (1-2)

Lab Sample ID: 240-56145-12
Date Collected: 10/02/15 07:55
Matrix: Solid
Date Received: 10/03/15 09:30
Percent Solids: 83.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			200616	10/06/15 20:02	LAM	TAL CAN
Total/NA	Analysis	8260B		1	201259	10/10/15 08:41	TJL2	TAL CAN
Total/NA	Prep	3540C			200464	10/06/15 07:57	NAK	TAL CAN
Total/NA	Analysis	8270C		1	200852	10/08/15 14:49	MRU	TAL CAN
Total/NA	Prep	3050B			200730	10/07/15 11:19	DEE	TAL CAN
Total/NA	Analysis	6010B		1	200956	10/08/15 17:26	WAL	TAL CAN
Total/NA	Prep	3050B			200730	10/07/15 11:19	DEE	TAL CAN
Total/NA	Analysis	6010B		1	201368	10/09/15 20:18	KLC	TAL CAN
Total/NA	Prep	7471A			200749	10/07/15 16:25	DEE	TAL CAN
Total/NA	Analysis	7471A		1	201208	10/09/15 11:14	WAL	TAL CAN
Total/NA	Prep	3060A			200719	10/07/15 10:18	GNR	TAL CAN
Total/NA	Analysis	7196A		1	200947	10/08/15 11:06	GNR	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Client Sample ID: VAP-1-GW (12-13')

Lab Sample ID: 240-56145-13

Date Collected: 10/02/15 08:00
Matrix: Water
Date Received: 10/03/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201375	10/12/15 15:23	LEE	TAL CAN
Total/NA	Prep	3510C			200483	10/06/15 08:39	CS	TAL CAN
Total/NA	Analysis	8270C		1	200658	10/07/15 15:51	TMH	TAL CAN
Total Recoverable	Prep	3005A			200509	10/06/15 10:16	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	200740	10/07/15 19:22	WAL	TAL CAN
Total/NA	Prep	7470A			200510	10/06/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201659	10/13/15 11:35	WAL	TAL CAN

Client Sample ID: VAP-1-GW (15-16')

Lab Sample ID: 240-56145-14

Date Collected: 10/02/15 08:47
Matrix: Water
Date Received: 10/03/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201375	10/12/15 15:46	LEE	TAL CAN
Total/NA	Prep	3510C			200483	10/06/15 08:39	CS	TAL CAN
Total/NA	Analysis	8270C		1	200658	10/07/15 16:14	TMH	TAL CAN
Total Recoverable	Prep	3005A			200509	10/06/15 10:16	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	200740	10/07/15 19:26	WAL	TAL CAN
Total Recoverable	Prep	3005A			200509	10/06/15 10:16	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201368	10/09/15 17:13	KLC	TAL CAN
Total/NA	Prep	7470A			200510	10/06/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201659	10/13/15 11:37	WAL	TAL CAN

Client Sample ID: VAP-1-GW (20-21')

Lab Sample ID: 240-56145-15

Date Collected: 10/02/15 09:15
Matrix: Water
Date Received: 10/03/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201375	10/12/15 16:09	LEE	TAL CAN
Total/NA	Prep	3510C			200483	10/06/15 08:39	CS	TAL CAN
Total/NA	Analysis	8270C		1	200658	10/07/15 16:37	TMH	TAL CAN
Total/NA	Prep	3510C	RA		200483	10/06/15 08:39	CS	TAL CAN
Total/NA	Analysis	8270C	RA	2	200833	10/08/15 14:48	TMH	TAL CAN
Total Recoverable	Prep	3005A			200509	10/06/15 10:16	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	200740	10/07/15 19:30	WAL	TAL CAN
Total Recoverable	Prep	3005A			200509	10/06/15 10:16	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201368	10/09/15 17:17	KLC	TAL CAN
Total/NA	Prep	7470A			200510	10/06/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201017	10/08/15 07:59	WAL	TAL CAN

Client Sample ID: VAP-1-GW (25-26')

Lab Sample ID: 240-56145-16

Date Collected: 10/02/15 09:43

Matrix: Water

Date Received: 10/03/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201375	10/12/15 16:32	LEE	TAL CAN
Total/NA	Prep	3510C			200940	10/08/15 11:15	CS	TAL CAN
Total/NA	Analysis	8270C		1	201067	10/09/15 13:56	TMH	TAL CAN
Total Recoverable	Prep	3005A			200509	10/06/15 10:16	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	200740	10/07/15 19:35	WAL	TAL CAN
Total Recoverable	Prep	3005A			200509	10/06/15 10:16	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201368	10/09/15 17:21	KLC	TAL CAN
Total/NA	Prep	7470A			200510	10/06/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201017	10/08/15 08:00	WAL	TAL CAN

Client Sample ID: VAP-1-GW (30-31')

Lab Sample ID: 240-56145-17

Date Collected: 10/02/15 10:03

Matrix: Water

Date Received: 10/03/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201375	10/12/15 16:54	LEE	TAL CAN
Total/NA	Prep	3510C			200483	10/06/15 08:39	CS	TAL CAN
Total/NA	Analysis	8270C		1	200658	10/07/15 17:23	TMH	TAL CAN
Total Recoverable	Prep	3005A			200509	10/06/15 10:16	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	200740	10/07/15 19:39	WAL	TAL CAN
Total/NA	Prep	7470A			200510	10/06/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201017	10/08/15 08:02	WAL	TAL CAN

Client Sample ID: VAP-1-GW (35-36')

Lab Sample ID: 240-56145-18

Date Collected: 10/02/15 10:27

Matrix: Water

Date Received: 10/03/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201375	10/12/15 17:17	LEE	TAL CAN
Total/NA	Prep	3510C			200940	10/08/15 11:15	CS	TAL CAN
Total/NA	Analysis	8270C		1	201067	10/09/15 14:42	TMH	TAL CAN
Total Recoverable	Prep	3005A			200509	10/06/15 10:16	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	200740	10/07/15 19:43	WAL	TAL CAN
Total/NA	Prep	7470A			200510	10/06/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201017	10/08/15 08:03	WAL	TAL CAN

Client Sample ID: VAP-1-GW (40-41')

Lab Sample ID: 240-56145-19

Date Collected: 10/02/15 10:55

Matrix: Water

Date Received: 10/03/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201375	10/12/15 17:39	LEE	TAL CAN
Total/NA	Prep	3510C			200940	10/08/15 11:15	CS	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Client Sample ID: VAP-1-GW (40-41')

Lab Sample ID: 240-56145-19

Date Collected: 10/02/15 10:55
Matrix: Water
Date Received: 10/03/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		1	201067	10/09/15 15:05	TMH	TAL CAN
Total Recoverable	Prep	3005A			200509	10/06/15 10:17	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	200740	10/07/15 19:47	WAL	TAL CAN
Total/NA	Prep	7470A			200510	10/06/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201017	10/08/15 08:05	WAL	TAL CAN

Client Sample ID: VAP-1-GW (45-46')

Lab Sample ID: 240-56145-20

Date Collected: 10/02/15 11:28
Matrix: Water
Date Received: 10/03/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201374	10/12/15 17:20	LEE	TAL CAN
Total/NA	Prep	3510C			200483	10/06/15 08:39	CS	TAL CAN
Total/NA	Analysis	8270C		1	200658	10/07/15 18:33	TMH	TAL CAN
Total Recoverable	Prep	3005A			200509	10/06/15 10:17	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	200740	10/07/15 19:51	WAL	TAL CAN
Total/NA	Prep	7470A			200510	10/06/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201017	10/08/15 08:06	WAL	TAL CAN

Client Sample ID: VAP-1-GW (49-50')

Lab Sample ID: 240-56145-21

Date Collected: 10/02/15 12:00
Matrix: Water
Date Received: 10/03/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201374	10/12/15 17:43	LEE	TAL CAN
Total/NA	Prep	3510C			200483	10/06/15 08:39	CS	TAL CAN
Total/NA	Analysis	8270C		1	200658	10/07/15 18:56	TMH	TAL CAN
Total Recoverable	Prep	3005A			200509	10/06/15 10:17	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	200740	10/07/15 20:03	WAL	TAL CAN
Total/NA	Prep	7470A			200510	10/06/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201017	10/08/15 08:08	WAL	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56145-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-15
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-26-16
Kentucky (WW)	State Program	4	98016	12-31-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-15
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	10-30-15 *
New York	NELAP	2	10975	03-31-16
Ohio VAP	State Program	5	CL0024	10-31-15 *
Oregon	NELAP	10	4062	02-23-16
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-16
West Virginia DEP	State Program	3	210	12-31-15
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS



240-56145 Chain of Custody

TestAmerica Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

1.6/CO.1
1.8/CO.3
2.0/CO.5

Chain of Custody Record

089063

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210 (0713)

Client Contact	Project Manager: John Ellis	Site Contact: Gene Cook	Date:	COC No:
Company Name: Arcadis	Tel/Fax: John.Ellis@Arcadis.com	Lab Contact:	Carrier:	1 of ____ COCs
Address: 10352 Plaza Americana Dr.	Analysis Turnaround Time			Sampler:
City/State/Zip: Baton Rouge, LA 70816	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 225-292-1004	TAT if different from Below ____			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: Grenada Manufacturing	☐ 1 week			
Site: Grenada, MS,	☐ 2 days			Job / SDG No.:
PO# LA 003307 0001.08AY	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Mo, Sb, Se, Tl, B (6010B)	7470A, 7196A, SHEX	Target Cmpd Analysis	VOC 8260B-TCL plus MIBK/Naphthalene	PCB & Naphthalene 8082A	SVOC 8270C-CLP plus 15
VMP-9 (2-4)	10/01/15	1317	G	S	3	N		2	1	1	1		
VMP-9-GW-(15-16')	"	1400	G	W	6	Y					3	1	2
VMP-9-GW-(20-21)	"	1430	G	W	6	Y					3	1	2
VMP-9-GW-(25-26)	10/01/15	1508	G	W	6	Y					3	1	2
VMP-9-GW-(30-31)	"	1557	G	W	6	Y					3	1	2
VMP-9-GW-(35-36)	"	1642	G	W	6	Y					3	1	2
VMP-9-GW-(40-41)	10/01/15	1655	G	W	6	Y					3	1	2
VMP-9-GW-(45-46)	"	1728	G	W	6	Y					3	1	2
VMP-9-GW-(49-50)	"	1800	G	W	6	Y					3	1	2
DUP-01(10/01/15)	10/01/15	—	G	S	3	Y					3	1	2
TB-01(10/01/15)	"	—	G	W	2	—					2		

Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3, 5=NaOH, 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for____ Months

Special Instructions/QC Requirements & Comments:

* RCRA Metals were ~~filtered~~ filtered in Field

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd:____ Corr'd:____	Therm ID No.:____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Jesse Flack	Arcadis	10/03/15 1345			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in laboratory by:	Company:	Date/Time:
				TAL Canton	10/03/15

TestAmerica Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

Chain of Custody Record

089065

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: John Ellis	Site Contact: George Elcock	Date:	COC No:
Company Name: Arcadis	Tel/Fax: Em John.Ellis@Arcadis.us	Lab Contact:	Carrier:	2 of ____ COCs
Address: 10352 Plaza Americana Dr	Analysis Turnaround Time			Sampler:
City/State/Zip: Baton Rouge, La. 70816	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 225-292-1004	TAT if different from Below ____			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: Grenada Manufacturing	☐ 1 week			
Site: Grenada MS	☐ 2 days			Job / SDG No.:
PO# LA003307 000	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	Mo,Mn,Sb,Zn,Cu,Ni,Co,Be,Ag,Tl	7471A, 7196A, 8260B	Terra Core 8260B	VOC 8260B-TCL plus MIBK, Xylenes	TCLP Metals 6010B / 7470A/7196A	SVOC 8270C plus Xylenes
VAP-1 (1-2)	10-02-15	0755	G	S	3	N		2		1			
VAP-1-6w (11-13)	"	0830	G	W	6	Y				3	1	2	
VAP-1-6w (15-16)	"	0847	G	W	6	Y				3	1	2	
VAP-1-6w (20-21)	10/02/15	0915	G	W	6	Y				3	1	2	
VAP-1-6w (25-26)	"	0943	G	W	6	Y				3	1	2	
VAP-1-6w (30-31)	"	1003	G	W	6	Y				3	1	2	
VAP-1 6w (35-36)	10/02/15	1017	G	W	6	Y				3	1	2	
VAP-1-6w (40-41)	"	1055	G	W	6	Y				3	1	2	
VAP-1-6w (45-46)	"	1138	G	W	6	Y				3	1	2	
VAP-1 6w (49-50	"	1200	G	W	6	Y				3	1	2	
			G										

Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3, 5=NaOH, 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:
VAP-1 were Filtered in Field !

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: ____ Corr'd: ____	Therm ID No.: ____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Sean Fleet	Arcad.	10/03/15			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time: 10/03/15

TestAmerica Canton Sample Receipt Form/Narrative Login # : 30148
Canton Facility

Client Arcadis Site Name Grenada

Cooler Received on 10/3/15 Opened on 10/3/15

Cooler unpacked by: Jerry Burns

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # Foam Box Client Cooler Box Other Multiple

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A (CF +1.0 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

~~IR GUN# 4 (CF +0.5 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C~~

~~IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C~~

IR GUN# 8 (CF -1.5 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

☑ See Multiple Cooler Form

2.	Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 each	Yes	No
	-Were custody seals on the outside of the cooler(s) signed & dated?	Yes	No NA
	-Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
3.	Shippers' packing slip attached to the cooler(s)?	Yes	No
4.	Did custody papers accompany the sample(s)?	Yes	No
5.	Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6.	Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7.	Did all bottles arrive in good condition (Unbroken)?	Yes	No
8.	Could all bottle labels be reconciled with the COC?	Yes	No
9.	Were correct bottle(s) used for the test(s) indicated?	Yes	No
10.	Sufficient quantity received to perform indicated analyses?	Yes	No
11.	Were sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC554612
12.	Were VOAs on the COC?	Yes	No
13.	Were air bubbles >6 mm in any VOA vials?	Yes	No NA
14.	Was a trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

VAP-9-GW (20-21) 3X40
(25-26) 3X40
(40-41) 2X40
(45-46) 2X40
VAP-1-GW (15-16) 2X40
(20-21) 2X40
(30-31) 2X40
(40-41) 2X40
(45-46) 3X40

Bubbles >6mm

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) See above were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

TestAmerica Multiple Cooler Receipt Form/Narrative **Login # :** 560145
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
CANTON	8	1.6	0.1	ICE
1	1	1.8	0.3	1
		2.0	0.5	

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
VAP-9-GW-(15-16')	240-56145-F-2	Plastic 500ml - with Nitric Acid	<2		
VAP-9-GW-(20-21')	240-56145-F-3	Plastic 500ml - with Nitric Acid	<2		
VAP-9-GW-(25-26')	240-56145-F-4	Plastic 500ml - with Nitric Acid	<2		
VAP-9-GW-(30-31')	240-56145-F-5	Plastic 500ml - with Nitric Acid	<2		
VAP-9-GW-(35-36')	240-56145-F-6	Plastic 500ml - with Nitric Acid	<2		
VAP-9-GW-(40-41')	240-56145-F-7	Plastic 500ml - with Nitric Acid	<2		
VAP-9-GW-(45-46')	240-56145-F-8	Plastic 500ml - with Nitric Acid	<2		
VAP-9-GW-(49-50')	240-56145-F-9	Plastic 500ml - with Nitric Acid	<2		
VAP-1-GW (12-13')	240-56145-F-13	Plastic 500ml - with Nitric Acid	<2		
VAP-1-GW (15-16')	240-56145-F-14	Plastic 500ml - with Nitric Acid	<2		
VAP-1-GW (20-21')	240-56145-F-15	Plastic 500ml - with Nitric Acid	<2		
VAP-1-GW (25-26')	240-56145-F-16	Plastic 500ml - with Nitric Acid	<2		
VAP-1-GW (30-31')	240-56145-F-17	Plastic 500ml - with Nitric Acid	<2		
VAP-1-GW (35-36')	240-56145-F-18	Plastic 500ml - with Nitric Acid	<2		
VAP-1-GW (40-41')	240-56145-F-19	Plastic 500ml - with Nitric Acid	<2		
VAP-1-GW (45-46')	240-56145-F-20	Plastic 500ml - with Nitric Acid	<2		
VAP-1-GW (49-50')	240-56145-F-21	Plastic 500ml - with Nitric Acid	<2		

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-56328-1
Client Project/Site: Grenada Manufacturing

For:
ARCADIS U.S., Inc.
10352 Plaza Americana Dr.
Baton Rouge, Louisiana 70816

Attn: Mr. John Ellis

Denise Pohl

Authorized for release by:
10/20/2015 2:15:51 PM

Denise Pohl, Project Manager II
(330)966-9789
denise.pohl@testamericainc.com

LINKS

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Have a Question? Ask The Expert

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
*	LCS or LCSD is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
E	Result exceeded calibration range.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits
H	Sample was prepped or analyzed beyond the specified holding time
F2	MS/MSD RPD exceeds control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
E	Result exceeded calibration range.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
L	A negative instrument reading had an absolute value greater than the reporting limit
F1	MS and/or MSD Recovery is outside acceptance limits.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 240-56328-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Grenada Manufacturing

Report Number: 240-56328-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 10/8/2015 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 8 coolers at receipt time were 0.1º C, 0.3º C, 1.1º C, 1.1º C, 1.7º C, 2.1º C, 2.3º C and 3.7º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples VAP-2 (2-4) (240-56328-2), VAP-3 (1-2) (240-56328-12), VAP-4 (6-8) (240-56328-21) and VAP-5 (4-6) (240-56328-30) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 10/10/2015 and analyzed on 10/14/2015.

1,2,4-Trichlorobenzene, 2-Butanone (MEK), Acetone and Methylene Chloride were detected in method blank MB 240-201750/9 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Acetone and Methyl acetate failed the recovery criteria high for LCS 240-201750/8. Refer to the QC report for details.

Method(s) 8260B: The laboratory control sample (LCS) for preparation batch 240-201261 and analytical batch 240-201750 recovered outside control limits for the following analyte: Acetone and Methyl acetate. These compounds has been identified as poor performing

Job ID: 240-56328-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

analytes when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples TB-02 (100515) (240-56328-1), VAP-2 GW (15-16) (240-56328-3), VAP-2 GW (20-21) (240-56328-4), VAP-2 GW (25-26) (240-56328-5), VAP-2 GW (30-31) (240-56328-6), VAP-2 GW (35-36) (240-56328-7), VAP-2 GW (40-41) (240-56328-8), VAP-2 GW (45-46) (240-56328-9), VAP-2 GW (49-50) (240-56328-10), DUP-GW-01 (100515) (240-56328-11), VAP-3-GW (15-16) (240-56328-13), VAP-3-GW (20-21) (240-56328-14), VAP-3-GW (25-26) (240-56328-15), VAP-3-GW (30-31) (240-56328-16), VAP-3-GW (35-36) (240-56328-17), VAP-3-GW (40-41) (240-56328-18), VAP-3-GW (45-46) (240-56328-19), VAP-3-GW (49-50) (240-56328-20), VAP-4-GW (15-16) (240-56328-22), VAP-4-GW (20-21) (240-56328-23), VAP-4-GW (25-26) (240-56328-24), VAP-4-GW (30-31) (240-56328-25), VAP-4-GW (35-36) (240-56328-26), VAP-4-GW (40-41) (240-56328-27), VAP-4-GW (45-46) (240-56328-28), VAP-4-GW (48-49) (240-56328-29), VAP-5-GW (15-16) (240-56328-31), VAP-5-GW (20-21) (240-56328-32), VAP-5-GW (25-26) (240-56328-33), VAP-5-GW (30-31) (240-56328-34), VAP-5-GW (35-36) (240-56328-35), VAP-5-GW (40-41) (240-56328-36), VAP-5-GW (45-46) (240-56328-37), VAP-5-GW (49-50) (240-56328-38), TB-03 (100715) (240-56328-39) and TB-04 (100715) (240-56328-40) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 10/13/2015, 10/14/2015 and 10/15/2015.

cis-1,2-Dichloroethene failed the recovery criteria low for the MS of sample VAP-5-GW (20-21)MS (240-56328-32) in batch 240-201796. Several analytes exceeded the RPD limit for the MSD of sample VAP-5-GW (20-21)MSD (240-56328-32) in batch 240-201796. Refer to the QC report for details.

Samples VAP-5-GW (15-16) (240-56328-31)[8X], VAP-5-GW (20-21) (240-56328-32)[10X] and VAP-5-GW (25-26) (240-56328-33)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Method(s) 8260B: The pH of the sample was greater than 2. VAP-4-GW (48-49) (240-56328-29).

Method(s) 8260B: No MS/MSD in batch 202028 due to and incorrect preparation by the analyst. Batch includes: VAP-5-GW (25-26) (240-56328-33).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Samples VAP-2 (2-4) (240-56328-2), VAP-3 (1-2) (240-56328-12), VAP-4 (6-8) (240-56328-21) and VAP-5 (4-6) (240-56328-30) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 10/09/2015 and 10/14/2015 and analyzed on 10/13/2015 and 10/16/2015.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

Di-n-butyl phthalate was detected in method blank MB 240-201082/22-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Hexachlorocyclopentadiene failed the recovery criteria low for the MS of sample VAP-3 (1-2)MS (240-56328-12) in batch 240-202221. Di-n-octyl phthalate failed the recovery criteria high. 4,6-Dinitro-2-methylphenol and Hexachlorocyclopentadiene failed the recovery criteria low for the MSD of sample VAP-3 (1-2)MSD (240-56328-12) in batch 240-202367. 2,4-Dinitrotoluene, 2-Nitrophenol, 4,6-Dinitro-2-methylphenol and Di-n-octyl phthalate exceeded the RPD limit. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Samples VAP-2 GW (15-16) (240-56328-3), VAP-2 GW (20-21) (240-56328-4), VAP-2 GW (25-26) (240-56328-5), VAP-2 GW (30-31) (240-56328-6), VAP-2 GW (35-36) (240-56328-7), VAP-2 GW (40-41) (240-56328-8), VAP-2 GW (45-46) (240-56328-9), VAP-2 GW (49-50)

Job ID: 240-56328-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

(240-56328-10), DUP-GW-01 (100515) (240-56328-11), VAP-3-GW (15-16) (240-56328-13), VAP-3-GW (20-21) (240-56328-14), VAP-3-GW (25-26) (240-56328-15), VAP-3-GW (30-31) (240-56328-16), VAP-3-GW (35-36) (240-56328-17), VAP-3-GW (40-41) (240-56328-18), VAP-3-GW (45-46) (240-56328-19), VAP-3-GW (49-50) (240-56328-20), VAP-4-GW (15-16) (240-56328-22), VAP-4-GW (20-21) (240-56328-23), VAP-4-GW (25-26) (240-56328-24), VAP-4-GW (30-31) (240-56328-25), VAP-4-GW (35-36) (240-56328-26), VAP-4-GW (40-41) (240-56328-27), VAP-4-GW (45-46) (240-56328-28), VAP-4-GW (48-49) (240-56328-29), VAP-5-GW (15-16) (240-56328-31), VAP-5-GW (20-21) (240-56328-32), VAP-5-GW (25-26) (240-56328-33), VAP-5-GW (30-31) (240-56328-34), VAP-5-GW (35-36) (240-56328-35), VAP-5-GW (40-41) (240-56328-36) and VAP-5-GW (45-46) (240-56328-37) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 10/09/2015 and 10/13/2015 and analyzed on 10/11/2015, 10/12/2015, 10/13/2015 and 10/14/2015.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

Bis(2-ethylhexyl) phthalate, Caprolactam and Di-n-butyl phthalate were detected in method blank MB 240-201121/23-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Bis(2-ethylhexyl) phthalate and Caprolactam were detected in method blank MB 240-201122/13-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Caprolactam was detected in method blank MB 240-201574/7-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

2,4,6-Tribromophenol (Surr), 2-Fluorobiphenyl (Surr), 2-Fluorophenol (Surr), Nitrobenzene-d5 (Surr), Phenol-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for DUP-GW-01 (100515) (240-56328-11). Several analytes failed the surrogate recovery criteria low for VAP-3-GW (25-26) (240-56328-15). Terphenyl-d14 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-4-GW (30-31) (240-56328-25). 2,4,6-Tribromophenol (Surr), 2-Fluorobiphenyl (Surr), Nitrobenzene-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-4-GW (35-36) (240-56328-26). Nitrobenzene-d5 (Surr) and Nitrobenzene-d5 (Surr) failed the surrogate recovery criteria low for VAP-4-GW (48-49) (240-56328-29). 2-Fluorobiphenyl (Surr) failed the surrogate recovery criteria low for VAP-2 GW (15-16) (240-56328-3). Terphenyl-d14 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-5-GW (15-16) (240-56328-31). Terphenyl-d14 (Surr), 2,4,6-Tribromophenol (Surr), Nitrobenzene-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-5-GW (40-41) (240-56328-36). 2,4,6-Tribromophenol (Surr), 2-Fluorobiphenyl (Surr), 2-Fluorophenol (Surr), Nitrobenzene-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-2 GW (40-41) (240-56328-8). 2,4,6-Tribromophenol (Surr), 2-Fluorobiphenyl (Surr), Nitrobenzene-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-2 GW (45-46) (240-56328-9). 2,4,6-Tribromophenol (Surr), 2-Fluorobiphenyl (Surr), Nitrobenzene-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-2 GW (35-36)MSD (240-56328-7MSD). Refer to the QC report for details.

Benzaldehyde failed the recovery criteria high for LCS 240-201121/24-A. Benzaldehyde failed the recovery criteria high for LCS 240-201574/8-A. Refer to the QC report for details.

Several analytes failed the recovery criteria low for the MSD of sample VAP-2 GW (35-36)MSD (240-56328-7) in batch 240-201359. Several analytes exceeded the RPD limit. Refer to the QC report for details.

Samples VAP-2 GW (15-16) (240-56328-3)[4X], VAP-2 GW (49-50) (240-56328-10)[4X], VAP-3-GW (25-26) (240-56328-15)[20X], VAP-3-GW (30-31) (240-56328-16)[5X], VAP-3-GW (35-36) (240-56328-17)[25X], VAP-3-GW (40-41) (240-56328-18)[12.5X], VAP-3-GW (45-46) (240-56328-19)[6.67X], VAP-3-GW (49-50) (240-56328-20)[25X], VAP-4-GW (15-16) (240-56328-22)[5X], VAP-4-GW (20-21) (240-56328-23)[4X], VAP-4-GW (30-31) (240-56328-25)[4X], VAP-4-GW (48-49) (240-56328-29)[4X], VAP-5-GW (15-16) (240-56328-31) [4X], VAP-5-GW (20-21) (240-56328-32)[10X], VAP-5-GW (40-41) (240-56328-36)[10X] and VAP-5-GW (45-46) (240-56328-37)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Method(s) 8270C: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates per fraction, to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: VAP-4-GW (48-49) (240-56328-29), VAP-5-GW (15-16) (240-56328-31) and VAP-5-GW (40-41) (240-56328-36). These results have been reported and qualified.

Job ID: 240-56328-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

Method(s) 8270C: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates, per fraction, to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: VAP-2 GW (15-16) (240-56328-3) and VAP-4-GW (30-31) (240-56328-25). These results have been reported and qualified.

Method(s) 8270C: The laboratory control sample (LCS) for 201121 recovered outside control limits for the following analytes: Benzaldehyde. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270C: The laboratory control sample (LCS) for prep batch 201121 recovered outside control limits for the following analyte: Benzaldehyde. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270C: Surrogate recovery for the following sample was outside control limits: VAP-4-GW (35-36) (240-56328-26). Re-extraction and re-analysis was performed with concurring results.The original analysis has been reported.

Method(s) 8270C: The laboratory control sample (LCS) for prep batch 201574 recovered outside control limits for the following analytes: Benzaldehyde. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270C: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates, per fraction, to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: VAP-2 GW (35-36) (240-56328-7), VAP-2 GW (40-41) (240-56328-8) and DUP-GW-01 (100515) (240-56328-11). These results have been reported and qualified.

Method(s) 8270C: The MS/MSD for the original analysis exhibited poor recoveries and RPD's. After consulting with PM, it was determined to try re-prep. The re-ext analysis gave better results, however was prepped outside of hold time. Both sets of data are reported for the following samples: VAP-2 GW (35-36) (240-56328-7), VAP-2 GW (35-36) (240-56328-7[MS]) and VAP-2 GW (35-36) (240-56328-7[MSD]).

Method(s) 8270C: Surrogate recovery for the following samples were outside control limits: VAP-2 GW (40-41) (240-56328-8), VAP-2 GW (45-46) (240-56328-9), DUP-GW-01 (100515) (240-56328-11), VAP-3-GW (25-26) (240-56328-15) and VAP-4-GW (35-36) (240-56328-26). Re-extraction and re-analysis was performed with concurring results. The original analysis has been reported.

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batches 240-201122, 240-201574.

Method(s) 3510C: The following samples formed extremely thick, nasty emulsions during the extraction procedure: VAP-2 GW (15-16) (240-56328-3), VAP-2 GW (20-21) (240-56328-4), VAP-2 GW (25-26) (240-56328-5), VAP-2 GW (30-31) (240-56328-6), VAP-2 GW (35-36) (240-56328-7), VAP-2 GW (35-36) (240-56328-7[MS]), VAP-2 GW (35-36) (240-56328-7[MSD]), VAP-2 GW (40-41) (240-56328-8), VAP-2 GW (45-46) (240-56328-9), VAP-2 GW (49-50) (240-56328-10), DUP-GW-01 (100515) (240-56328-11), VAP-3-GW (15-16) (240-56328-13), VAP-3-GW (20-21) (240-56328-14), VAP-3-GW (25-26) (240-56328-15), VAP-3-GW (30-31) (240-56328-16), VAP-3-GW (35-36) (240-56328-17), VAP-3-GW (40-41) (240-56328-18), VAP-3-GW (45-46) (240-56328-19), VAP-3-GW (49-50) (240-56328-20), VAP-4-GW (15-16) (240-56328-22), VAP-4-GW (20-21) (240-56328-23), VAP-4-GW (25-26) (240-56328-24), VAP-4-GW (30-31) (240-56328-25), VAP-4-GW (35-36) (240-56328-26), VAP-4-GW (40-41) (240-56328-27), VAP-4-GW (45-46) (240-56328-28), VAP-4-GW (48-49) (240-56328-29), VAP-5-GW (15-16) (240-56328-31), VAP-5-GW (20-21) (240-56328-32), VAP-5-GW (25-26) (240-56328-33), VAP-5-GW (30-31) (240-56328-34), VAP-5-GW (35-36) (240-56328-35), VAP-5-GW (40-41) (240-56328-36) and VAP-5-GW (45-46) (240-56328-37). A centrifuge was used to attempt to break up the emulsions, but only partial solvent recovery was achieved.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)

Samples VAP-2 (2-4) (240-56328-2), VAP-3 (1-2) (240-56328-12), VAP-4 (6-8) (240-56328-21) and VAP-5 (4-6) (240-56328-30) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 10/09/2015 and analyzed on 10/13/2015.

Job ID: 240-56328-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

Chromium was detected in method blank MB 240-201088/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED METALS (ICP)

Samples VAP-2 GW (15-16) (240-56328-3), VAP-2 GW (20-21) (240-56328-4), VAP-2 GW (25-26) (240-56328-5), VAP-2 GW (30-31) (240-56328-6), VAP-2 GW (35-36) (240-56328-7), VAP-2 GW (40-41) (240-56328-8), VAP-2 GW (45-46) (240-56328-9), VAP-2 GW (49-50) (240-56328-10), DUP-GW-01 (100515) (240-56328-11), VAP-3-GW (15-16) (240-56328-13), VAP-3-GW (20-21) (240-56328-14), VAP-3-GW (25-26) (240-56328-15), VAP-3-GW (30-31) (240-56328-16), VAP-3-GW (35-36) (240-56328-17), VAP-3-GW (40-41) (240-56328-18), VAP-3-GW (45-46) (240-56328-19), VAP-3-GW (49-50) (240-56328-20), VAP-4-GW (15-16) (240-56328-22), VAP-4-GW (20-21) (240-56328-23), VAP-4-GW (25-26) (240-56328-24), VAP-4-GW (30-31) (240-56328-25), VAP-4-GW (35-36) (240-56328-26), VAP-4-GW (40-41) (240-56328-27), VAP-4-GW (45-46) (240-56328-28), VAP-4-GW (48-49) (240-56328-29), VAP-5-GW (15-16) (240-56328-31), VAP-5-GW (20-21) (240-56328-32), VAP-5-GW (25-26) (240-56328-33), VAP-5-GW (30-31) (240-56328-34), VAP-5-GW (35-36) (240-56328-35), VAP-5-GW (40-41) (240-56328-36) and VAP-5-GW (45-46) (240-56328-37) were analyzed for dissolved metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 10/09/2015 and analyzed on 10/13/2015, 10/14/2015 and 10/15/2015.

Chromium was detected in method blank MB 240-201148/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Barium was detected in method blank MB 240-201151/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED MERCURY (CVAA)

Samples VAP-2 GW (15-16) (240-56328-3), VAP-2 GW (20-21) (240-56328-4), VAP-2 GW (25-26) (240-56328-5), VAP-2 GW (30-31) (240-56328-6), VAP-2 GW (35-36) (240-56328-7), VAP-2 GW (40-41) (240-56328-8), VAP-2 GW (45-46) (240-56328-9), VAP-2 GW (49-50) (240-56328-10), DUP-GW-01 (100515) (240-56328-11), VAP-3-GW (15-16) (240-56328-13), VAP-3-GW (20-21) (240-56328-14), VAP-3-GW (25-26) (240-56328-15), VAP-3-GW (30-31) (240-56328-16), VAP-3-GW (35-36) (240-56328-17), VAP-3-GW (40-41) (240-56328-18), VAP-3-GW (45-46) (240-56328-19), VAP-3-GW (49-50) (240-56328-20), VAP-4-GW (15-16) (240-56328-22), VAP-4-GW (20-21) (240-56328-23), VAP-4-GW (25-26) (240-56328-24), VAP-4-GW (30-31) (240-56328-25), VAP-4-GW (35-36) (240-56328-26), VAP-4-GW (40-41) (240-56328-27), VAP-4-GW (45-46) (240-56328-28), VAP-4-GW (48-49) (240-56328-29), VAP-5-GW (15-16) (240-56328-31), VAP-5-GW (20-21) (240-56328-32), VAP-5-GW (25-26) (240-56328-33), VAP-5-GW (30-31) (240-56328-34), VAP-5-GW (35-36) (240-56328-35), VAP-5-GW (40-41) (240-56328-36) and VAP-5-GW (45-46) (240-56328-37) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 10/09/2015 and analyzed on 10/13/2015 and 10/14/2015.

Mercury failed the recovery criteria high for the MS/MSD of sample VAP-2 GW (35-36)MS/MSD (240-56328-7) in batch 240-201918. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY

Samples VAP-2 (2-4) (240-56328-2), VAP-3 (1-2) (240-56328-12), VAP-4 (6-8) (240-56328-21) and VAP-5 (4-6) (240-56328-30) were analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared on 10/09/2015 and analyzed on 10/13/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HEXAVALENT CHROMIUM

Samples VAP-2 (2-4) (240-56328-2), VAP-3 (1-2) (240-56328-12), VAP-4 (6-8) (240-56328-21) and VAP-5 (4-6) (240-56328-30) were analyzed for hexavalent chromium in accordance with EPA SW-846 Method 3060A/7196A. The samples were prepared on 10/09/2015 and

Job ID: 240-56328-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

analyzed on 10/12/2015.

Sample VAP-3 (1-2) (240-56328-12)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS

Samples VAP-2 (2-4) (240-56328-2), VAP-3 (1-2) (240-56328-12), VAP-4 (6-8) (240-56328-21) and VAP-5 (4-6) (240-56328-30) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 10/09/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN
7471A	Mercury (CVAA)	SW846	TAL CAN
7196A	Chromium, Hexavalent	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-56328-1	TB-02 (100515)	Water	10/05/15 00:00	10/08/15 09:30
240-56328-2	VAP-2 (2-4)	Solid	10/05/15 08:35	10/08/15 09:30
240-56328-3	VAP-2 GW (15-16)	Water	10/05/15 08:50	10/08/15 09:30
240-56328-4	VAP-2 GW (20-21)	Water	10/05/15 10:00	10/08/15 09:30
240-56328-5	VAP-2 GW (25-26)	Water	10/05/15 10:33	10/08/15 09:30
240-56328-6	VAP-2 GW (30-31)	Water	10/05/15 13:12	10/08/15 09:30
240-56328-7	VAP-2 GW (35-36)	Water	10/05/15 13:38	10/08/15 09:30
240-56328-8	VAP-2 GW (40-41)	Water	10/05/15 14:41	10/08/15 09:30
240-56328-9	VAP-2 GW (45-46)	Water	10/05/15 15:30	10/08/15 09:30
240-56328-10	VAP-2 GW (49-50)	Water	10/05/15 16:00	10/08/15 09:30
240-56328-11	DUP-GW-01 (100515)	Water	10/05/15 00:00	10/08/15 09:30
240-56328-12	VAP-3 (1-2)	Solid	10/05/15 17:15	10/08/15 09:30
240-56328-13	VAP-3-GW (15-16)	Water	10/06/15 08:06	10/08/15 09:30
240-56328-14	VAP-3-GW (20-21)	Water	10/06/15 09:11	10/08/15 09:30
240-56328-15	VAP-3-GW (25-26)	Water	10/06/15 09:39	10/08/15 09:30
240-56328-16	VAP-3-GW (30-31)	Water	10/06/15 10:10	10/08/15 09:30
240-56328-17	VAP-3-GW (35-36)	Water	10/06/15 10:58	10/08/15 09:30
240-56328-18	VAP-3-GW (40-41)	Water	10/06/15 11:30	10/08/15 09:30
240-56328-19	VAP-3-GW (45-46)	Water	10/06/15 12:04	10/08/15 09:30
240-56328-20	VAP-3-GW (49-50)	Water	10/06/15 12:55	10/08/15 09:30
240-56328-21	VAP-4 (6-8)	Solid	10/06/15 14:52	10/08/15 09:30
240-56328-22	VAP-4-GW (15-16)	Water	10/06/15 15:03	10/08/15 09:30
240-56328-23	VAP-4-GW (20-21)	Water	10/06/15 15:31	10/08/15 09:30
240-56328-24	VAP-4-GW (25-26)	Water	10/06/15 16:06	10/08/15 09:30
240-56328-25	VAP-4-GW (30-31)	Water	10/06/15 16:36	10/08/15 09:30
240-56328-26	VAP-4-GW (35-36)	Water	10/07/15 08:11	10/08/15 09:30
240-56328-27	VAP-4-GW (40-41)	Water	10/07/15 08:45	10/08/15 09:30
240-56328-28	VAP-4-GW (45-46)	Water	10/07/15 09:18	10/08/15 09:30
240-56328-29	VAP-4-GW (48-49)	Water	10/07/15 09:55	10/08/15 09:30
240-56328-30	VAP-5 (4-6)	Solid	10/07/15 11:37	10/08/15 09:30
240-56328-31	VAP-5-GW (15-16)	Water	10/07/15 12:00	10/08/15 09:30
240-56328-32	VAP-5-GW (20-21)	Water	10/07/15 12:28	10/08/15 09:30
240-56328-33	VAP-5-GW (25-26)	Water	10/07/15 12:57	10/08/15 09:30
240-56328-34	VAP-5-GW (30-31)	Water	10/07/15 13:31	10/08/15 09:30
240-56328-35	VAP-5-GW (35-36)	Water	10/07/15 13:57	10/08/15 09:30
240-56328-36	VAP-5-GW (40-41)	Water	10/07/15 14:43	10/08/15 09:30
240-56328-37	VAP-5-GW (45-46)	Water	10/07/15 15:15	10/08/15 09:30
240-56328-38	VAP-5-GW (49-50)	Water	10/07/15 15:40	10/08/15 09:30
240-56328-39	TB-03 (100715)	Water	10/07/15 00:00	10/08/15 09:30
240-56328-40	TB-04 (100715)	Water	10/07/15 00:00	10/08/15 09:30

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: TB-02 (100515) — Lab Sample ID: 240-56328-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.0	J	10	0.94	ug/L	1		8260B	Total/NA

Client Sample ID: VAP-2 (2-4) — Lab Sample ID: 240-56328-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	10	J B *	20	1.6	ug/Kg	1	☼	8260B	Total/NA
Benzene	0.57	J	4.9	0.23	ug/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	2.0	J B	20	0.47	ug/Kg	1	☼	8260B	Total/NA
Carbon disulfide	0.60	J	4.9	0.33	ug/Kg	1	☼	8260B	Total/NA
Toluene	0.49	J	4.9	0.26	ug/Kg	1	☼	8260B	Total/NA
Bis(2-ethylhexyl) phthalate	25	J	90	24	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	26	J B	90	19	ug/Kg	1	☼	8270C	Total/NA
Arsenic	3.7		1.1	0.46	mg/Kg	1	☼	6010B	Total/NA
Barium	93		23	0.46	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.038	J	0.23	0.024	mg/Kg	1	☼	6010B	Total/NA
Chromium	7.7	B	0.56	0.085	mg/Kg	1	☼	6010B	Total/NA
Lead	8.1		0.34	0.23	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.46	J	0.56	0.38	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.018	J	0.13	0.018	mg/Kg	1	☼	7471A	Total/NA
Cr (VI)	0.44	J	1.0	0.33	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: VAP-2 GW (15-16) — Lab Sample ID: 240-56328-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.1		1.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.74	J	1.0	0.26	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.8	J B	1.9	1.5	ug/L	1		8270C	Total/NA
Diethyl phthalate	1.9		0.96	0.12	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.96	B	0.96	0.38	ug/L	1		8270C	Total/NA
Caprolactam - RA	160	B	19	1.4	ug/L	4		8270C	Total/NA
Arsenic	7.9	J	10	2.9	ug/L	1		6010B	Dissolved
Barium	180	J	200	1.0	ug/L	1		6010B	Dissolved
Cadmium	0.20	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	38	B	5.0	0.55	ug/L	1		6010B	Dissolved
Lead	10		3.0	1.9	ug/L	1		6010B	Dissolved
Selenium	4.5	J	5.0	4.0	ug/L	1		6010B	Dissolved

Client Sample ID: VAP-2 GW (20-21) — Lab Sample ID: 240-56328-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.8	J	10	0.94	ug/L	1		8260B	Total/NA
Trichloroethene	0.40	J	1.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.51	J	1.0	0.26	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.5	J B	1.9	1.4	ug/L	1		8270C	Total/NA
Caprolactam	3.2	J B	4.6	0.34	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.42	J	0.93	0.12	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.52	J B	0.93	0.37	ug/L	1		8270C	Total/NA
Arsenic	5.5	J	10	2.9	ug/L	1		6010B	Dissolved
Barium	83	J	200	1.0	ug/L	1		6010B	Dissolved
Chromium	12	B	5.0	0.55	ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-2 GW (20-21) (Continued) — Lab Sample ID: 240-56328-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	5.1		3.0	1.9	ug/L	1		6010B	Dissolved

Client Sample ID: VAP-2 GW (25-26) — Lab Sample ID: 240-56328-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.2	J	10	0.94	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.54	J	1.0	0.26	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	2.8	B	1.9	1.5	ug/L	1		8270C	Total/NA
Caprolactam	52	B	4.8	0.36	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.32	J	0.96	0.12	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.87	J B	0.96	0.38	ug/L	1		8270C	Total/NA
Arsenic	61		10	2.9	ug/L	1		6010B	Dissolved
Barium	1300		200	1.0	ug/L	1		6010B	Dissolved
Cadmium	1.2	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	460	B	5.0	0.55	ug/L	1		6010B	Dissolved
Lead	150		3.0	1.9	ug/L	1		6010B	Dissolved
Selenium	8.7		5.0	4.0	ug/L	1		6010B	Dissolved
Mercury	1.8		0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-2 GW (30-31) — Lab Sample ID: 240-56328-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.3	J	10	0.94	ug/L	1		8260B	Total/NA
Caprolactam	29	B	4.6	0.34	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.53	J B	0.93	0.37	ug/L	1		8270C	Total/NA
Arsenic	5.4	J	10	2.9	ug/L	1		6010B	Dissolved
Barium	180	J	200	1.0	ug/L	1		6010B	Dissolved
Cadmium	0.14	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	21	B	5.0	0.55	ug/L	1		6010B	Dissolved
Lead	9.0		3.0	1.9	ug/L	1		6010B	Dissolved

Client Sample ID: VAP-2 GW (35-36) — Lab Sample ID: 240-56328-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.5	J	10	0.94	ug/L	1		8260B	Total/NA
Caprolactam	26	B F1 F2	5.0	0.37	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.62	J B F2	1.0	0.40	ug/L	1		8270C	Total/NA
Caprolactam - RE	4.7	J H F2 B	4.8	0.36	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate - RE	0.72	J H	0.96	0.38	ug/L	1		8270C	Total/NA
Arsenic	5.7	J	10	2.9	ug/L	1		6010B	Dissolved
Barium	180	J	200	1.0	ug/L	1		6010B	Dissolved
Cadmium	0.30	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	51	B	5.0	0.55	ug/L	1		6010B	Dissolved
Lead	15		3.0	1.9	ug/L	1		6010B	Dissolved

Client Sample ID: VAP-2 GW (40-41) — Lab Sample ID: 240-56328-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.5	J	10	0.94	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.8	J B	1.9	1.4	ug/L	1		8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-2 GW (40-41) (Continued) — Lab Sample ID: 240-56328-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Caprolactam	17	B	4.7	0.35	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.85	J B	0.94	0.38	ug/L	1		8270C	Total/NA
Caprolactam - RE	9.6	H B	4.8	0.36	ug/L	1		8270C	Total/NA
Diethyl phthalate - RE	0.23	J H	0.96	0.12	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate - RE	0.96	H	0.96	0.38	ug/L	1		8270C	Total/NA
Arsenic	120		10	2.9	ug/L	1		6010B	Dissolved
Barium	1800		200	1.0	ug/L	1		6010B	Dissolved
Cadmium	5.5		2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	660	B	5.0	0.55	ug/L	1		6010B	Dissolved
Lead	230		3.0	1.9	ug/L	1		6010B	Dissolved
Selenium	67		5.0	4.0	ug/L	1		6010B	Dissolved
Mercury	1.2		0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-2 GW (45-46) — Lab Sample ID: 240-56328-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.7	J	10	0.94	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.8	J B	1.9	1.5	ug/L	1		8270C	Total/NA
Caprolactam	6.6	B	4.8	0.36	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.62	J B	0.96	0.38	ug/L	1		8270C	Total/NA
Acetophenone - RE	0.22	J H	0.96	0.13	ug/L	1		8270C	Total/NA
Caprolactam - RE	7.6	H B	4.8	0.36	ug/L	1		8270C	Total/NA
Diethyl phthalate - RE	0.22	J H	0.96	0.12	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate - RE	0.58	J H	0.96	0.38	ug/L	1		8270C	Total/NA
Naphthalene - RE	0.22	H	0.19	0.041	ug/L	1		8270C	Total/NA
Arsenic	22		10	2.9	ug/L	1		6010B	Dissolved
Barium	450		200	1.0	ug/L	1		6010B	Dissolved
Cadmium	0.80	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	120	B	5.0	0.55	ug/L	1		6010B	Dissolved
Lead	44		3.0	1.9	ug/L	1		6010B	Dissolved
Mercury	0.11	J	0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-2 GW (49-50) — Lab Sample ID: 240-56328-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	2.0	B	1.9	1.5	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.58	J B	0.96	0.38	ug/L	1		8270C	Total/NA
Caprolactam - RA	180	B	19	1.4	ug/L	4		8270C	Total/NA
Barium	36	J	200	1.0	ug/L	1		6010B	Dissolved
Chromium	1.2	J B	5.0	0.55	ug/L	1		6010B	Dissolved

Client Sample ID: DUP-GW-01 (100515) — Lab Sample ID: 240-56328-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.6	J	10	0.94	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.5	J B	1.9	1.5	ug/L	1		8270C	Total/NA
Caprolactam	12	B	4.8	0.36	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.69	J B	0.96	0.38	ug/L	1		8270C	Total/NA
Caprolactam - RE	42	H B	4.8	0.36	ug/L	1		8270C	Total/NA
Diethyl phthalate - RE	0.23	J H	0.96	0.12	ug/L	1		8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DUP-GW-01 (100515) (Continued) — Lab Sample ID: 240-56328-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Di-n-butyl phthalate - RE	1.2	H	0.96	0.38	ug/L	1		8270C	Total/NA
Arsenic	41		10	2.9	ug/L	1		6010B	Dissolved
Barium	1100		200	1.0	ug/L	1		6010B	Dissolved
Cadmium	2.4		2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	200	B	5.0	0.55	ug/L	1		6010B	Dissolved
Lead	85		3.0	1.9	ug/L	1		6010B	Dissolved
Selenium	22		5.0	4.0	ug/L	1		6010B	Dissolved
Mercury	0.32		0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-3 (1-2) — Lab Sample ID: 240-56328-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.9	J B *	17	1.3	ug/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	1.4	J B	17	0.40	ug/Kg	1	☼	8260B	Total/NA
Bis(2-ethylhexyl) phthalate	25	J	85	23	ug/Kg	1	☼	8270C	Total/NA
Arsenic	10		0.86	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	66		17	0.35	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.068	J	0.17	0.018	mg/Kg	1	☼	6010B	Total/NA
Chromium	14	B	0.43	0.065	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.26	0.17	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.043	J	0.12	0.017	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: VAP-3-GW (15-16) — Lab Sample ID: 240-56328-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.6	J	10	0.94	ug/L	1		8260B	Total/NA
Carbon disulfide	0.56	J	1.0	0.38	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	2.1	B	1.9	1.5	ug/L	1		8270C	Total/NA
Caprolactam	2.0	J B	4.8	0.36	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.47	J B	0.96	0.38	ug/L	1		8270C	Total/NA
Arsenic	10		10	2.9	ug/L	1		6010B	Dissolved
Barium	230		200	1.0	ug/L	1		6010B	Dissolved
Cadmium	0.62	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	35	B	5.0	0.55	ug/L	1		6010B	Dissolved
Lead	11		3.0	1.9	ug/L	1		6010B	Dissolved

Client Sample ID: VAP-3-GW (20-21) — Lab Sample ID: 240-56328-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.7	J	10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	0.73	J	10	0.53	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.5	J	1.9	1.5	ug/L	1		8270C	Total/NA
Caprolactam	95	B	4.8	0.36	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.41	J	0.96	0.12	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.68	J	0.96	0.38	ug/L	1		8270C	Total/NA
Arsenic	13		10	2.9	ug/L	1		6010B	Dissolved
Barium	210		200	1.0	ug/L	1		6010B	Dissolved
Cadmium	0.23	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	73	B	5.0	0.55	ug/L	1		6010B	Dissolved
Lead	9.8		3.0	1.9	ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-3-GW (25-26) — Lab Sample ID: 240-56328-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.5	J	10	0.94	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.8	J B	1.9	1.5	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.23	J	0.96	0.12	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.71	J B	0.96	0.38	ug/L	1		8270C	Total/NA
Isophorone	0.069	J	0.96	0.040	ug/L	1		8270C	Total/NA
Caprolactam - RA	1000	B	96	7.2	ug/L	20		8270C	Total/NA
Arsenic	16		10	2.9	ug/L	1		6010B	Dissolved
Barium	120	J	200	1.0	ug/L	1		6010B	Dissolved
Cadmium	0.41	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	29	B	5.0	0.55	ug/L	1		6010B	Dissolved
Lead	13		3.0	1.9	ug/L	1		6010B	Dissolved

Client Sample ID: VAP-3-GW (30-31) — Lab Sample ID: 240-56328-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.2	J	10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	1.3	J	10	0.53	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.5	J	1.9	1.5	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.57	J	0.96	0.12	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	1.3		0.96	0.38	ug/L	1		8270C	Total/NA
Caprolactam - RA	190	B	24	1.8	ug/L	5		8270C	Total/NA
Arsenic	27		10	2.9	ug/L	1		6010B	Dissolved
Barium	2300		200	1.0	ug/L	1		6010B	Dissolved
Cadmium	1.3	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	870	B	5.0	0.55	ug/L	1		6010B	Dissolved
Lead	260		3.0	1.9	ug/L	1		6010B	Dissolved
Selenium	19		5.0	4.0	ug/L	1		6010B	Dissolved
Mercury	1.0		0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-3-GW (35-36) — Lab Sample ID: 240-56328-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.6	J	10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	0.67	J	10	0.53	ug/L	1		8260B	Total/NA
Carbon disulfide	0.38	J	1.0	0.38	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	2.1	B	1.9	1.4	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.90	J B	0.93	0.37	ug/L	1		8270C	Total/NA
Caprolactam - RA	1500	B	120	8.6	ug/L	25		8270C	Total/NA
Arsenic	8.6	J	10	2.9	ug/L	1		6010B	Dissolved
Barium	380		200	1.0	ug/L	1		6010B	Dissolved
Cadmium	0.31	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	140	B	5.0	0.55	ug/L	1		6010B	Dissolved
Lead	35		3.0	1.9	ug/L	1		6010B	Dissolved

Client Sample ID: VAP-3-GW (40-41) — Lab Sample ID: 240-56328-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.1	J	10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	1.4	J	10	0.53	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	2.1	B	1.9	1.4	ug/L	1		8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-3-GW (40-41) (Continued) — Lab Sample ID: 240-56328-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Di-n-butyl phthalate	0.66	J B	0.93	0.37	ug/L	1		8270C	Total/NA
Caprolactam - RA	800	B	58	4.3	ug/L	12.5		8270C	Total/NA
Arsenic	17		10	2.9	ug/L	1		6010B	Dissolved
Barium	1100		200	1.0	ug/L	1		6010B	Dissolved
Cadmium	1.2	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	470	B	5.0	0.55	ug/L	1		6010B	Dissolved
Lead	150		3.0	1.9	ug/L	1		6010B	Dissolved
Selenium	9.5		5.0	4.0	ug/L	1		6010B	Dissolved
Mercury	0.17	J	0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-3-GW (45-46) — Lab Sample ID: 240-56328-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.8	J	10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	0.81	J	10	0.53	ug/L	1		8260B	Total/NA
Di-n-butyl phthalate	0.56	J B	0.93	0.37	ug/L	1		8270C	Total/NA
Caprolactam - RA	330	B	31	2.3	ug/L	6.6666		8270C	Total/NA
Arsenic	8.1	J	10	2.9	ug/L	1		6010B	Dissolved
Barium	410		200	1.0	ug/L	1		6010B	Dissolved
Cadmium	2.7		2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	140	B	5.0	0.55	ug/L	1		6010B	Dissolved
Lead	39		3.0	1.9	ug/L	1		6010B	Dissolved
Selenium	21		5.0	4.0	ug/L	1		6010B	Dissolved
Mercury	0.095	J	0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-3-GW (49-50) — Lab Sample ID: 240-56328-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.5	J	10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	0.83	J	10	0.53	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.6	J B	1.9	1.4	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	1.1	B	0.93	0.37	ug/L	1		8270C	Total/NA
Caprolactam - RA	1600	B	120	8.6	ug/L	25		8270C	Total/NA
Arsenic	23		10	2.9	ug/L	1		6010B	Dissolved
Barium	380		200	1.0	ug/L	1		6010B	Dissolved
Cadmium	0.54	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	140	B	5.0	0.55	ug/L	1		6010B	Dissolved
Lead	34		3.0	1.9	ug/L	1		6010B	Dissolved
Mercury	0.16	J	0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-4 (6-8) — Lab Sample ID: 240-56328-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.3	J B *	17	1.4	ug/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	1.3	J B	17	0.42	ug/Kg	1	☼	8260B	Total/NA
Carbon disulfide	0.52	J	4.3	0.30	ug/Kg	1	☼	8260B	Total/NA
Bis(2-ethylhexyl) phthalate	27	J	85	23	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	27	J B	85	18	ug/Kg	1	☼	8270C	Total/NA
Arsenic	2.3		0.86	0.35	mg/Kg	1	☼	6010B	Total/NA
Barium	440		17	0.35	mg/Kg	1	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-4 (6-8) (Continued) — Lab Sample ID: 240-56328-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.048	J	0.17	0.018	mg/Kg	1	☼	6010B	Total/NA
Chromium	8.2	B	0.43	0.064	mg/Kg	1	☼	6010B	Total/NA
Lead	6.9		0.26	0.17	mg/Kg	1	☼	6010B	Total/NA
Cr (VI)	0.35	J	0.99	0.32	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: VAP-4-GW (15-16) — Lab Sample ID: 240-56328-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.3	J	10	0.94	ug/L	1		8260B	Total/NA
Trichloroethene	0.83	J	1.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.47	J	1.0	0.26	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	3.0	B	1.9	1.5	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.31	J	0.96	0.12	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	1.2	B	0.96	0.38	ug/L	1		8270C	Total/NA
Caprolactam - RA	240	B	24	1.8	ug/L	5		8270C	Total/NA
Arsenic	130		10	2.9	ug/L	1		6010B	Dissolved
Barium	980		200	1.0	ug/L	1		6010B	Dissolved
Cadmium	1.9	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	260	B	5.0	0.55	ug/L	1		6010B	Dissolved
Lead	57		3.0	1.9	ug/L	1		6010B	Dissolved
Selenium	4.1	J	5.0	4.0	ug/L	1		6010B	Dissolved
Mercury	0.22		0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-4-GW (20-21) — Lab Sample ID: 240-56328-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.0	J	10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	1.3	J	10	0.53	ug/L	1		8260B	Total/NA
Trichloroethene	12		1.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	10		1.0	0.26	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	2.3	B	2.0	1.5	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	1.0	B	1.0	0.40	ug/L	1		8270C	Total/NA
Caprolactam - RA	170	B	20	1.5	ug/L	4		8270C	Total/NA
Arsenic	19		10	2.9	ug/L	1		6010B	Dissolved
Barium	410		200	1.0	ug/L	1		6010B	Dissolved
Cadmium	0.24	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	130	B	5.0	0.55	ug/L	1		6010B	Dissolved
Lead	32		3.0	1.9	ug/L	1		6010B	Dissolved

Client Sample ID: VAP-4-GW (25-26) — Lab Sample ID: 240-56328-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	19		1.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	18		1.0	0.26	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	2.2	B	2.0	1.5	ug/L	1		8270C	Total/NA
Caprolactam	45	B	5.0	0.37	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	1.1	B	1.0	0.40	ug/L	1		8270C	Total/NA
Arsenic	19		10	2.9	ug/L	1		6010B	Dissolved
Barium	260		200	1.0	ug/L	1		6010B	Dissolved
Cadmium	0.21	J	2.0	0.14	ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-4-GW (25-26) (Continued) — Lab Sample ID: 240-56328-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	100	B	5.0	0.55	ug/L	1		6010B	Dissolved
Lead	34		3.0	1.9	ug/L	1		6010B	Dissolved
Mercury	0.38		0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-4-GW (30-31) — Lab Sample ID: 240-56328-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	6.6		1.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	5.2		1.0	0.26	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.6	J B	1.9	1.5	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	1.2		0.96	0.38	ug/L	1		8270C	Total/NA
Caprolactam - RA	190	B	19	1.4	ug/L	4		8270C	Total/NA
Arsenic	96		10	2.9	ug/L	1		6010B	Dissolved
Barium	1300	B	200	1.0	ug/L	1		6010B	Dissolved
Cadmium	1.6	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	550		5.0	0.55	ug/L	1		6010B	Dissolved
Lead	280		3.0	1.9	ug/L	1		6010B	Dissolved
Mercury	2.3		0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-4-GW (35-36) — Lab Sample ID: 240-56328-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.4	J	10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	0.86	J	10	0.53	ug/L	1		8260B	Total/NA
Trichloroethene	0.95	J	1.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	1.2		1.0	0.26	ug/L	1		8260B	Total/NA
Caprolactam	72	B	5.0	0.37	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.67	J	1.0	0.40	ug/L	1		8270C	Total/NA
Phenol	12		1.0	0.15	ug/L	1		8270C	Total/NA
Arsenic	66		10	2.9	ug/L	1		6010B	Dissolved
Barium	2400	B	200	1.0	ug/L	1		6010B	Dissolved
Cadmium	3.9		2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	670		5.0	0.55	ug/L	1		6010B	Dissolved
Lead	230		3.0	1.9	ug/L	1		6010B	Dissolved
Selenium	11		5.0	4.0	ug/L	1		6010B	Dissolved
Mercury	1.0		0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-4-GW (40-41) — Lab Sample ID: 240-56328-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.53	J	10	0.53	ug/L	1		8260B	Total/NA
Caprolactam	6.8	B	4.8	0.36	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.61	J	0.96	0.38	ug/L	1		8270C	Total/NA
Arsenic	15		10	2.9	ug/L	1		6010B	Dissolved
Barium	1400	B	200	1.0	ug/L	1		6010B	Dissolved
Cadmium	1.4	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	380		5.0	0.55	ug/L	1		6010B	Dissolved
Lead	130		3.0	1.9	ug/L	1		6010B	Dissolved
Selenium	7.0		5.0	4.0	ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-4-GW (45-46) — Lab Sample ID: 240-56328-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.54	J	10	0.53	ug/L	1		8260B	Total/NA
Acetophenone	0.28	J	0.93	0.13	ug/L	1		8270C	Total/NA
Bis(2-ethylhexyl) phthalate	1.6	J	1.9	1.4	ug/L	1		8270C	Total/NA
Caprolactam	58	B	4.6	0.34	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	1.5		0.93	0.37	ug/L	1		8270C	Total/NA
Phenanthrene	0.33		0.19	0.029	ug/L	1		8270C	Total/NA
Arsenic	15		10	2.9	ug/L	1		6010B	Dissolved
Barium	1500	B	200	1.0	ug/L	1		6010B	Dissolved
Cadmium	2.1		2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	690		5.0	0.55	ug/L	1		6010B	Dissolved
Lead	190		3.0	1.9	ug/L	1		6010B	Dissolved
Selenium	11		5.0	4.0	ug/L	1		6010B	Dissolved
Mercury	0.15	J	0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-4-GW (48-49) — Lab Sample ID: 240-56328-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.7	J	10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	1.5	J	10	0.53	ug/L	1		8260B	Total/NA
Toluene	0.26	J	1.0	0.23	ug/L	1		8260B	Total/NA
Di-n-butyl phthalate	0.94		0.93	0.37	ug/L	1		8270C	Total/NA
Caprolactam - RA	110	B	19	1.4	ug/L	4		8270C	Total/NA
Arsenic	56		10	2.9	ug/L	1		6010B	Dissolved
Barium	2400	B	200	1.0	ug/L	1		6010B	Dissolved
Cadmium	4.1		2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	2000		5.0	0.55	ug/L	1		6010B	Dissolved
Lead	220		3.0	1.9	ug/L	1		6010B	Dissolved
Selenium	12		5.0	4.0	ug/L	1		6010B	Dissolved
Mercury	0.54		0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-5 (4-6) — Lab Sample ID: 240-56328-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	1.1	J B	18	0.43	ug/Kg	1	☼	8260B	Total/NA
Arsenic	7.1		0.91	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	110		18	0.37	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.11	J	0.18	0.019	mg/Kg	1	☼	6010B	Total/NA
Chromium	9.2	B	0.45	0.068	mg/Kg	1	☼	6010B	Total/NA
Lead	8.7		0.27	0.18	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.44	J	0.45	0.31	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: VAP-5-GW (15-16) — Lab Sample ID: 240-56328-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	81		8.0	1.8	ug/L	8		8260B	Total/NA
cis-1,2-Dichloroethene	220		8.0	2.1	ug/L	8		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.7	J B	2.0	1.5	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.72	J	1.0	0.40	ug/L	1		8270C	Total/NA
Phenol	6.1		1.0	0.15	ug/L	1		8270C	Total/NA
Caprolactam - RA	120	B	20	1.5	ug/L	4		8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-5-GW (15-16) (Continued) — Lab Sample ID: 240-56328-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	14		10	2.9	ug/L	1		6010B	Dissolved
Barium	440	B	200	1.0	ug/L	1		6010B	Dissolved
Cadmium	1.0	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	100		5.0	0.55	ug/L	1		6010B	Dissolved
Lead	37		3.0	1.9	ug/L	1		6010B	Dissolved
Mercury	1.0		0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-5-GW (20-21) — Lab Sample ID: 240-56328-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	130		10	2.2	ug/L	10		8260B	Total/NA
cis-1,2-Dichloroethene	390	F1	10	2.6	ug/L	10		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	3.1	B	1.9	1.4	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.22	J	0.93	0.12	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	1.1		0.93	0.37	ug/L	1		8270C	Total/NA
Caprolactam - RA	260	B	46	3.4	ug/L	10		8270C	Total/NA
Arsenic	35		10	2.9	ug/L	1		6010B	Dissolved
Barium	140	J B	200	1.0	ug/L	1		6010B	Dissolved
Cadmium	0.26	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	40		5.0	0.55	ug/L	1		6010B	Dissolved
Lead	11		3.0	1.9	ug/L	1		6010B	Dissolved
Mercury	0.20		0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-5-GW (25-26) — Lab Sample ID: 240-56328-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	57		5.0	1.1	ug/L	5		8260B	Total/NA
cis-1,2-Dichloroethene	130		5.0	1.3	ug/L	5		8260B	Total/NA
Caprolactam	20	B	4.8	0.36	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.60	J	0.96	0.38	ug/L	1		8270C	Total/NA
Arsenic	9.2	J	10	2.9	ug/L	1		6010B	Dissolved
Barium	240	B	200	1.0	ug/L	1		6010B	Dissolved
Cadmium	0.18	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	55		5.0	0.55	ug/L	1		6010B	Dissolved
Lead	23		3.0	1.9	ug/L	1		6010B	Dissolved
Mercury	0.11	J	0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-5-GW (30-31) — Lab Sample ID: 240-56328-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.3		1.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	2.8		1.0	0.26	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.7	J B	1.9	1.5	ug/L	1		8270C	Total/NA
Caprolactam	52	B	4.8	0.36	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.53	J	0.96	0.38	ug/L	1		8270C	Total/NA
Arsenic	7.8	J	10	2.9	ug/L	1		6010B	Dissolved
Barium	380	B	200	1.0	ug/L	1		6010B	Dissolved
Cadmium	3.6		2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	210		5.0	0.55	ug/L	1		6010B	Dissolved
Lead	96		3.0	1.9	ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-5-GW (30-31) (Continued) — Lab Sample ID: 240-56328-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	29		5.0	4.0	ug/L	1		6010B	Dissolved
Mercury	0.28		0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-5-GW (35-36) — Lab Sample ID: 240-56328-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.27	J	1.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.46	J	1.0	0.26	ug/L	1		8260B	Total/NA
Caprolactam	30	B	5.0	0.37	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.57	J	1.0	0.40	ug/L	1		8270C	Total/NA
Arsenic	12		10	2.9	ug/L	1		6010B	Dissolved
Barium	280	B	200	1.0	ug/L	1		6010B	Dissolved
Cadmium	0.48	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	48		5.0	0.55	ug/L	1		6010B	Dissolved
Lead	30		3.0	1.9	ug/L	1		6010B	Dissolved
Mercury	0.15	J	0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-5-GW (40-41) — Lab Sample ID: 240-56328-36

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Di-n-butyl phthalate	0.71	J	1.0	0.40	ug/L	1		8270C	Total/NA
Caprolactam - RA	320	B	50	3.7	ug/L	10		8270C	Total/NA
Arsenic	14		10	2.9	ug/L	1		6010B	Dissolved
Barium	190	J B	200	1.0	ug/L	1		6010B	Dissolved
Cadmium	0.66	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	33		5.0	0.55	ug/L	1		6010B	Dissolved
Lead	18		3.0	1.9	ug/L	1		6010B	Dissolved

Client Sample ID: VAP-5-GW (45-46) — Lab Sample ID: 240-56328-37

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Di-n-butyl phthalate	0.83	J	1.0	0.40	ug/L	1		8270C	Total/NA
Caprolactam - RA	150	B	20	1.5	ug/L	4		8270C	Total/NA
Arsenic	16		10	2.9	ug/L	1		6010B	Dissolved
Barium	220	B	200	1.0	ug/L	1		6010B	Dissolved
Cadmium	0.68	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	54		5.0	0.55	ug/L	1		6010B	Dissolved
Lead	28		3.0	1.9	ug/L	1		6010B	Dissolved

Client Sample ID: VAP-5-GW (49-50) — Lab Sample ID: 240-56328-38

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	2.3	J	10	0.53	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.27	J	1.0	0.26	ug/L	1		8260B	Total/NA

Client Sample ID: TB-03 (100715) — Lab Sample ID: 240-56328-39

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.2	J	10	0.94	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: TB-04 (100715)

Lab Sample ID: 240-56328-40

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.9	J	10	0.94	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-02 (100515)
Date Collected: 10/05/15 00:00
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1.0	J	10	0.94	ug/L			10/14/15 00:59	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 00:59	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 00:59	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 00:59	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 00:59	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/14/15 00:59	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 00:59	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 00:59	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 00:59	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 00:59	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 00:59	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 00:59	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 00:59	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 00:59	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 00:59	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 00:59	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 00:59	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 00:59	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 00:59	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 00:59	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 00:59	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 00:59	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 00:59	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 00:59	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 00:59	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 00:59	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/14/15 00:59	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 00:59	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 00:59	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 00:59	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 00:59	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 00:59	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 00:59	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 00:59	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 00:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/14/15 00:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 00:59	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 00:59	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 00:59	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 00:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 00:59	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 00:59	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 00:59	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 00:59	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 00:59	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 00:59	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 00:59	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 00:59	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: TB-02 (100515)
Date Collected: 10/05/15 00:00
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		78 - 125		10/14/15 00:59	1
4-Bromofluorobenzene (Surr)	87		61 - 120		10/14/15 00:59	1
Toluene-d8 (Surr)	95		80 - 120		10/14/15 00:59	1
Dibromofluoromethane (Surr)	103		79 - 120		10/14/15 00:59	1

Client Sample ID: VAP-2 (2-4)

Date Collected: 10/05/15 08:35
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-2

Matrix: Solid
Percent Solids: 78.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**10**	**J B ***	20	1.6	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Benzene	**0.57**	**J**	4.9	0.23	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Dichlorobromomethane	4.9	U	4.9	0.21	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Bromoform	4.9	U	4.9	0.37	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Bromomethane	4.9	U	4.9	0.70	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
2-Butanone (MEK)	**2.0**	**J B**	20	0.47	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Carbon disulfide	**0.60**	**J**	4.9	0.33	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Carbon tetrachloride	4.9	U	4.9	0.32	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Chlorobenzene	4.9	U	4.9	0.28	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Chloroethane	4.9	U	4.9	0.33	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Chloroform	4.9	U	4.9	0.21	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Chloromethane	4.9	U	4.9	1.3	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
1,1-Dichloroethane	4.9	U	4.9	1.2	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
1,2-Dichloroethane	4.9	U	4.9	0.20	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
1,1-Dichloroethene	4.9	U	4.9	0.48	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
1,2-Dichloropropane	4.9	U	4.9	0.27	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
cis-1,3-Dichloropropene	4.9	U	4.9	0.26	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
trans-1,3-Dichloropropene	4.9	U	4.9	0.21	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Ethylbenzene	4.9	U	4.9	0.31	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
2-Hexanone	20	U	20	0.69	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Methylene Chloride	4.9	U	4.9	1.0	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
4-Methyl-2-pentanone (MIBK)	20	U	20	0.28	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Styrene	4.9	U	4.9	0.26	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
1,1,2,2-Tetrachloroethane	4.9	U	4.9	0.16	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Tetrachloroethene	4.9	U	4.9	0.32	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Toluene	**0.49**	**J**	4.9	0.26	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Trichloroethene	4.9	U	4.9	0.25	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Vinyl chloride	4.9	U	4.9	0.38	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Xylenes, Total	9.8	U	9.8	0.62	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
1,1,1-Trichloroethane	4.9	U	4.9	0.25	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
1,1,2-Trichloroethane	4.9	U	4.9	0.48	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Cyclohexane	9.8	U	9.8	0.28	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
1,2-Dibromo-3-Chloropropane	9.8	U	9.8	1.8	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Ethylene Dibromide	4.9	U	4.9	0.24	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Dichlorodifluoromethane	4.9	U	4.9	0.39	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
cis-1,2-Dichloroethene	4.9	U	4.9	0.27	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
trans-1,2-Dichloroethene	4.9	U	4.9	0.36	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Isopropylbenzene	4.9	U	4.9	0.29	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Methyl acetate	9.8	U *	9.8	2.2	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Methyl tert-butyl ether	4.9	U	4.9	0.15	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	4.9	U	4.9	0.38	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
1,2,4-Trichlorobenzene	4.9	U	4.9	0.38	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
1,2-Dichlorobenzene	4.9	U	4.9	0.37	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
1,3-Dichlorobenzene	4.9	U	4.9	0.39	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
1,4-Dichlorobenzene	4.9	U	4.9	0.40	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Trichlorofluoromethane	4.9	U	4.9	0.25	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Chlorodibromomethane	4.9	U	4.9	0.16	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1
Methylcyclohexane	9.8	U	9.8	0.32	ug/Kg	☼	10/10/15 05:46	10/14/15 07:26	1

Client Sample ID: VAP-2 (2-4)

Date Collected: 10/05/15 08:35
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-2

Matrix: Solid
Percent Solids: 78.4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*64 - 120*	*10/10/15 05:46*	*10/14/15 07:26*	*1*
4-Bromofluorobenzene (Surr)	*113*		*64 - 130*	*10/10/15 05:46*	*10/14/15 07:26*	*1*
Toluene-d8 (Surr)	*99*		*69 - 128*	*10/10/15 05:46*	*10/14/15 07:26*	*1*
Dibromofluoromethane (Surr)	*97*		*68 - 120*	*10/10/15 05:46*	*10/14/15 07:26*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	64	U	64	4.5	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
bis (2-chloroisopropyl) ether	130	U	130	12	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
2,4,5-Trichlorophenol	190	U	190	32	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
2,4,6-Trichlorophenol	190	U	190	11	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
2,4-Dichlorophenol	190	U	190	26	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
2,4-Dimethylphenol	190	U	190	26	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
2,4-Dinitrophenol	420	U	420	27	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
2,4-Dinitrotoluene	260	U	260	22	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
2,6-Dinitrotoluene	260	U	260	27	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
2-Chloronaphthalene	64	U	64	0.58	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
2-Chlorophenol	64	U	64	11	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
2-Methylnaphthalene	8.6	U	8.6	0.64	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
2-Methylphenol	260	U	260	14	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
2-Nitroaniline	260	U	260	12	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
2-Nitrophenol	64	U	64	11	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
3,3'-Dichlorobenzidine	130	U	130	23	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
3-Nitroaniline	260	U	260	21	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
4,6-Dinitro-2-methylphenol	190	U	190	12	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
4-Bromophenyl phenyl ether	64	U	64	17	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
4-Chloro-3-methylphenol	190	U	190	27	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
4-Chloroaniline	190	U	190	22	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
4-Chlorophenyl phenyl ether	64	U	64	17	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
4-Nitroaniline	260	U	260	33	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
4-Nitrophenol	420	U	420	22	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Acenaphthene	8.6	U	8.6	0.98	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Acenaphthylene	8.6	U	8.6	0.45	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Acetophenone	130	U	130	12	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Anthracene	8.6	U	8.6	1.0	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Atrazine	260	U	260	12	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Benzaldehyde	130	U	130	15	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Benzo[a]anthracene	8.6	U	8.6	0.81	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Benzo[a]pyrene	8.6	U	8.6	0.82	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Benzo[b]fluoranthene	8.6	U	8.6	0.76	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Benzo[g,h,i]perylene	8.6	U	8.6	0.45	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Benzo[k]fluoranthene	8.6	U	8.6	0.88	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Bis(2-chloroethoxy)methane	130	U	130	28	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Bis(2-chloroethyl)ether	130	U	130	2.6	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Bis(2-ethylhexyl) phthalate	**25**	**J**	90	24	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Butyl benzyl phthalate	90	U	90	13	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Caprolactam	420	U	420	48	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Carbazole	64	U	64	35	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Chrysene	8.6	U	8.6	1.4	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Dibenz(a,h)anthracene	8.6	U	8.6	0.85	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1

Client Sample ID: VAP-2 (2-4)

Date Collected: 10/05/15 08:35
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-2

Matrix: Solid
Percent Solids: 78.4

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	64	U	64	0.85	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Diethyl phthalate	90	U	90	21	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Dimethyl phthalate	90	U	90	22	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Di-n-butyl phthalate	**26**	**J B**	90	19	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Di-n-octyl phthalate	90	U	90	10	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Fluoranthene	8.6	U	8.6	0.71	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Fluorene	8.6	U	8.6	0.68	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Hexachlorobenzene	8.6	U	8.6	2.7	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Hexachlorobutadiene	64	U	64	7.2	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Hexachlorocyclopentadiene	420	U	420	10	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Hexachloroethane	64	U	64	12	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Indeno[1,2,3-cd]pyrene	8.6	U	8.6	0.45	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Isophorone	64	U	64	17	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Naphthalene	8.6	U	8.6	1.1	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Nitrobenzene	130	U	130	2.8	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
N-Nitrosodi-n-propylamine	64	U	64	8.1	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
N-Nitrosodiphenylamine	64	U	64	27	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Pentachlorophenol	190	U	190	12	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Phenol	64	U	64	9.4	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Phenanthrene	8.6	U	8.6	0.94	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
Pyrene	8.6	U	8.6	0.57	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1
3 & 4 Methylphenol	520	U	520	26	ug/Kg	☼	10/09/15 07:30	10/13/15 14:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*75*		*24 - 110*	*10/09/15 07:30*	*10/13/15 14:11*	*1*
2-Fluorophenol (Surr)	*71*		*24 - 110*	*10/09/15 07:30*	*10/13/15 14:11*	*1*
2,4,6-Tribromophenol (Surr)	*13*		*10 - 110*	*10/09/15 07:30*	*10/13/15 14:11*	*1*
Nitrobenzene-d5 (Surr)	*66*		*20 - 110*	*10/09/15 07:30*	*10/13/15 14:11*	*1*
Phenol-d5 (Surr)	*70*		*26 - 110*	*10/09/15 07:30*	*10/13/15 14:11*	*1*
Terphenyl-d14 (Surr)	*87*		*36 - 110*	*10/09/15 07:30*	*10/13/15 14:11*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.7**		1.1	0.46	mg/Kg	☼	10/09/15 07:38	10/13/15 06:08	1
Barium	**93**		23	0.46	mg/Kg	☼	10/09/15 07:38	10/13/15 06:08	1
Cadmium	**0.038**	**J**	0.23	0.024	mg/Kg	☼	10/09/15 07:38	10/13/15 06:08	1
Chromium	**7.7**	**B**	0.56	0.085	mg/Kg	☼	10/09/15 07:38	10/13/15 06:08	1
Lead	**8.1**		0.34	0.23	mg/Kg	☼	10/09/15 07:38	10/13/15 06:08	1
Selenium	**0.46**	**J**	0.56	0.38	mg/Kg	☼	10/09/15 07:38	10/13/15 08:53	1
Silver	0.56	U	0.56	0.071	mg/Kg	☼	10/09/15 07:38	10/13/15 06:08	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.018**	**J**	0.13	0.018	mg/Kg	☼	10/09/15 10:00	10/13/15 12:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	**0.44**	**J**	1.0	0.33	mg/Kg	☼	10/09/15 11:05	10/12/15 15:14	1
Percent Solids	**78**		0.10	0.10	%			10/09/15 13:58	1
Percent Moisture	**22**		0.10	0.10	%			10/09/15 13:58	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-2 GW (15-16)

Date Collected: 10/05/15 08:50
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/14/15 01:21	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 01:21	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 01:21	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 01:21	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 01:21	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/14/15 01:21	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 01:21	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 01:21	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 01:21	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 01:21	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 01:21	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 01:21	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 01:21	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 01:21	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 01:21	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 01:21	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 01:21	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 01:21	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 01:21	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 01:21	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 01:21	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 01:21	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 01:21	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 01:21	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 01:21	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 01:21	1
Trichloroethene	**2.1**		1.0	0.22	ug/L			10/14/15 01:21	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 01:21	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 01:21	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 01:21	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 01:21	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 01:21	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 01:21	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 01:21	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 01:21	1
cis-1,2-Dichloroethene	**0.74**	**J**	1.0	0.26	ug/L			10/14/15 01:21	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 01:21	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 01:21	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 01:21	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 01:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 01:21	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 01:21	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 01:21	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 01:21	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 01:21	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 01:21	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 01:21	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 01:21	1

Client Sample ID: VAP-2 GW (15-16)

Date Collected: 10/05/15 08:50
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-3

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*78 - 125*		*10/14/15 01:21*	*1*
4-Bromofluorobenzene (Surr)	*87*		*61 - 120*		*10/14/15 01:21*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*10/14/15 01:21*	*1*
Dibromofluoromethane (Surr)	*102*		*79 - 120*		*10/14/15 01:21*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/09/15 09:01	10/12/15 08:00	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/12/15 08:00	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/09/15 09:01	10/12/15 08:00	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/09/15 09:01	10/12/15 08:00	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/09/15 09:01	10/12/15 08:00	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/09/15 09:01	10/12/15 08:00	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/09/15 09:01	10/12/15 08:00	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/09/15 09:01	10/12/15 08:00	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/09/15 09:01	10/12/15 08:00	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 08:00	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/12/15 08:00	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/09/15 09:01	10/12/15 08:00	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/12/15 08:00	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/09/15 09:01	10/12/15 08:00	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/09/15 09:01	10/12/15 08:00	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/09/15 09:01	10/12/15 08:00	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/09/15 09:01	10/12/15 08:00	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/09/15 09:01	10/12/15 08:00	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/09/15 09:01	10/12/15 08:00	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/09/15 09:01	10/12/15 08:00	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/09/15 09:01	10/12/15 08:00	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/09/15 09:01	10/12/15 08:00	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/09/15 09:01	10/12/15 08:00	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/09/15 09:01	10/12/15 08:00	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/09/15 09:01	10/12/15 08:00	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/09/15 09:01	10/12/15 08:00	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/12/15 08:00	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/09/15 09:01	10/12/15 08:00	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 08:00	1
Benzaldehyde	0.96	U *	0.96	0.28	ug/L		10/09/15 09:01	10/12/15 08:00	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/09/15 09:01	10/12/15 08:00	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/09/15 09:01	10/12/15 08:00	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/09/15 09:01	10/12/15 08:00	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/09/15 09:01	10/12/15 08:00	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/09/15 09:01	10/12/15 08:00	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/09/15 09:01	10/12/15 08:00	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/12/15 08:00	1
Bis(2-ethylhexyl) phthalate	**1.8**	**J B**	1.9	1.5	ug/L		10/09/15 09:01	10/12/15 08:00	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/09/15 09:01	10/12/15 08:00	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/09/15 09:01	10/12/15 08:00	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/09/15 09:01	10/12/15 08:00	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/09/15 09:01	10/12/15 08:00	1
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/12/15 08:00	1

Client Sample ID: VAP-2 GW (15-16)

Date Collected: 10/05/15 08:50
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-3

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	**1.9**		0.96	0.12	ug/L		10/09/15 09:01	10/12/15 08:00	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/09/15 09:01	10/12/15 08:00	1
Di-n-butyl phthalate	**0.96**	**B**	0.96	0.38	ug/L		10/09/15 09:01	10/12/15 08:00	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/09/15 09:01	10/12/15 08:00	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/09/15 09:01	10/12/15 08:00	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/09/15 09:01	10/12/15 08:00	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 08:00	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/09/15 09:01	10/12/15 08:00	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/09/15 09:01	10/12/15 08:00	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/09/15 09:01	10/12/15 08:00	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/09/15 09:01	10/12/15 08:00	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/09/15 09:01	10/12/15 08:00	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/09/15 09:01	10/12/15 08:00	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 08:00	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/09/15 09:01	10/12/15 08:00	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 08:00	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/09/15 09:01	10/12/15 08:00	1
Phenol	0.96	U	0.96	0.14	ug/L		10/09/15 09:01	10/12/15 08:00	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/09/15 09:01	10/12/15 08:00	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/09/15 09:01	10/12/15 08:00	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/09/15 09:01	10/12/15 08:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*27*	*X*	*29 - 110*	*10/09/15 09:01*	*10/12/15 08:00*	*1*
2-Fluorophenol (Surr)	*39*		*15 - 110*	*10/09/15 09:01*	*10/12/15 08:00*	*1*
2,4,6-Tribromophenol (Surr)	*31*		*21 - 128*	*10/09/15 09:01*	*10/12/15 08:00*	*1*
Nitrobenzene-d5 (Surr)	*34*		*31 - 110*	*10/09/15 09:01*	*10/12/15 08:00*	*1*
Phenol-d5 (Surr)	*33*		*10 - 110*	*10/09/15 09:01*	*10/12/15 08:00*	*1*
Terphenyl-d14 (Surr)	*36*		*31 - 115*	*10/09/15 09:01*	*10/12/15 08:00*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**160**	**B**	19	1.4	ug/L		10/09/15 09:01	10/13/15 10:22	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*34*		*29 - 110*	*10/09/15 09:01*	*10/13/15 10:22*	*4*
2-Fluorophenol (Surr)	*47*		*15 - 110*	*10/09/15 09:01*	*10/13/15 10:22*	*4*
2,4,6-Tribromophenol (Surr)	*29*		*21 - 128*	*10/09/15 09:01*	*10/13/15 10:22*	*4*
Nitrobenzene-d5 (Surr)	*40*		*31 - 110*	*10/09/15 09:01*	*10/13/15 10:22*	*4*
Phenol-d5 (Surr)	*41*		*10 - 110*	*10/09/15 09:01*	*10/13/15 10:22*	*4*
Terphenyl-d14 (Surr)	*43*		*31 - 115*	*10/09/15 09:01*	*10/13/15 10:22*	*4*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.9**	**J**	10	2.9	ug/L		10/09/15 10:45	10/14/15 23:47	1
Barium	**180**	**J**	200	1.0	ug/L		10/09/15 10:45	10/14/15 23:47	1
Cadmium	**0.20**	**J**	2.0	0.14	ug/L		10/09/15 10:45	10/14/15 23:47	1
Chromium	**38**	**B**	5.0	0.55	ug/L		10/09/15 10:45	10/14/15 23:47	1
Lead	**10**		3.0	1.9	ug/L		10/09/15 10:45	10/14/15 23:47	1
Selenium	**4.5**	**J**	5.0	4.0	ug/L		10/09/15 10:45	10/14/15 23:47	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-2 GW (15-16)
Date Collected: 10/05/15 08:50
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-3
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:45	10/14/15 23:47	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/09/15 14:00	10/14/15 09:52	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-2 GW (20-21)

Date Collected: 10/05/15 10:00
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-4

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**4.8**	**J**	10	0.94	ug/L			10/14/15 01:44	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 01:44	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 01:44	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 01:44	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 01:44	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/14/15 01:44	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 01:44	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 01:44	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 01:44	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 01:44	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 01:44	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 01:44	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 01:44	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 01:44	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 01:44	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 01:44	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 01:44	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 01:44	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 01:44	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 01:44	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 01:44	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 01:44	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 01:44	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 01:44	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 01:44	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 01:44	1
Trichloroethene	**0.40**	**J**	1.0	0.22	ug/L			10/14/15 01:44	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 01:44	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 01:44	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 01:44	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 01:44	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 01:44	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 01:44	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 01:44	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 01:44	1
cis-1,2-Dichloroethene	**0.51**	**J**	1.0	0.26	ug/L			10/14/15 01:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 01:44	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 01:44	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 01:44	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 01:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 01:44	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 01:44	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 01:44	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 01:44	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 01:44	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 01:44	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 01:44	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 01:44	1

Client Sample ID: VAP-2 GW (20-21)

Date Collected: 10/05/15 10:00
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-4

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*78 - 125*		*10/14/15 01:44*	*1*
4-Bromofluorobenzene (Surr)	*92*		*61 - 120*		*10/14/15 01:44*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/14/15 01:44*	*1*
Dibromofluoromethane (Surr)	*103*		*79 - 120*		*10/14/15 01:44*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 08:24	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/09/15 09:01	10/12/15 08:24	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/09/15 09:01	10/12/15 08:24	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/09/15 09:01	10/12/15 08:24	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/09/15 09:01	10/12/15 08:24	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/09/15 09:01	10/12/15 08:24	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/09/15 09:01	10/12/15 08:24	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/09/15 09:01	10/12/15 08:24	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/09/15 09:01	10/12/15 08:24	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 08:24	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/09/15 09:01	10/12/15 08:24	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/09/15 09:01	10/12/15 08:24	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/09/15 09:01	10/12/15 08:24	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/09/15 09:01	10/12/15 08:24	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/09/15 09:01	10/12/15 08:24	1
3,3'-Dichlorobenzidine	4.6	U	4.6	0.33	ug/L		10/09/15 09:01	10/12/15 08:24	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/09/15 09:01	10/12/15 08:24	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/09/15 09:01	10/12/15 08:24	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/09/15 09:01	10/12/15 08:24	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/09/15 09:01	10/12/15 08:24	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/09/15 09:01	10/12/15 08:24	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/09/15 09:01	10/12/15 08:24	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/09/15 09:01	10/12/15 08:24	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/09/15 09:01	10/12/15 08:24	1
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/09/15 09:01	10/12/15 08:24	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/09/15 09:01	10/12/15 08:24	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/09/15 09:01	10/12/15 08:24	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/09/15 09:01	10/12/15 08:24	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 08:24	1
Benzaldehyde	0.93	U *	0.93	0.27	ug/L		10/09/15 09:01	10/12/15 08:24	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/09/15 09:01	10/12/15 08:24	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/09/15 09:01	10/12/15 08:24	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/09/15 09:01	10/12/15 08:24	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/09/15 09:01	10/12/15 08:24	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/09/15 09:01	10/12/15 08:24	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/09/15 09:01	10/12/15 08:24	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/09/15 09:01	10/12/15 08:24	1
Bis(2-ethylhexyl) phthalate	**1.5**	**J B**	1.9	1.4	ug/L		10/09/15 09:01	10/12/15 08:24	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/09/15 09:01	10/12/15 08:24	1
Caprolactam	**3.2**	**J B**	4.6	0.34	ug/L		10/09/15 09:01	10/12/15 08:24	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/09/15 09:01	10/12/15 08:24	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/09/15 09:01	10/12/15 08:24	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/09/15 09:01	10/12/15 08:24	1

Client Sample ID: VAP-2 GW (20-21)
Date Collected: 10/05/15 10:00
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-4
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/09/15 09:01	10/12/15 08:24	1
Diethyl phthalate	**0.42**	**J**	0.93	0.12	ug/L		10/09/15 09:01	10/12/15 08:24	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/09/15 09:01	10/12/15 08:24	1
Di-n-butyl phthalate	**0.52**	**J B**	0.93	0.37	ug/L		10/09/15 09:01	10/12/15 08:24	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/09/15 09:01	10/12/15 08:24	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/09/15 09:01	10/12/15 08:24	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/09/15 09:01	10/12/15 08:24	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 08:24	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/09/15 09:01	10/12/15 08:24	1
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/09/15 09:01	10/12/15 08:24	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/09/15 09:01	10/12/15 08:24	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/09/15 09:01	10/12/15 08:24	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/09/15 09:01	10/12/15 08:24	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/09/15 09:01	10/12/15 08:24	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 08:24	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/09/15 09:01	10/12/15 08:24	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/09/15 09:01	10/12/15 08:24	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/09/15 09:01	10/12/15 08:24	1
Phenol	0.93	U	0.93	0.14	ug/L		10/09/15 09:01	10/12/15 08:24	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/09/15 09:01	10/12/15 08:24	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/09/15 09:01	10/12/15 08:24	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/09/15 09:01	10/12/15 08:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*39*		*29 - 110*	*10/09/15 09:01*	*10/12/15 08:24*	*1*
2-Fluorophenol (Surr)	*48*		*15 - 110*	*10/09/15 09:01*	*10/12/15 08:24*	*1*
2,4,6-Tribromophenol (Surr)	*41*		*21 - 128*	*10/09/15 09:01*	*10/12/15 08:24*	*1*
Nitrobenzene-d5 (Surr)	*46*		*31 - 110*	*10/09/15 09:01*	*10/12/15 08:24*	*1*
Phenol-d5 (Surr)	*40*		*10 - 110*	*10/09/15 09:01*	*10/12/15 08:24*	*1*
Terphenyl-d14 (Surr)	*42*		*31 - 115*	*10/09/15 09:01*	*10/12/15 08:24*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.5**	**J**	10	2.9	ug/L		10/09/15 10:45	10/14/15 23:59	1
Barium	**83**	**J**	200	1.0	ug/L		10/09/15 10:45	10/14/15 23:59	1
Cadmium	2.0	U	2.0	0.14	ug/L		10/09/15 10:45	10/14/15 23:59	1
Chromium	**12**	**B**	5.0	0.55	ug/L		10/09/15 10:45	10/14/15 23:59	1
Lead	**5.1**		3.0	1.9	ug/L		10/09/15 10:45	10/14/15 23:59	1
Selenium	5.0	U	5.0	4.0	ug/L		10/09/15 10:45	10/14/15 23:59	1
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:45	10/14/15 23:59	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/09/15 14:00	10/14/15 09:54	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-2 GW (25-26)
Date Collected: 10/05/15 10:33
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**6.2**	**J**	10	0.94	ug/L			10/14/15 02:06	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 02:06	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 02:06	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 02:06	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 02:06	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/14/15 02:06	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 02:06	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 02:06	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 02:06	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 02:06	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 02:06	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 02:06	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 02:06	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 02:06	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 02:06	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 02:06	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 02:06	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 02:06	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 02:06	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 02:06	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 02:06	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 02:06	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 02:06	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 02:06	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 02:06	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 02:06	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/14/15 02:06	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 02:06	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 02:06	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 02:06	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 02:06	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 02:06	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 02:06	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 02:06	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 02:06	1
cis-1,2-Dichloroethene	**0.54**	**J**	1.0	0.26	ug/L			10/14/15 02:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 02:06	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 02:06	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 02:06	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 02:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 02:06	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 02:06	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 02:06	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 02:06	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 02:06	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 02:06	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 02:06	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 02:06	1

Client Sample ID: VAP-2 GW (25-26)

Date Collected: 10/05/15 10:33
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-5

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*78 - 125*		*10/14/15 02:06*	*1*
4-Bromofluorobenzene (Surr)	*90*		*61 - 120*		*10/14/15 02:06*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/14/15 02:06*	*1*
Dibromofluoromethane (Surr)	*102*		*79 - 120*		*10/14/15 02:06*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/09/15 09:01	10/12/15 08:47	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/12/15 08:47	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/09/15 09:01	10/12/15 08:47	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/09/15 09:01	10/12/15 08:47	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/09/15 09:01	10/12/15 08:47	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/09/15 09:01	10/12/15 08:47	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/09/15 09:01	10/12/15 08:47	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/09/15 09:01	10/12/15 08:47	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/09/15 09:01	10/12/15 08:47	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 08:47	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/12/15 08:47	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/09/15 09:01	10/12/15 08:47	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/12/15 08:47	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/09/15 09:01	10/12/15 08:47	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/09/15 09:01	10/12/15 08:47	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/09/15 09:01	10/12/15 08:47	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/09/15 09:01	10/12/15 08:47	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/09/15 09:01	10/12/15 08:47	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/09/15 09:01	10/12/15 08:47	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/09/15 09:01	10/12/15 08:47	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/09/15 09:01	10/12/15 08:47	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/09/15 09:01	10/12/15 08:47	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/09/15 09:01	10/12/15 08:47	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/09/15 09:01	10/12/15 08:47	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/09/15 09:01	10/12/15 08:47	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/09/15 09:01	10/12/15 08:47	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/12/15 08:47	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/09/15 09:01	10/12/15 08:47	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 08:47	1
Benzaldehyde	0.96	U *	0.96	0.28	ug/L		10/09/15 09:01	10/12/15 08:47	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/09/15 09:01	10/12/15 08:47	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/09/15 09:01	10/12/15 08:47	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/09/15 09:01	10/12/15 08:47	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/09/15 09:01	10/12/15 08:47	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/09/15 09:01	10/12/15 08:47	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/09/15 09:01	10/12/15 08:47	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/12/15 08:47	1
Bis(2-ethylhexyl) phthalate	**2.8**	**B**	1.9	1.5	ug/L		10/09/15 09:01	10/12/15 08:47	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/09/15 09:01	10/12/15 08:47	1
Caprolactam	**52**	**B**	4.8	0.36	ug/L		10/09/15 09:01	10/12/15 08:47	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/09/15 09:01	10/12/15 08:47	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/09/15 09:01	10/12/15 08:47	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/09/15 09:01	10/12/15 08:47	1

Client Sample ID: VAP-2 GW (25-26)
Date Collected: 10/05/15 10:33
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-5
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/12/15 08:47	1
Diethyl phthalate	**0.32**	**J**	0.96	0.12	ug/L		10/09/15 09:01	10/12/15 08:47	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/09/15 09:01	10/12/15 08:47	1
Di-n-butyl phthalate	**0.87**	**J B**	0.96	0.38	ug/L		10/09/15 09:01	10/12/15 08:47	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/09/15 09:01	10/12/15 08:47	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/09/15 09:01	10/12/15 08:47	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/09/15 09:01	10/12/15 08:47	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 08:47	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/09/15 09:01	10/12/15 08:47	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/09/15 09:01	10/12/15 08:47	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/09/15 09:01	10/12/15 08:47	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/09/15 09:01	10/12/15 08:47	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/09/15 09:01	10/12/15 08:47	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/09/15 09:01	10/12/15 08:47	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 08:47	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/09/15 09:01	10/12/15 08:47	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 08:47	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/09/15 09:01	10/12/15 08:47	1
Phenol	0.96	U	0.96	0.14	ug/L		10/09/15 09:01	10/12/15 08:47	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/09/15 09:01	10/12/15 08:47	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/09/15 09:01	10/12/15 08:47	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/09/15 09:01	10/12/15 08:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*40*		*29 - 110*	*10/09/15 09:01*	*10/12/15 08:47*	*1*
2-Fluorophenol (Surr)	*48*		*15 - 110*	*10/09/15 09:01*	*10/12/15 08:47*	*1*
2,4,6-Tribromophenol (Surr)	*41*		*21 - 128*	*10/09/15 09:01*	*10/12/15 08:47*	*1*
Nitrobenzene-d5 (Surr)	*49*		*31 - 110*	*10/09/15 09:01*	*10/12/15 08:47*	*1*
Phenol-d5 (Surr)	*41*		*10 - 110*	*10/09/15 09:01*	*10/12/15 08:47*	*1*
Terphenyl-d14 (Surr)	*34*		*31 - 115*	*10/09/15 09:01*	*10/12/15 08:47*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**61**		10	2.9	ug/L		10/09/15 10:45	10/15/15 00:03	1
Barium	**1300**		200	1.0	ug/L		10/09/15 10:45	10/15/15 00:03	1
Cadmium	**1.2**	**J**	2.0	0.14	ug/L		10/09/15 10:45	10/15/15 00:03	1
Chromium	**460**	**B**	5.0	0.55	ug/L		10/09/15 10:45	10/15/15 00:03	1
Lead	**150**		3.0	1.9	ug/L		10/09/15 10:45	10/15/15 00:03	1
Selenium	**8.7**		5.0	4.0	ug/L		10/09/15 10:45	10/15/15 07:26	1
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:45	10/15/15 00:03	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.8**		0.20	0.090	ug/L		10/09/15 14:00	10/14/15 09:43	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-2 GW (30-31)
Date Collected: 10/05/15 13:12
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.3	J	10	0.94	ug/L			10/14/15 02:28	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 02:28	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 02:28	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 02:28	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 02:28	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/14/15 02:28	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 02:28	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 02:28	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 02:28	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 02:28	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 02:28	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 02:28	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 02:28	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 02:28	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 02:28	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 02:28	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 02:28	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 02:28	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 02:28	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 02:28	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 02:28	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 02:28	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 02:28	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 02:28	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 02:28	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 02:28	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/14/15 02:28	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 02:28	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 02:28	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 02:28	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 02:28	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 02:28	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 02:28	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 02:28	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 02:28	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/14/15 02:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 02:28	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 02:28	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 02:28	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 02:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 02:28	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 02:28	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 02:28	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 02:28	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 02:28	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 02:28	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 02:28	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 02:28	1

Client Sample ID: VAP-2 GW (30-31)

Date Collected: 10/05/15 13:12
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-6

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*78 - 125*		*10/14/15 02:28*	*1*
4-Bromofluorobenzene (Surr)	*88*		*61 - 120*		*10/14/15 02:28*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*10/14/15 02:28*	*1*
Dibromofluoromethane (Surr)	*102*		*79 - 120*		*10/14/15 02:28*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 09:11	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/09/15 09:01	10/12/15 09:11	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/09/15 09:01	10/12/15 09:11	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/09/15 09:01	10/12/15 09:11	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/09/15 09:01	10/12/15 09:11	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/09/15 09:01	10/12/15 09:11	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/09/15 09:01	10/12/15 09:11	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/09/15 09:01	10/12/15 09:11	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/09/15 09:01	10/12/15 09:11	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 09:11	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/09/15 09:01	10/12/15 09:11	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/09/15 09:01	10/12/15 09:11	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/09/15 09:01	10/12/15 09:11	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/09/15 09:01	10/12/15 09:11	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/09/15 09:01	10/12/15 09:11	1
3,3'-Dichlorobenzidine	4.6	U	4.6	0.33	ug/L		10/09/15 09:01	10/12/15 09:11	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/09/15 09:01	10/12/15 09:11	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/09/15 09:01	10/12/15 09:11	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/09/15 09:01	10/12/15 09:11	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/09/15 09:01	10/12/15 09:11	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/09/15 09:01	10/12/15 09:11	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/09/15 09:01	10/12/15 09:11	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/09/15 09:01	10/12/15 09:11	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/09/15 09:01	10/12/15 09:11	1
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/09/15 09:01	10/12/15 09:11	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/09/15 09:01	10/12/15 09:11	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/09/15 09:01	10/12/15 09:11	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/09/15 09:01	10/12/15 09:11	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 09:11	1
Benzaldehyde	0.93	U *	0.93	0.27	ug/L		10/09/15 09:01	10/12/15 09:11	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/09/15 09:01	10/12/15 09:11	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/09/15 09:01	10/12/15 09:11	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/09/15 09:01	10/12/15 09:11	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/09/15 09:01	10/12/15 09:11	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/09/15 09:01	10/12/15 09:11	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/09/15 09:01	10/12/15 09:11	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/09/15 09:01	10/12/15 09:11	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	1.4	ug/L		10/09/15 09:01	10/12/15 09:11	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/09/15 09:01	10/12/15 09:11	1
Caprolactam	**29**	**B**	4.6	0.34	ug/L		10/09/15 09:01	10/12/15 09:11	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/09/15 09:01	10/12/15 09:11	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/09/15 09:01	10/12/15 09:11	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/09/15 09:01	10/12/15 09:11	1

Client Sample ID: VAP-2 GW (30-31)

Date Collected: 10/05/15 13:12
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-6
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/09/15 09:01	10/12/15 09:11	1
Diethyl phthalate	0.93	U	0.93	0.12	ug/L		10/09/15 09:01	10/12/15 09:11	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/09/15 09:01	10/12/15 09:11	1
Di-n-butyl phthalate	**0.53**	**J B**	0.93	0.37	ug/L		10/09/15 09:01	10/12/15 09:11	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/09/15 09:01	10/12/15 09:11	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/09/15 09:01	10/12/15 09:11	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/09/15 09:01	10/12/15 09:11	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 09:11	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/09/15 09:01	10/12/15 09:11	1
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/09/15 09:01	10/12/15 09:11	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/09/15 09:01	10/12/15 09:11	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/09/15 09:01	10/12/15 09:11	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/09/15 09:01	10/12/15 09:11	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/09/15 09:01	10/12/15 09:11	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 09:11	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/09/15 09:01	10/12/15 09:11	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/09/15 09:01	10/12/15 09:11	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/09/15 09:01	10/12/15 09:11	1
Phenol	0.93	U	0.93	0.14	ug/L		10/09/15 09:01	10/12/15 09:11	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/09/15 09:01	10/12/15 09:11	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/09/15 09:01	10/12/15 09:11	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/09/15 09:01	10/12/15 09:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*38*		*29 - 110*	*10/09/15 09:01*	*10/12/15 09:11*	*1*
2-Fluorophenol (Surr)	*43*		*15 - 110*	*10/09/15 09:01*	*10/12/15 09:11*	*1*
2,4,6-Tribromophenol (Surr)	*38*		*21 - 128*	*10/09/15 09:01*	*10/12/15 09:11*	*1*
Nitrobenzene-d5 (Surr)	*43*		*31 - 110*	*10/09/15 09:01*	*10/12/15 09:11*	*1*
Phenol-d5 (Surr)	*34*		*10 - 110*	*10/09/15 09:01*	*10/12/15 09:11*	*1*
Terphenyl-d14 (Surr)	*51*		*31 - 115*	*10/09/15 09:01*	*10/12/15 09:11*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.4**	**J**	10	2.9	ug/L		10/09/15 10:45	10/15/15 00:07	1
Barium	**180**	**J**	200	1.0	ug/L		10/09/15 10:45	10/15/15 00:07	1
Cadmium	**0.14**	**J**	2.0	0.14	ug/L		10/09/15 10:45	10/15/15 00:07	1
Chromium	**21**	**B**	5.0	0.55	ug/L		10/09/15 10:45	10/15/15 00:07	1
Lead	**9.0**		3.0	1.9	ug/L		10/09/15 10:45	10/15/15 00:07	1
Selenium	5.0	U	5.0	4.0	ug/L		10/09/15 10:45	10/15/15 00:07	1
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:45	10/15/15 00:07	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/09/15 14:00	10/14/15 09:45	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-2 GW (35-36)
Date Collected: 10/05/15 13:38
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	6.5	J	10	0.94	ug/L			10/14/15 08:04	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 08:04	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 08:04	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 08:04	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 08:04	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/14/15 08:04	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 08:04	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 08:04	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 08:04	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 08:04	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 08:04	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 08:04	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 08:04	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 08:04	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 08:04	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 08:04	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 08:04	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 08:04	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 08:04	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 08:04	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 08:04	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 08:04	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 08:04	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 08:04	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 08:04	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 08:04	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/14/15 08:04	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 08:04	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 08:04	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 08:04	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 08:04	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 08:04	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 08:04	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 08:04	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 08:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/14/15 08:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 08:04	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 08:04	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 08:04	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 08:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 08:04	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 08:04	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 08:04	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 08:04	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 08:04	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 08:04	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 08:04	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 08:04	1

Client Sample ID: VAP-2 GW (35-36)

Lab Sample ID: 240-56328-7

Date Collected: 10/05/15 13:38

Matrix: Water

Date Received: 10/08/15 09:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*78 - 125*		*10/14/15 08:04*	*1*
4-Bromofluorobenzene (Surr)	*91*		*61 - 120*		*10/14/15 08:04*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/14/15 08:04*	*1*
Dibromofluoromethane (Surr)	*101*		*79 - 120*		*10/14/15 08:04*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U F2	1.0	0.12	ug/L		10/09/15 09:01	10/12/15 09:34	1
bis (2-chloroisopropyl) ether	1.0	U F2	1.0	0.18	ug/L		10/09/15 09:01	10/12/15 09:34	1
2,4,5-Trichlorophenol	5.0	U F2	5.0	0.37	ug/L		10/09/15 09:01	10/12/15 09:34	1
2,4,6-Trichlorophenol	5.0	U F2	5.0	0.26	ug/L		10/09/15 09:01	10/12/15 09:34	1
2,4-Dichlorophenol	2.0	U F2	2.0	0.29	ug/L		10/09/15 09:01	10/12/15 09:34	1
2,4-Dimethylphenol	2.0	U F2	2.0	0.31	ug/L		10/09/15 09:01	10/12/15 09:34	1
2,4-Dinitrophenol	40	U F2	40	6.1	ug/L		10/09/15 09:01	10/12/15 09:34	1
2,4-Dinitrotoluene	5.0	U F2	5.0	0.26	ug/L		10/09/15 09:01	10/12/15 09:34	1
2,6-Dinitrotoluene	5.0	U F2	5.0	0.24	ug/L		10/09/15 09:01	10/12/15 09:34	1
2-Chloronaphthalene	1.0	U F2	1.0	0.12	ug/L		10/09/15 09:01	10/12/15 09:34	1
2-Chlorophenol	1.0	U F2	1.0	0.13	ug/L		10/09/15 09:01	10/12/15 09:34	1
2-Methylnaphthalene	0.20	U F2	0.20	0.037	ug/L		10/09/15 09:01	10/12/15 09:34	1
2-Methylphenol	1.0	U F2	1.0	0.19	ug/L		10/09/15 09:01	10/12/15 09:34	1
2-Nitroaniline	2.0	U F2	2.0	0.31	ug/L		10/09/15 09:01	10/12/15 09:34	1
2-Nitrophenol	2.0	U F2	2.0	0.21	ug/L		10/09/15 09:01	10/12/15 09:34	1
3,3'-Dichlorobenzidine	5.0	U F1 F2	5.0	0.35	ug/L		10/09/15 09:01	10/12/15 09:34	1
3-Nitroaniline	2.0	U F2	2.0	0.27	ug/L		10/09/15 09:01	10/12/15 09:34	1
4,6-Dinitro-2-methylphenol	5.0	U F2	5.0	0.53	ug/L		10/09/15 09:01	10/12/15 09:34	1
4-Bromophenyl phenyl ether	2.0	U F1 F2	2.0	0.35	ug/L		10/09/15 09:01	10/12/15 09:34	1
4-Chloro-3-methylphenol	2.0	U F2	2.0	0.28	ug/L		10/09/15 09:01	10/12/15 09:34	1
4-Chloroaniline	2.0	U F1 F2	2.0	0.15	ug/L		10/09/15 09:01	10/12/15 09:34	1
4-Chlorophenyl phenyl ether	2.0	U F1 F2	2.0	0.29	ug/L		10/09/15 09:01	10/12/15 09:34	1
4-Nitroaniline	2.0	U F2	2.0	0.24	ug/L		10/09/15 09:01	10/12/15 09:34	1
4-Nitrophenol	5.0	U F2	5.0	0.59	ug/L		10/09/15 09:01	10/12/15 09:34	1
Acenaphthene	0.20	U F2	0.20	0.044	ug/L		10/09/15 09:01	10/12/15 09:34	1
Acenaphthylene	0.20	U F2	0.20	0.020	ug/L		10/09/15 09:01	10/12/15 09:34	1
Acetophenone	1.0	U F2	1.0	0.14	ug/L		10/09/15 09:01	10/12/15 09:34	1
Anthracene	0.20	U F1 F2	0.20	0.031	ug/L		10/09/15 09:01	10/12/15 09:34	1
Atrazine	1.0	U F2	1.0	0.12	ug/L		10/09/15 09:01	10/12/15 09:34	1
Benzaldehyde	1.0	U * F2	1.0	0.30	ug/L		10/09/15 09:01	10/12/15 09:34	1
Benzo[a]anthracene	0.20	U F1 F2	0.20	0.059	ug/L		10/09/15 09:01	10/12/15 09:34	1
Benzo[a]pyrene	0.20	U F1 F2	0.20	0.030	ug/L		10/09/15 09:01	10/12/15 09:34	1
Benzo[b]fluoranthene	0.20	U F1 F2	0.20	0.059	ug/L		10/09/15 09:01	10/12/15 09:34	1
Benzo[g,h,i]perylene	0.20	U F1 F2	0.20	0.050	ug/L		10/09/15 09:01	10/12/15 09:34	1
Benzo[k]fluoranthene	0.20	U F1 F2	0.20	0.048	ug/L		10/09/15 09:01	10/12/15 09:34	1
Bis(2-chloroethoxy)methane	1.0	U F2	1.0	0.037	ug/L		10/09/15 09:01	10/12/15 09:34	1
Bis(2-chloroethyl)ether	1.0	U F2	1.0	0.19	ug/L		10/09/15 09:01	10/12/15 09:34	1
Bis(2-ethylhexyl) phthalate	2.0	U F2	2.0	1.5	ug/L		10/09/15 09:01	10/12/15 09:34	1
Butyl benzyl phthalate	1.0	U F2	1.0	0.22	ug/L		10/09/15 09:01	10/12/15 09:34	1
Caprolactam	**26**	**B F1 F2**	5.0	0.37	ug/L		10/09/15 09:01	10/12/15 09:34	1
Carbazole	1.0	U F2	1.0	0.11	ug/L		10/09/15 09:01	10/12/15 09:34	1
Chrysene	0.20	U F1 F2	0.20	0.035	ug/L		10/09/15 09:01	10/12/15 09:34	1
Dibenz(a,h)anthracene	0.20	U F1 F2	0.20	0.040	ug/L		10/09/15 09:01	10/12/15 09:34	1

Client Sample ID: VAP-2 GW (35-36)

Date Collected: 10/05/15 13:38
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-7
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	1.0	U F2	1.0	0.14	ug/L		10/09/15 09:01	10/12/15 09:34	1
Diethyl phthalate	1.0	U F2	1.0	0.13	ug/L		10/09/15 09:01	10/12/15 09:34	1
Dimethyl phthalate	1.0	U F2	1.0	0.10	ug/L		10/09/15 09:01	10/12/15 09:34	1
Di-n-butyl phthalate	**0.62**	**J B F2**	1.0	0.40	ug/L		10/09/15 09:01	10/12/15 09:34	1
Di-n-octyl phthalate	1.0	U F1 F2	1.0	0.37	ug/L		10/09/15 09:01	10/12/15 09:34	1
Fluoranthene	0.20	U F1 F2	0.20	0.027	ug/L		10/09/15 09:01	10/12/15 09:34	1
Fluorene	0.20	U F1 F2	0.20	0.034	ug/L		10/09/15 09:01	10/12/15 09:34	1
Hexachlorobenzene	1.0	U F1 F2	1.0	0.12	ug/L		10/09/15 09:01	10/12/15 09:34	1
Hexachlorobutadiene	1.0	U F1 F2	1.0	0.14	ug/L		10/09/15 09:01	10/12/15 09:34	1
Hexachlorocyclopentadiene	10	U F1	10	2.5	ug/L		10/09/15 09:01	10/12/15 09:34	1
Hexachloroethane	1.0	U F2	1.0	0.22	ug/L		10/09/15 09:01	10/12/15 09:34	1
Indeno[1,2,3-cd]pyrene	0.20	U F1 F2	0.20	0.048	ug/L		10/09/15 09:01	10/12/15 09:34	1
Isophorone	1.0	U F2	1.0	0.042	ug/L		10/09/15 09:01	10/12/15 09:34	1
Naphthalene	0.20	U F2	0.20	0.043	ug/L		10/09/15 09:01	10/12/15 09:34	1
Nitrobenzene	1.0	U F2	1.0	0.12	ug/L		10/09/15 09:01	10/12/15 09:34	1
N-Nitrosodi-n-propylamine	1.0	U F2	1.0	0.16	ug/L		10/09/15 09:01	10/12/15 09:34	1
N-Nitrosodiphenylamine	1.0	U F2	1.0	0.11	ug/L		10/09/15 09:01	10/12/15 09:34	1
Pentachlorophenol	40	U F1	40	5.5	ug/L		10/09/15 09:01	10/12/15 09:34	1
Phenol	1.0	U F2	1.0	0.15	ug/L		10/09/15 09:01	10/12/15 09:34	1
Phenanthrene	0.20	U F1 F2	0.20	0.031	ug/L		10/09/15 09:01	10/12/15 09:34	1
Pyrene	0.20	U F1 F2	0.20	0.028	ug/L		10/09/15 09:01	10/12/15 09:34	1
3 & 4 Methylphenol	2.0	U F2	2.0	0.34	ug/L		10/09/15 09:01	10/12/15 09:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*30*		*29 - 110*	*10/09/15 09:01*	*10/12/15 09:34*	*1*
2-Fluorophenol (Surr)	*35*		*15 - 110*	*10/09/15 09:01*	*10/12/15 09:34*	*1*
2,4,6-Tribromophenol (Surr)	*29*		*21 - 128*	*10/09/15 09:01*	*10/12/15 09:34*	*1*
Nitrobenzene-d5 (Surr)	*37*		*31 - 110*	*10/09/15 09:01*	*10/12/15 09:34*	*1*
Phenol-d5 (Surr)	*30*		*10 - 110*	*10/09/15 09:01*	*10/12/15 09:34*	*1*
Terphenyl-d14 (Surr)	*31*		*31 - 115*	*10/09/15 09:01*	*10/12/15 09:34*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U H	0.96	0.12	ug/L		10/13/15 12:16	10/14/15 08:55	1
bis (2-chloroisopropyl) ether	0.96	U H	0.96	0.18	ug/L		10/13/15 12:16	10/14/15 08:55	1
2,4,5-Trichlorophenol	4.8	U H	4.8	0.35	ug/L		10/13/15 12:16	10/14/15 08:55	1
2,4,6-Trichlorophenol	4.8	U H	4.8	0.25	ug/L		10/13/15 12:16	10/14/15 08:55	1
2,4-Dichlorophenol	1.9	U H	1.9	0.28	ug/L		10/13/15 12:16	10/14/15 08:55	1
2,4-Dimethylphenol	1.9	U H	1.9	0.30	ug/L		10/13/15 12:16	10/14/15 08:55	1
2,4-Dinitrophenol	38	U H	38	5.9	ug/L		10/13/15 12:16	10/14/15 08:55	1
2,4-Dinitrotoluene	4.8	U H	4.8	0.25	ug/L		10/13/15 12:16	10/14/15 08:55	1
2,6-Dinitrotoluene	4.8	U H	4.8	0.23	ug/L		10/13/15 12:16	10/14/15 08:55	1
2-Chloronaphthalene	0.96	U H	0.96	0.11	ug/L		10/13/15 12:16	10/14/15 08:55	1
2-Chlorophenol	0.96	U H	0.96	0.13	ug/L		10/13/15 12:16	10/14/15 08:55	1
2-Methylnaphthalene	0.19	U H	0.19	0.036	ug/L		10/13/15 12:16	10/14/15 08:55	1
2-Methylphenol	0.96	U H	0.96	0.18	ug/L		10/13/15 12:16	10/14/15 08:55	1
2-Nitroaniline	1.9	U H	1.9	0.30	ug/L		10/13/15 12:16	10/14/15 08:55	1
2-Nitrophenol	1.9	U H	1.9	0.20	ug/L		10/13/15 12:16	10/14/15 08:55	1
3,3'-Dichlorobenzidine	4.8	U H F2	4.8	0.34	ug/L		10/13/15 12:16	10/14/15 08:55	1
3-Nitroaniline	1.9	U H	1.9	0.25	ug/L		10/13/15 12:16	10/14/15 08:55	1

Client Sample ID: VAP-2 GW (35-36)
Date Collected: 10/05/15 13:38
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-7
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	4.8	U H	4.8	0.50	ug/L		10/13/15 12:16	10/14/15 08:55	1
4-Bromophenyl phenyl ether	1.9	U H	1.9	0.33	ug/L		10/13/15 12:16	10/14/15 08:55	1
4-Chloro-3-methylphenol	1.9	U H	1.9	0.27	ug/L		10/13/15 12:16	10/14/15 08:55	1
4-Chloroaniline	1.9	U H	1.9	0.14	ug/L		10/13/15 12:16	10/14/15 08:55	1
4-Chlorophenyl phenyl ether	1.9	U H	1.9	0.28	ug/L		10/13/15 12:16	10/14/15 08:55	1
4-Nitroaniline	1.9	U H	1.9	0.23	ug/L		10/13/15 12:16	10/14/15 08:55	1
4-Nitrophenol	4.8	U H	4.8	0.56	ug/L		10/13/15 12:16	10/14/15 08:55	1
Acenaphthene	0.19	U H	0.19	0.042	ug/L		10/13/15 12:16	10/14/15 08:55	1
Acenaphthylene	0.19	U H	0.19	0.019	ug/L		10/13/15 12:16	10/14/15 08:55	1
Acetophenone	0.96	U H	0.96	0.13	ug/L		10/13/15 12:16	10/14/15 08:55	1
Anthracene	0.19	U H	0.19	0.030	ug/L		10/13/15 12:16	10/14/15 08:55	1
Atrazine	0.96	U H	0.96	0.11	ug/L		10/13/15 12:16	10/14/15 08:55	1
Benzaldehyde	0.96	U H *	0.96	0.28	ug/L		10/13/15 12:16	10/14/15 08:55	1
Benzo[a]anthracene	0.19	U H	0.19	0.057	ug/L		10/13/15 12:16	10/14/15 08:55	1
Benzo[a]pyrene	0.19	U H	0.19	0.029	ug/L		10/13/15 12:16	10/14/15 08:55	1
Benzo[b]fluoranthene	0.19	U H	0.19	0.057	ug/L		10/13/15 12:16	10/14/15 08:55	1
Benzo[g,h,i]perylene	0.19	U H	0.19	0.048	ug/L		10/13/15 12:16	10/14/15 08:55	1
Benzo[k]fluoranthene	0.19	U H	0.19	0.046	ug/L		10/13/15 12:16	10/14/15 08:55	1
Bis(2-chloroethoxy)methane	0.96	U H	0.96	0.036	ug/L		10/13/15 12:16	10/14/15 08:55	1
Bis(2-chloroethyl)ether	0.96	U H	0.96	0.18	ug/L		10/13/15 12:16	10/14/15 08:55	1
Bis(2-ethylhexyl) phthalate	1.9	U H	1.9	1.5	ug/L		10/13/15 12:16	10/14/15 08:55	1
Butyl benzyl phthalate	0.96	U H	0.96	0.21	ug/L		10/13/15 12:16	10/14/15 08:55	1
Caprolactam	**4.7**	**J H F2 B**	4.8	0.36	ug/L		10/13/15 12:16	10/14/15 08:55	1
Carbazole	0.96	U H	0.96	0.10	ug/L		10/13/15 12:16	10/14/15 08:55	1
Chrysene	0.19	U H	0.19	0.034	ug/L		10/13/15 12:16	10/14/15 08:55	1
Dibenz(a,h)anthracene	0.19	U H	0.19	0.038	ug/L		10/13/15 12:16	10/14/15 08:55	1
Dibenzofuran	0.96	U H	0.96	0.13	ug/L		10/13/15 12:16	10/14/15 08:55	1
Diethyl phthalate	0.96	U H	0.96	0.12	ug/L		10/13/15 12:16	10/14/15 08:55	1
Dimethyl phthalate	0.96	U H	0.96	0.097	ug/L		10/13/15 12:16	10/14/15 08:55	1
Di-n-butyl phthalate	**0.72**	**J H**	0.96	0.38	ug/L		10/13/15 12:16	10/14/15 08:55	1
Di-n-octyl phthalate	0.96	U H	0.96	0.35	ug/L		10/13/15 12:16	10/14/15 08:55	1
Fluoranthene	0.19	U H	0.19	0.026	ug/L		10/13/15 12:16	10/14/15 08:55	1
Fluorene	0.19	U H	0.19	0.033	ug/L		10/13/15 12:16	10/14/15 08:55	1
Hexachlorobenzene	0.96	U H	0.96	0.11	ug/L		10/13/15 12:16	10/14/15 08:55	1
Hexachlorobutadiene	0.96	U H	0.96	0.14	ug/L		10/13/15 12:16	10/14/15 08:55	1
Hexachlorocyclopentadiene	9.6	U H	9.6	2.4	ug/L		10/13/15 12:16	10/14/15 08:55	1
Hexachloroethane	0.96	U H	0.96	0.21	ug/L		10/13/15 12:16	10/14/15 08:55	1
Indeno[1,2,3-cd]pyrene	0.19	U H	0.19	0.046	ug/L		10/13/15 12:16	10/14/15 08:55	1
Isophorone	0.96	U H	0.96	0.040	ug/L		10/13/15 12:16	10/14/15 08:55	1
Naphthalene	0.19	U H	0.19	0.041	ug/L		10/13/15 12:16	10/14/15 08:55	1
Nitrobenzene	0.96	U H	0.96	0.11	ug/L		10/13/15 12:16	10/14/15 08:55	1
N-Nitrosodi-n-propylamine	0.96	U H	0.96	0.15	ug/L		10/13/15 12:16	10/14/15 08:55	1
N-Nitrosodiphenylamine	0.96	U H	0.96	0.11	ug/L		10/13/15 12:16	10/14/15 08:55	1
Pentachlorophenol	38	U H	38	5.3	ug/L		10/13/15 12:16	10/14/15 08:55	1
Phenol	0.96	U H	0.96	0.14	ug/L		10/13/15 12:16	10/14/15 08:55	1
Phenanthrene	0.19	U H	0.19	0.030	ug/L		10/13/15 12:16	10/14/15 08:55	1
Pyrene	0.19	U H	0.19	0.027	ug/L		10/13/15 12:16	10/14/15 08:55	1
3 & 4 Methylphenol	1.9	U H	1.9	0.32	ug/L		10/13/15 12:16	10/14/15 08:55	1

Client Sample ID: VAP-2 GW (35-36)

Lab Sample ID: 240-56328-7

Date Collected: 10/05/15 13:38

Matrix: Water

Date Received: 10/08/15 09:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*62*		*29 - 110*	*10/13/15 12:16*	*10/14/15 08:55*	*1*
2-Fluorophenol (Surr)	*36*		*15 - 110*	*10/13/15 12:16*	*10/14/15 08:55*	*1*
2,4,6-Tribromophenol (Surr)	*51*		*21 - 128*	*10/13/15 12:16*	*10/14/15 08:55*	*1*
Nitrobenzene-d5 (Surr)	*65*		*31 - 110*	*10/13/15 12:16*	*10/14/15 08:55*	*1*
Phenol-d5 (Surr)	*22*		*10 - 110*	*10/13/15 12:16*	*10/14/15 08:55*	*1*
Terphenyl-d14 (Surr)	*30*	*X*	*31 - 115*	*10/13/15 12:16*	*10/14/15 08:55*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.7**	**J**	10	2.9	ug/L		10/09/15 10:45	10/14/15 23:27	1
Barium	**180**	**J**	200	1.0	ug/L		10/09/15 10:45	10/14/15 23:27	1
Cadmium	**0.30**	**J**	2.0	0.14	ug/L		10/09/15 10:45	10/14/15 23:27	1
Chromium	**51**	**B**	5.0	0.55	ug/L		10/09/15 10:45	10/14/15 23:27	1
Lead	**15**		3.0	1.9	ug/L		10/09/15 10:45	10/14/15 23:27	1
Selenium	5.0	U	5.0	4.0	ug/L		10/09/15 10:45	10/14/15 23:27	1
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:45	10/14/15 23:27	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U F1	0.20	0.090	ug/L		10/09/15 14:00	10/14/15 09:05	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-2 GW (40-41)

Date Collected: 10/05/15 14:41
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-8

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	9.5	J	10	0.94	ug/L			10/14/15 02:51	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 02:51	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 02:51	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 02:51	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 02:51	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/14/15 02:51	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 02:51	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 02:51	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 02:51	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 02:51	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 02:51	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 02:51	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 02:51	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 02:51	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 02:51	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 02:51	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 02:51	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 02:51	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 02:51	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 02:51	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 02:51	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 02:51	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 02:51	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 02:51	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 02:51	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 02:51	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/14/15 02:51	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 02:51	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 02:51	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 02:51	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 02:51	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 02:51	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 02:51	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 02:51	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 02:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/14/15 02:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 02:51	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 02:51	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 02:51	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 02:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 02:51	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 02:51	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 02:51	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 02:51	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 02:51	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 02:51	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 02:51	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 02:51	1

Client Sample ID: VAP-2 GW (40-41)

Date Collected: 10/05/15 14:41
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-8

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*78 - 125*		*10/14/15 02:51*	*1*
4-Bromofluorobenzene (Surr)	*89*		*61 - 120*		*10/14/15 02:51*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*10/14/15 02:51*	*1*
Dibromofluoromethane (Surr)	*105*		*79 - 120*		*10/14/15 02:51*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.94	U	0.94	0.12	ug/L		10/09/15 09:01	10/12/15 11:08	1
bis (2-chloroisopropyl) ether	0.94	U	0.94	0.17	ug/L		10/09/15 09:01	10/12/15 11:08	1
2,4,5-Trichlorophenol	4.7	U	4.7	0.35	ug/L		10/09/15 09:01	10/12/15 11:08	1
2,4,6-Trichlorophenol	4.7	U	4.7	0.25	ug/L		10/09/15 09:01	10/12/15 11:08	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/09/15 09:01	10/12/15 11:08	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/09/15 09:01	10/12/15 11:08	1
2,4-Dinitrophenol	38	U	38	5.8	ug/L		10/09/15 09:01	10/12/15 11:08	1
2,4-Dinitrotoluene	4.7	U	4.7	0.24	ug/L		10/09/15 09:01	10/12/15 11:08	1
2,6-Dinitrotoluene	4.7	U	4.7	0.22	ug/L		10/09/15 09:01	10/12/15 11:08	1
2-Chloronaphthalene	0.94	U	0.94	0.11	ug/L		10/09/15 09:01	10/12/15 11:08	1
2-Chlorophenol	0.94	U	0.94	0.12	ug/L		10/09/15 09:01	10/12/15 11:08	1
2-Methylnaphthalene	0.19	U	0.19	0.035	ug/L		10/09/15 09:01	10/12/15 11:08	1
2-Methylphenol	0.94	U	0.94	0.18	ug/L		10/09/15 09:01	10/12/15 11:08	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/09/15 09:01	10/12/15 11:08	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/09/15 09:01	10/12/15 11:08	1
3,3'-Dichlorobenzidine	4.7	U	4.7	0.33	ug/L		10/09/15 09:01	10/12/15 11:08	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/09/15 09:01	10/12/15 11:08	1
4,6-Dinitro-2-methylphenol	4.7	U	4.7	0.50	ug/L		10/09/15 09:01	10/12/15 11:08	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/09/15 09:01	10/12/15 11:08	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/09/15 09:01	10/12/15 11:08	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/09/15 09:01	10/12/15 11:08	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/09/15 09:01	10/12/15 11:08	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/09/15 09:01	10/12/15 11:08	1
4-Nitrophenol	4.7	U	4.7	0.55	ug/L		10/09/15 09:01	10/12/15 11:08	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/09/15 09:01	10/12/15 11:08	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/09/15 09:01	10/12/15 11:08	1
Acetophenone	0.94	U	0.94	0.13	ug/L		10/09/15 09:01	10/12/15 11:08	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/09/15 09:01	10/12/15 11:08	1
Atrazine	0.94	U	0.94	0.11	ug/L		10/09/15 09:01	10/12/15 11:08	1
Benzaldehyde	0.94	U *	0.94	0.28	ug/L		10/09/15 09:01	10/12/15 11:08	1
Benzo[a]anthracene	0.19	U	0.19	0.056	ug/L		10/09/15 09:01	10/12/15 11:08	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/09/15 09:01	10/12/15 11:08	1
Benzo[b]fluoranthene	0.19	U	0.19	0.056	ug/L		10/09/15 09:01	10/12/15 11:08	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.047	ug/L		10/09/15 09:01	10/12/15 11:08	1
Benzo[k]fluoranthene	0.19	U	0.19	0.045	ug/L		10/09/15 09:01	10/12/15 11:08	1
Bis(2-chloroethoxy)methane	0.94	U	0.94	0.035	ug/L		10/09/15 09:01	10/12/15 11:08	1
Bis(2-chloroethyl)ether	0.94	U	0.94	0.18	ug/L		10/09/15 09:01	10/12/15 11:08	1
Bis(2-ethylhexyl) phthalate	**1.8**	**J B**	1.9	1.4	ug/L		10/09/15 09:01	10/12/15 11:08	1
Butyl benzyl phthalate	0.94	U	0.94	0.20	ug/L		10/09/15 09:01	10/12/15 11:08	1
Caprolactam	**17**	**B**	4.7	0.35	ug/L		10/09/15 09:01	10/12/15 11:08	1
Carbazole	0.94	U	0.94	0.099	ug/L		10/09/15 09:01	10/12/15 11:08	1
Chrysene	0.19	U	0.19	0.033	ug/L		10/09/15 09:01	10/12/15 11:08	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/09/15 09:01	10/12/15 11:08	1

Client Sample ID: VAP-2 GW (40-41)
Date Collected: 10/05/15 14:41
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-8
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.94	U	0.94	0.13	ug/L		10/09/15 09:01	10/12/15 11:08	1
Diethyl phthalate	0.94	U	0.94	0.12	ug/L		10/09/15 09:01	10/12/15 11:08	1
Dimethyl phthalate	0.94	U	0.94	0.095	ug/L		10/09/15 09:01	10/12/15 11:08	1
Di-n-butyl phthalate	**0.85**	**J B**	0.94	0.38	ug/L		10/09/15 09:01	10/12/15 11:08	1
Di-n-octyl phthalate	0.94	U	0.94	0.34	ug/L		10/09/15 09:01	10/12/15 11:08	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/09/15 09:01	10/12/15 11:08	1
Fluorene	0.19	U	0.19	0.032	ug/L		10/09/15 09:01	10/12/15 11:08	1
Hexachlorobenzene	0.94	U	0.94	0.11	ug/L		10/09/15 09:01	10/12/15 11:08	1
Hexachlorobutadiene	0.94	U	0.94	0.13	ug/L		10/09/15 09:01	10/12/15 11:08	1
Hexachlorocyclopentadiene	9.4	U	9.4	2.3	ug/L		10/09/15 09:01	10/12/15 11:08	1
Hexachloroethane	0.94	U	0.94	0.21	ug/L		10/09/15 09:01	10/12/15 11:08	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.045	ug/L		10/09/15 09:01	10/12/15 11:08	1
Isophorone	0.94	U	0.94	0.040	ug/L		10/09/15 09:01	10/12/15 11:08	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/09/15 09:01	10/12/15 11:08	1
Nitrobenzene	0.94	U	0.94	0.11	ug/L		10/09/15 09:01	10/12/15 11:08	1
N-Nitrosodi-n-propylamine	0.94	U	0.94	0.15	ug/L		10/09/15 09:01	10/12/15 11:08	1
N-Nitrosodiphenylamine	0.94	U	0.94	0.11	ug/L		10/09/15 09:01	10/12/15 11:08	1
Pentachlorophenol	38	U	38	5.2	ug/L		10/09/15 09:01	10/12/15 11:08	1
Phenol	0.94	U	0.94	0.14	ug/L		10/09/15 09:01	10/12/15 11:08	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/09/15 09:01	10/12/15 11:08	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/09/15 09:01	10/12/15 11:08	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/09/15 09:01	10/12/15 11:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*10*	*X*	*29 - 110*	*10/09/15 09:01*	*10/12/15 11:08*	*1*
2-Fluorophenol (Surr)	*13*	*X*	*15 - 110*	*10/09/15 09:01*	*10/12/15 11:08*	*1*
2,4,6-Tribromophenol (Surr)	*7*	*X*	*21 - 128*	*10/09/15 09:01*	*10/12/15 11:08*	*1*
Nitrobenzene-d5 (Surr)	*12*	*X*	*31 - 110*	*10/09/15 09:01*	*10/12/15 11:08*	*1*
Phenol-d5 (Surr)	*11*		*10 - 110*	*10/09/15 09:01*	*10/12/15 11:08*	*1*
Terphenyl-d14 (Surr)	*8*	*X*	*31 - 115*	*10/09/15 09:01*	*10/12/15 11:08*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U H	0.96	0.12	ug/L		10/13/15 08:39	10/14/15 10:28	1
bis (2-chloroisopropyl) ether	0.96	U H	0.96	0.18	ug/L		10/13/15 08:39	10/14/15 10:28	1
2,4,5-Trichlorophenol	4.8	U H	4.8	0.35	ug/L		10/13/15 08:39	10/14/15 10:28	1
2,4,6-Trichlorophenol	4.8	U H	4.8	0.25	ug/L		10/13/15 08:39	10/14/15 10:28	1
2,4-Dichlorophenol	1.9	U H	1.9	0.28	ug/L		10/13/15 08:39	10/14/15 10:28	1
2,4-Dimethylphenol	1.9	U H	1.9	0.30	ug/L		10/13/15 08:39	10/14/15 10:28	1
2,4-Dinitrophenol	38	U H	38	5.9	ug/L		10/13/15 08:39	10/14/15 10:28	1
2,4-Dinitrotoluene	4.8	U H	4.8	0.25	ug/L		10/13/15 08:39	10/14/15 10:28	1
2,6-Dinitrotoluene	4.8	U H	4.8	0.23	ug/L		10/13/15 08:39	10/14/15 10:28	1
2-Chloronaphthalene	0.96	U H	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 10:28	1
2-Chlorophenol	0.96	U H	0.96	0.13	ug/L		10/13/15 08:39	10/14/15 10:28	1
2-Methylnaphthalene	0.19	U H	0.19	0.036	ug/L		10/13/15 08:39	10/14/15 10:28	1
2-Methylphenol	0.96	U H	0.96	0.18	ug/L		10/13/15 08:39	10/14/15 10:28	1
2-Nitroaniline	1.9	U H	1.9	0.30	ug/L		10/13/15 08:39	10/14/15 10:28	1
2-Nitrophenol	1.9	U H	1.9	0.20	ug/L		10/13/15 08:39	10/14/15 10:28	1
3,3'-Dichlorobenzidine	4.8	U H	4.8	0.34	ug/L		10/13/15 08:39	10/14/15 10:28	1
3-Nitroaniline	1.9	U H	1.9	0.25	ug/L		10/13/15 08:39	10/14/15 10:28	1

Client Sample ID: VAP-2 GW (40-41)
Date Collected: 10/05/15 14:41
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-8
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	4.8	U H	4.8	0.50	ug/L		10/13/15 08:39	10/14/15 10:28	1
4-Bromophenyl phenyl ether	1.9	U H	1.9	0.33	ug/L		10/13/15 08:39	10/14/15 10:28	1
4-Chloro-3-methylphenol	1.9	U H	1.9	0.27	ug/L		10/13/15 08:39	10/14/15 10:28	1
4-Chloroaniline	1.9	U H	1.9	0.14	ug/L		10/13/15 08:39	10/14/15 10:28	1
4-Chlorophenyl phenyl ether	1.9	U H	1.9	0.28	ug/L		10/13/15 08:39	10/14/15 10:28	1
4-Nitroaniline	1.9	U H	1.9	0.23	ug/L		10/13/15 08:39	10/14/15 10:28	1
4-Nitrophenol	4.8	U H	4.8	0.56	ug/L		10/13/15 08:39	10/14/15 10:28	1
Acenaphthene	0.19	U H	0.19	0.042	ug/L		10/13/15 08:39	10/14/15 10:28	1
Acenaphthylene	0.19	U H	0.19	0.019	ug/L		10/13/15 08:39	10/14/15 10:28	1
Acetophenone	0.96	U H	0.96	0.13	ug/L		10/13/15 08:39	10/14/15 10:28	1
Anthracene	0.19	U H	0.19	0.030	ug/L		10/13/15 08:39	10/14/15 10:28	1
Atrazine	0.96	U H	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 10:28	1
Benzaldehyde	0.96	U H *	0.96	0.28	ug/L		10/13/15 08:39	10/14/15 10:28	1
Benzo[a]anthracene	0.19	U H	0.19	0.057	ug/L		10/13/15 08:39	10/14/15 10:28	1
Benzo[a]pyrene	0.19	U H	0.19	0.029	ug/L		10/13/15 08:39	10/14/15 10:28	1
Benzo[b]fluoranthene	0.19	U H	0.19	0.057	ug/L		10/13/15 08:39	10/14/15 10:28	1
Benzo[g,h,i]perylene	0.19	U H	0.19	0.048	ug/L		10/13/15 08:39	10/14/15 10:28	1
Benzo[k]fluoranthene	0.19	U H	0.19	0.046	ug/L		10/13/15 08:39	10/14/15 10:28	1
Bis(2-chloroethoxy)methane	0.96	U H	0.96	0.036	ug/L		10/13/15 08:39	10/14/15 10:28	1
Bis(2-chloroethyl)ether	0.96	U H	0.96	0.18	ug/L		10/13/15 08:39	10/14/15 10:28	1
Bis(2-ethylhexyl) phthalate	1.9	U H	1.9	1.5	ug/L		10/13/15 08:39	10/14/15 10:28	1
Butyl benzyl phthalate	0.96	U H	0.96	0.21	ug/L		10/13/15 08:39	10/14/15 10:28	1
Caprolactam	**9.6**	**H B**	4.8	0.36	ug/L		10/13/15 08:39	10/14/15 10:28	1
Carbazole	0.96	U H	0.96	0.10	ug/L		10/13/15 08:39	10/14/15 10:28	1
Chrysene	0.19	U H	0.19	0.034	ug/L		10/13/15 08:39	10/14/15 10:28	1
Dibenz(a,h)anthracene	0.19	U H	0.19	0.038	ug/L		10/13/15 08:39	10/14/15 10:28	1
Dibenzofuran	0.96	U H	0.96	0.13	ug/L		10/13/15 08:39	10/14/15 10:28	1
Diethyl phthalate	**0.23**	**J H**	0.96	0.12	ug/L		10/13/15 08:39	10/14/15 10:28	1
Dimethyl phthalate	0.96	U H	0.96	0.097	ug/L		10/13/15 08:39	10/14/15 10:28	1
Di-n-butyl phthalate	**0.96**	**H**	0.96	0.38	ug/L		10/13/15 08:39	10/14/15 10:28	1
Di-n-octyl phthalate	0.96	U H	0.96	0.35	ug/L		10/13/15 08:39	10/14/15 10:28	1
Fluoranthene	0.19	U H	0.19	0.026	ug/L		10/13/15 08:39	10/14/15 10:28	1
Fluorene	0.19	U H	0.19	0.033	ug/L		10/13/15 08:39	10/14/15 10:28	1
Hexachlorobenzene	0.96	U H	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 10:28	1
Hexachlorobutadiene	0.96	U H	0.96	0.14	ug/L		10/13/15 08:39	10/14/15 10:28	1
Hexachlorocyclopentadiene	9.6	U H	9.6	2.4	ug/L		10/13/15 08:39	10/14/15 10:28	1
Hexachloroethane	0.96	U H	0.96	0.21	ug/L		10/13/15 08:39	10/14/15 10:28	1
Indeno[1,2,3-cd]pyrene	0.19	U H	0.19	0.046	ug/L		10/13/15 08:39	10/14/15 10:28	1
Isophorone	0.96	U H	0.96	0.040	ug/L		10/13/15 08:39	10/14/15 10:28	1
Naphthalene	0.19	U H	0.19	0.041	ug/L		10/13/15 08:39	10/14/15 10:28	1
Nitrobenzene	0.96	U H	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 10:28	1
N-Nitrosodi-n-propylamine	0.96	U H	0.96	0.15	ug/L		10/13/15 08:39	10/14/15 10:28	1
N-Nitrosodiphenylamine	0.96	U H	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 10:28	1
Pentachlorophenol	38	U H	38	5.3	ug/L		10/13/15 08:39	10/14/15 10:28	1
Phenol	0.96	U H	0.96	0.14	ug/L		10/13/15 08:39	10/14/15 10:28	1
Phenanthrene	0.19	U H	0.19	0.030	ug/L		10/13/15 08:39	10/14/15 10:28	1
Pyrene	0.19	U H	0.19	0.027	ug/L		10/13/15 08:39	10/14/15 10:28	1
3 & 4 Methylphenol	1.9	U H	1.9	0.32	ug/L		10/13/15 08:39	10/14/15 10:28	1

Client Sample ID: VAP-2 GW (40-41)
Date Collected: 10/05/15 14:41
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-8
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*39*		*29 - 110*	*10/13/15 08:39*	*10/14/15 10:28*	*1*
2-Fluorophenol (Surr)	*27*		*15 - 110*	*10/13/15 08:39*	*10/14/15 10:28*	*1*
2,4,6-Tribromophenol (Surr)	*34*		*21 - 128*	*10/13/15 08:39*	*10/14/15 10:28*	*1*
Nitrobenzene-d5 (Surr)	*49*		*31 - 110*	*10/13/15 08:39*	*10/14/15 10:28*	*1*
Phenol-d5 (Surr)	*15*		*10 - 110*	*10/13/15 08:39*	*10/14/15 10:28*	*1*
Terphenyl-d14 (Surr)	*22*	*X*	*31 - 115*	*10/13/15 08:39*	*10/14/15 10:28*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**120**		10	2.9	ug/L		10/09/15 10:45	10/15/15 00:27	1
Barium	**1800**		200	1.0	ug/L		10/09/15 10:45	10/15/15 00:27	1
Cadmium	**5.5**		2.0	0.14	ug/L		10/09/15 10:45	10/15/15 00:27	1
Chromium	**660**	**B**	5.0	0.55	ug/L		10/09/15 10:45	10/15/15 00:27	1
Lead	**230**		3.0	1.9	ug/L		10/09/15 10:45	10/15/15 00:27	1
Selenium	**67**		5.0	4.0	ug/L		10/09/15 10:45	10/15/15 00:27	1
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:45	10/15/15 00:27	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.2**		0.20	0.090	ug/L		10/09/15 14:00	10/14/15 09:31	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-2 GW (45-46)
Date Collected: 10/05/15 15:30
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	4.7	J	10	0.94	ug/L			10/14/15 03:13	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 03:13	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 03:13	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 03:13	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 03:13	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/14/15 03:13	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 03:13	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 03:13	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 03:13	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 03:13	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 03:13	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 03:13	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 03:13	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 03:13	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 03:13	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 03:13	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 03:13	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 03:13	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 03:13	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 03:13	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 03:13	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 03:13	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 03:13	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 03:13	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 03:13	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 03:13	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/14/15 03:13	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 03:13	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 03:13	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 03:13	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 03:13	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 03:13	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 03:13	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 03:13	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 03:13	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/14/15 03:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 03:13	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 03:13	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 03:13	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 03:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 03:13	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 03:13	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 03:13	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 03:13	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 03:13	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 03:13	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 03:13	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 03:13	1

Client Sample ID: VAP-2 GW (45-46)

Date Collected: 10/05/15 15:30
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-9
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*78 - 125*		*10/14/15 03:13*	*1*
4-Bromofluorobenzene (Surr)	*88*		*61 - 120*		*10/14/15 03:13*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/14/15 03:13*	*1*
Dibromofluoromethane (Surr)	*100*		*79 - 120*		*10/14/15 03:13*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/09/15 09:01	10/12/15 11:32	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/12/15 11:32	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/09/15 09:01	10/12/15 11:32	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/09/15 09:01	10/12/15 11:32	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/09/15 09:01	10/12/15 11:32	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/09/15 09:01	10/12/15 11:32	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/09/15 09:01	10/12/15 11:32	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/09/15 09:01	10/12/15 11:32	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/09/15 09:01	10/12/15 11:32	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 11:32	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/12/15 11:32	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/09/15 09:01	10/12/15 11:32	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/12/15 11:32	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/09/15 09:01	10/12/15 11:32	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/09/15 09:01	10/12/15 11:32	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/09/15 09:01	10/12/15 11:32	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/09/15 09:01	10/12/15 11:32	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/09/15 09:01	10/12/15 11:32	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/09/15 09:01	10/12/15 11:32	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/09/15 09:01	10/12/15 11:32	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/09/15 09:01	10/12/15 11:32	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/09/15 09:01	10/12/15 11:32	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/09/15 09:01	10/12/15 11:32	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/09/15 09:01	10/12/15 11:32	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/09/15 09:01	10/12/15 11:32	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/09/15 09:01	10/12/15 11:32	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/12/15 11:32	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/09/15 09:01	10/12/15 11:32	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 11:32	1
Benzaldehyde	0.96	U *	0.96	0.28	ug/L		10/09/15 09:01	10/12/15 11:32	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/09/15 09:01	10/12/15 11:32	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/09/15 09:01	10/12/15 11:32	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/09/15 09:01	10/12/15 11:32	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/09/15 09:01	10/12/15 11:32	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/09/15 09:01	10/12/15 11:32	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/09/15 09:01	10/12/15 11:32	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/12/15 11:32	1
Bis(2-ethylhexyl) phthalate	**1.8**	**J B**	1.9	1.5	ug/L		10/09/15 09:01	10/12/15 11:32	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/09/15 09:01	10/12/15 11:32	1
Caprolactam	**6.6**	**B**	4.8	0.36	ug/L		10/09/15 09:01	10/12/15 11:32	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/09/15 09:01	10/12/15 11:32	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/09/15 09:01	10/12/15 11:32	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/09/15 09:01	10/12/15 11:32	1

Client Sample ID: VAP-2 GW (45-46)
Date Collected: 10/05/15 15:30
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-9
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/12/15 11:32	1
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/09/15 09:01	10/12/15 11:32	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/09/15 09:01	10/12/15 11:32	1
Di-n-butyl phthalate	**0.62**	**J B**	0.96	0.38	ug/L		10/09/15 09:01	10/12/15 11:32	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/09/15 09:01	10/12/15 11:32	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/09/15 09:01	10/12/15 11:32	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/09/15 09:01	10/12/15 11:32	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 11:32	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/09/15 09:01	10/12/15 11:32	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/09/15 09:01	10/12/15 11:32	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/09/15 09:01	10/12/15 11:32	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/09/15 09:01	10/12/15 11:32	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/09/15 09:01	10/12/15 11:32	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/09/15 09:01	10/12/15 11:32	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 11:32	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/09/15 09:01	10/12/15 11:32	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 11:32	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/09/15 09:01	10/12/15 11:32	1
Phenol	0.96	U	0.96	0.14	ug/L		10/09/15 09:01	10/12/15 11:32	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/09/15 09:01	10/12/15 11:32	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/09/15 09:01	10/12/15 11:32	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/09/15 09:01	10/12/15 11:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*16*	*X*	*29 - 110*	*10/09/15 09:01*	*10/12/15 11:32*	*1*
2-Fluorophenol (Surr)	*19*		*15 - 110*	*10/09/15 09:01*	*10/12/15 11:32*	*1*
2,4,6-Tribromophenol (Surr)	*10*	*X*	*21 - 128*	*10/09/15 09:01*	*10/12/15 11:32*	*1*
Nitrobenzene-d5 (Surr)	*17*	*X*	*31 - 110*	*10/09/15 09:01*	*10/12/15 11:32*	*1*
Phenol-d5 (Surr)	*16*		*10 - 110*	*10/09/15 09:01*	*10/12/15 11:32*	*1*
Terphenyl-d14 (Surr)	*16*	*X*	*31 - 115*	*10/09/15 09:01*	*10/12/15 11:32*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U H	0.96	0.12	ug/L		10/13/15 08:39	10/14/15 10:51	1
bis (2-chloroisopropyl) ether	0.96	U H	0.96	0.18	ug/L		10/13/15 08:39	10/14/15 10:51	1
2,4,5-Trichlorophenol	4.8	U H	4.8	0.35	ug/L		10/13/15 08:39	10/14/15 10:51	1
2,4,6-Trichlorophenol	4.8	U H	4.8	0.25	ug/L		10/13/15 08:39	10/14/15 10:51	1
2,4-Dichlorophenol	1.9	U H	1.9	0.28	ug/L		10/13/15 08:39	10/14/15 10:51	1
2,4-Dimethylphenol	1.9	U H	1.9	0.30	ug/L		10/13/15 08:39	10/14/15 10:51	1
2,4-Dinitrophenol	38	U H	38	5.9	ug/L		10/13/15 08:39	10/14/15 10:51	1
2,4-Dinitrotoluene	4.8	U H	4.8	0.25	ug/L		10/13/15 08:39	10/14/15 10:51	1
2,6-Dinitrotoluene	4.8	U H	4.8	0.23	ug/L		10/13/15 08:39	10/14/15 10:51	1
2-Chloronaphthalene	0.96	U H	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 10:51	1
2-Chlorophenol	0.96	U H	0.96	0.13	ug/L		10/13/15 08:39	10/14/15 10:51	1
2-Methylnaphthalene	0.19	U H	0.19	0.036	ug/L		10/13/15 08:39	10/14/15 10:51	1
2-Methylphenol	0.96	U H	0.96	0.18	ug/L		10/13/15 08:39	10/14/15 10:51	1
2-Nitroaniline	1.9	U H	1.9	0.30	ug/L		10/13/15 08:39	10/14/15 10:51	1
2-Nitrophenol	1.9	U H	1.9	0.20	ug/L		10/13/15 08:39	10/14/15 10:51	1
3,3'-Dichlorobenzidine	4.8	U H	4.8	0.34	ug/L		10/13/15 08:39	10/14/15 10:51	1
3-Nitroaniline	1.9	U H	1.9	0.25	ug/L		10/13/15 08:39	10/14/15 10:51	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-2 GW (45-46)
Date Collected: 10/05/15 15:30
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-9
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	4.8	U H	4.8	0.50	ug/L		10/13/15 08:39	10/14/15 10:51	1
4-Bromophenyl phenyl ether	1.9	U H	1.9	0.33	ug/L		10/13/15 08:39	10/14/15 10:51	1
4-Chloro-3-methylphenol	1.9	U H	1.9	0.27	ug/L		10/13/15 08:39	10/14/15 10:51	1
4-Chloroaniline	1.9	U H	1.9	0.14	ug/L		10/13/15 08:39	10/14/15 10:51	1
4-Chlorophenyl phenyl ether	1.9	U H	1.9	0.28	ug/L		10/13/15 08:39	10/14/15 10:51	1
4-Nitroaniline	1.9	U H	1.9	0.23	ug/L		10/13/15 08:39	10/14/15 10:51	1
4-Nitrophenol	4.8	U H	4.8	0.56	ug/L		10/13/15 08:39	10/14/15 10:51	1
Acenaphthene	0.19	U H	0.19	0.042	ug/L		10/13/15 08:39	10/14/15 10:51	1
Acenaphthylene	0.19	U H	0.19	0.019	ug/L		10/13/15 08:39	10/14/15 10:51	1
Acetophenone	**0.22**	**J H**	0.96	0.13	ug/L		10/13/15 08:39	10/14/15 10:51	1
Anthracene	0.19	U H	0.19	0.030	ug/L		10/13/15 08:39	10/14/15 10:51	1
Atrazine	0.96	U H	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 10:51	1
Benzaldehyde	0.96	U H *	0.96	0.28	ug/L		10/13/15 08:39	10/14/15 10:51	1
Benzo[a]anthracene	0.19	U H	0.19	0.057	ug/L		10/13/15 08:39	10/14/15 10:51	1
Benzo[a]pyrene	0.19	U H	0.19	0.029	ug/L		10/13/15 08:39	10/14/15 10:51	1
Benzo[b]fluoranthene	0.19	U H	0.19	0.057	ug/L		10/13/15 08:39	10/14/15 10:51	1
Benzo[g,h,i]perylene	0.19	U H	0.19	0.048	ug/L		10/13/15 08:39	10/14/15 10:51	1
Benzo[k]fluoranthene	0.19	U H	0.19	0.046	ug/L		10/13/15 08:39	10/14/15 10:51	1
Bis(2-chloroethoxy)methane	0.96	U H	0.96	0.036	ug/L		10/13/15 08:39	10/14/15 10:51	1
Bis(2-chloroethyl)ether	0.96	U H	0.96	0.18	ug/L		10/13/15 08:39	10/14/15 10:51	1
Bis(2-ethylhexyl) phthalate	1.9	U H	1.9	1.5	ug/L		10/13/15 08:39	10/14/15 10:51	1
Butyl benzyl phthalate	0.96	U H	0.96	0.21	ug/L		10/13/15 08:39	10/14/15 10:51	1
Caprolactam	**7.6**	**H B**	4.8	0.36	ug/L		10/13/15 08:39	10/14/15 10:51	1
Carbazole	0.96	U H	0.96	0.10	ug/L		10/13/15 08:39	10/14/15 10:51	1
Chrysene	0.19	U H	0.19	0.034	ug/L		10/13/15 08:39	10/14/15 10:51	1
Dibenz(a,h)anthracene	0.19	U H	0.19	0.038	ug/L		10/13/15 08:39	10/14/15 10:51	1
Dibenzofuran	0.96	U H	0.96	0.13	ug/L		10/13/15 08:39	10/14/15 10:51	1
Diethyl phthalate	**0.22**	**J H**	0.96	0.12	ug/L		10/13/15 08:39	10/14/15 10:51	1
Dimethyl phthalate	0.96	U H	0.96	0.097	ug/L		10/13/15 08:39	10/14/15 10:51	1
Di-n-butyl phthalate	**0.58**	**J H**	0.96	0.38	ug/L		10/13/15 08:39	10/14/15 10:51	1
Di-n-octyl phthalate	0.96	U H	0.96	0.35	ug/L		10/13/15 08:39	10/14/15 10:51	1
Fluoranthene	0.19	U H	0.19	0.026	ug/L		10/13/15 08:39	10/14/15 10:51	1
Fluorene	0.19	U H	0.19	0.033	ug/L		10/13/15 08:39	10/14/15 10:51	1
Hexachlorobenzene	0.96	U H	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 10:51	1
Hexachlorobutadiene	0.96	U H	0.96	0.14	ug/L		10/13/15 08:39	10/14/15 10:51	1
Hexachlorocyclopentadiene	9.6	U H	9.6	2.4	ug/L		10/13/15 08:39	10/14/15 10:51	1
Hexachloroethane	0.96	U H	0.96	0.21	ug/L		10/13/15 08:39	10/14/15 10:51	1
Indeno[1,2,3-cd]pyrene	0.19	U H	0.19	0.046	ug/L		10/13/15 08:39	10/14/15 10:51	1
Isophorone	0.96	U H	0.96	0.040	ug/L		10/13/15 08:39	10/14/15 10:51	1
Naphthalene	**0.22**	**H**	0.19	0.041	ug/L		10/13/15 08:39	10/14/15 10:51	1
Nitrobenzene	0.96	U H	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 10:51	1
N-Nitrosodi-n-propylamine	0.96	U H	0.96	0.15	ug/L		10/13/15 08:39	10/14/15 10:51	1
N-Nitrosodiphenylamine	0.96	U H	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 10:51	1
Pentachlorophenol	38	U H	38	5.3	ug/L		10/13/15 08:39	10/14/15 10:51	1
Phenol	0.96	U H	0.96	0.14	ug/L		10/13/15 08:39	10/14/15 10:51	1
Phenanthrene	0.19	U H	0.19	0.030	ug/L		10/13/15 08:39	10/14/15 10:51	1
Pyrene	0.19	U H	0.19	0.027	ug/L		10/13/15 08:39	10/14/15 10:51	1
3 & 4 Methylphenol	1.9	U H	1.9	0.32	ug/L		10/13/15 08:39	10/14/15 10:51	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-2 GW (45-46)
Date Collected: 10/05/15 15:30
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-9
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	47		29 - 110	10/13/15 08:39	10/14/15 10:51	1
2-Fluorophenol (Surr)	33		15 - 110	10/13/15 08:39	10/14/15 10:51	1
2,4,6-Tribromophenol (Surr)	38		21 - 128	10/13/15 08:39	10/14/15 10:51	1
Nitrobenzene-d5 (Surr)	56		31 - 110	10/13/15 08:39	10/14/15 10:51	1
Phenol-d5 (Surr)	19		10 - 110	10/13/15 08:39	10/14/15 10:51	1
Terphenyl-d14 (Surr)	35		31 - 115	10/13/15 08:39	10/14/15 10:51	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**22**		10	2.9	ug/L		10/09/15 10:45	10/15/15 00:11	1
Barium	**450**		200	1.0	ug/L		10/09/15 10:45	10/15/15 00:11	1
Cadmium	**0.80**	**J**	2.0	0.14	ug/L		10/09/15 10:45	10/15/15 00:11	1
Chromium	**120**	**B**	5.0	0.55	ug/L		10/09/15 10:45	10/15/15 00:11	1
Lead	**44**		3.0	1.9	ug/L		10/09/15 10:45	10/15/15 00:11	1
Selenium	5.0	U	5.0	4.0	ug/L		10/09/15 10:45	10/15/15 00:11	1
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:45	10/15/15 00:11	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.11**	**J**	0.20	0.090	ug/L		10/09/15 14:00	10/14/15 09:33	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-2 GW (49-50)
Date Collected: 10/05/15 16:00
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/14/15 03:35	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 03:35	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 03:35	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 03:35	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 03:35	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/14/15 03:35	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 03:35	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 03:35	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 03:35	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 03:35	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 03:35	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 03:35	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 03:35	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 03:35	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 03:35	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 03:35	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 03:35	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 03:35	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 03:35	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 03:35	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 03:35	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 03:35	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 03:35	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 03:35	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 03:35	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 03:35	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/14/15 03:35	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 03:35	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 03:35	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 03:35	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 03:35	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 03:35	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 03:35	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 03:35	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 03:35	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/14/15 03:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 03:35	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 03:35	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 03:35	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 03:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 03:35	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 03:35	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 03:35	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 03:35	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 03:35	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 03:35	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 03:35	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 03:35	1

Client Sample ID: VAP-2 GW (49-50)

Date Collected: 10/05/15 16:00
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-10

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*78 - 125*		*10/14/15 03:35*	*1*
4-Bromofluorobenzene (Surr)	*90*		*61 - 120*		*10/14/15 03:35*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*10/14/15 03:35*	*1*
Dibromofluoromethane (Surr)	*104*		*79 - 120*		*10/14/15 03:35*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/09/15 09:01	10/12/15 11:55	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/12/15 11:55	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/09/15 09:01	10/12/15 11:55	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/09/15 09:01	10/12/15 11:55	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/09/15 09:01	10/12/15 11:55	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/09/15 09:01	10/12/15 11:55	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/09/15 09:01	10/12/15 11:55	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/09/15 09:01	10/12/15 11:55	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/09/15 09:01	10/12/15 11:55	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 11:55	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/12/15 11:55	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/09/15 09:01	10/12/15 11:55	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/12/15 11:55	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/09/15 09:01	10/12/15 11:55	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/09/15 09:01	10/12/15 11:55	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/09/15 09:01	10/12/15 11:55	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/09/15 09:01	10/12/15 11:55	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/09/15 09:01	10/12/15 11:55	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/09/15 09:01	10/12/15 11:55	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/09/15 09:01	10/12/15 11:55	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/09/15 09:01	10/12/15 11:55	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/09/15 09:01	10/12/15 11:55	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/09/15 09:01	10/12/15 11:55	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/09/15 09:01	10/12/15 11:55	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/09/15 09:01	10/12/15 11:55	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/09/15 09:01	10/12/15 11:55	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/12/15 11:55	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/09/15 09:01	10/12/15 11:55	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 11:55	1
Benzaldehyde	0.96	U *	0.96	0.28	ug/L		10/09/15 09:01	10/12/15 11:55	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/09/15 09:01	10/12/15 11:55	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/09/15 09:01	10/12/15 11:55	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/09/15 09:01	10/12/15 11:55	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/09/15 09:01	10/12/15 11:55	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/09/15 09:01	10/12/15 11:55	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/09/15 09:01	10/12/15 11:55	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/12/15 11:55	1
Bis(2-ethylhexyl) phthalate	**2.0**	**B**	1.9	1.5	ug/L		10/09/15 09:01	10/12/15 11:55	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/09/15 09:01	10/12/15 11:55	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/09/15 09:01	10/12/15 11:55	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/09/15 09:01	10/12/15 11:55	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/09/15 09:01	10/12/15 11:55	1
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/12/15 11:55	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-2 GW (49-50)
Date Collected: 10/05/15 16:00
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-10
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/09/15 09:01	10/12/15 11:55	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/09/15 09:01	10/12/15 11:55	1
Di-n-butyl phthalate	**0.58**	**J B**	0.96	0.38	ug/L		10/09/15 09:01	10/12/15 11:55	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/09/15 09:01	10/12/15 11:55	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/09/15 09:01	10/12/15 11:55	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/09/15 09:01	10/12/15 11:55	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 11:55	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/09/15 09:01	10/12/15 11:55	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/09/15 09:01	10/12/15 11:55	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/09/15 09:01	10/12/15 11:55	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/09/15 09:01	10/12/15 11:55	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/09/15 09:01	10/12/15 11:55	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/09/15 09:01	10/12/15 11:55	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 11:55	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/09/15 09:01	10/12/15 11:55	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 11:55	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/09/15 09:01	10/12/15 11:55	1
Phenol	0.96	U	0.96	0.14	ug/L		10/09/15 09:01	10/12/15 11:55	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/09/15 09:01	10/12/15 11:55	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/09/15 09:01	10/12/15 11:55	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/09/15 09:01	10/12/15 11:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*44*		*29 - 110*	*10/09/15 09:01*	*10/12/15 11:55*	*1*
2-Fluorophenol (Surr)	*43*		*15 - 110*	*10/09/15 09:01*	*10/12/15 11:55*	*1*
2,4,6-Tribromophenol (Surr)	*41*		*21 - 128*	*10/09/15 09:01*	*10/12/15 11:55*	*1*
Nitrobenzene-d5 (Surr)	*46*		*31 - 110*	*10/09/15 09:01*	*10/12/15 11:55*	*1*
Phenol-d5 (Surr)	*37*		*10 - 110*	*10/09/15 09:01*	*10/12/15 11:55*	*1*
Terphenyl-d14 (Surr)	*54*		*31 - 115*	*10/09/15 09:01*	*10/12/15 11:55*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**180**	**B**	19	1.4	ug/L		10/09/15 09:01	10/13/15 10:46	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*46*		*29 - 110*	*10/09/15 09:01*	*10/13/15 10:46*	*4*
2-Fluorophenol (Surr)	*46*		*15 - 110*	*10/09/15 09:01*	*10/13/15 10:46*	*4*
2,4,6-Tribromophenol (Surr)	*36*		*21 - 128*	*10/09/15 09:01*	*10/13/15 10:46*	*4*
Nitrobenzene-d5 (Surr)	*47*		*31 - 110*	*10/09/15 09:01*	*10/13/15 10:46*	*4*
Phenol-d5 (Surr)	*40*		*10 - 110*	*10/09/15 09:01*	*10/13/15 10:46*	*4*
Terphenyl-d14 (Surr)	*55*		*31 - 115*	*10/09/15 09:01*	*10/13/15 10:46*	*4*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10	U	10	2.9	ug/L		10/09/15 10:45	10/15/15 00:15	1
Barium	**36**	**J**	200	1.0	ug/L		10/09/15 10:45	10/15/15 00:15	1
Cadmium	2.0	U	2.0	0.14	ug/L		10/09/15 10:45	10/15/15 00:15	1
Chromium	**1.2**	**J B**	5.0	0.55	ug/L		10/09/15 10:45	10/15/15 00:15	1
Lead	3.0	U	3.0	1.9	ug/L		10/09/15 10:45	10/15/15 00:15	1
Selenium	5.0	U	5.0	4.0	ug/L		10/09/15 10:45	10/15/15 00:15	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-2 GW (49-50)
Date Collected: 10/05/15 16:00
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-10
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:45	10/15/15 00:15	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/09/15 14:00	10/14/15 09:35	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: DUP-GW-01 (100515)
Date Collected: 10/05/15 00:00
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	5.6	J	10	0.94	ug/L			10/14/15 03:58	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 03:58	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 03:58	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 03:58	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 03:58	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/14/15 03:58	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 03:58	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 03:58	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 03:58	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 03:58	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 03:58	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 03:58	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 03:58	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 03:58	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 03:58	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 03:58	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 03:58	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 03:58	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 03:58	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 03:58	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 03:58	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 03:58	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 03:58	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 03:58	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 03:58	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 03:58	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/14/15 03:58	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 03:58	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 03:58	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 03:58	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 03:58	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 03:58	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 03:58	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 03:58	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 03:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/14/15 03:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 03:58	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 03:58	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 03:58	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 03:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 03:58	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 03:58	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 03:58	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 03:58	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 03:58	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 03:58	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 03:58	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 03:58	1

Client Sample ID: DUP-GW-01 (100515)

Lab Sample ID: 240-56328-11

Date Collected: 10/05/15 00:00

Matrix: Water

Date Received: 10/08/15 09:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*107*		*78 - 125*		*10/14/15 03:58*	*1*
4-Bromofluorobenzene (Surr)	*86*		*61 - 120*		*10/14/15 03:58*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/14/15 03:58*	*1*
Dibromofluoromethane (Surr)	*105*		*79 - 120*		*10/14/15 03:58*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/09/15 09:01	10/12/15 12:19	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/12/15 12:19	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/09/15 09:01	10/12/15 12:19	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/09/15 09:01	10/12/15 12:19	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/09/15 09:01	10/12/15 12:19	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/09/15 09:01	10/12/15 12:19	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/09/15 09:01	10/12/15 12:19	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/09/15 09:01	10/12/15 12:19	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/09/15 09:01	10/12/15 12:19	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 12:19	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/12/15 12:19	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/09/15 09:01	10/12/15 12:19	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/12/15 12:19	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/09/15 09:01	10/12/15 12:19	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/09/15 09:01	10/12/15 12:19	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/09/15 09:01	10/12/15 12:19	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/09/15 09:01	10/12/15 12:19	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/09/15 09:01	10/12/15 12:19	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/09/15 09:01	10/12/15 12:19	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/09/15 09:01	10/12/15 12:19	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/09/15 09:01	10/12/15 12:19	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/09/15 09:01	10/12/15 12:19	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/09/15 09:01	10/12/15 12:19	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/09/15 09:01	10/12/15 12:19	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/09/15 09:01	10/12/15 12:19	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/09/15 09:01	10/12/15 12:19	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/12/15 12:19	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/09/15 09:01	10/12/15 12:19	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 12:19	1
Benzaldehyde	0.96	U *	0.96	0.28	ug/L		10/09/15 09:01	10/12/15 12:19	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/09/15 09:01	10/12/15 12:19	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/09/15 09:01	10/12/15 12:19	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/09/15 09:01	10/12/15 12:19	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/09/15 09:01	10/12/15 12:19	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/09/15 09:01	10/12/15 12:19	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/09/15 09:01	10/12/15 12:19	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/12/15 12:19	1
Bis(2-ethylhexyl) phthalate	**1.5**	**J B**	1.9	1.5	ug/L		10/09/15 09:01	10/12/15 12:19	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/09/15 09:01	10/12/15 12:19	1
Caprolactam	**12**	**B**	4.8	0.36	ug/L		10/09/15 09:01	10/12/15 12:19	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/09/15 09:01	10/12/15 12:19	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/09/15 09:01	10/12/15 12:19	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/09/15 09:01	10/12/15 12:19	1

Client Sample ID: DUP-GW-01 (100515) — **Lab Sample ID: 240-56328-11**
Date Collected: 10/05/15 00:00 — **Matrix: Water**
Date Received: 10/08/15 09:30

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/12/15 12:19	1
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/09/15 09:01	10/12/15 12:19	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/09/15 09:01	10/12/15 12:19	1
Di-n-butyl phthalate	**0.69**	**J B**	0.96	0.38	ug/L		10/09/15 09:01	10/12/15 12:19	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/09/15 09:01	10/12/15 12:19	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/09/15 09:01	10/12/15 12:19	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/09/15 09:01	10/12/15 12:19	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 12:19	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/09/15 09:01	10/12/15 12:19	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/09/15 09:01	10/12/15 12:19	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/09/15 09:01	10/12/15 12:19	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/09/15 09:01	10/12/15 12:19	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/09/15 09:01	10/12/15 12:19	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/09/15 09:01	10/12/15 12:19	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 12:19	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/09/15 09:01	10/12/15 12:19	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 12:19	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/09/15 09:01	10/12/15 12:19	1
Phenol	0.96	U	0.96	0.14	ug/L		10/09/15 09:01	10/12/15 12:19	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/09/15 09:01	10/12/15 12:19	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/09/15 09:01	10/12/15 12:19	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/09/15 09:01	10/12/15 12:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*9*	*X*	*29 - 110*	*10/09/15 09:01*	*10/12/15 12:19*	*1*
2-Fluorophenol (Surr)	*10*	*X*	*15 - 110*	*10/09/15 09:01*	*10/12/15 12:19*	*1*
2,4,6-Tribromophenol (Surr)	*6*	*X*	*21 - 128*	*10/09/15 09:01*	*10/12/15 12:19*	*1*
Nitrobenzene-d5 (Surr)	*10*	*X*	*31 - 110*	*10/09/15 09:01*	*10/12/15 12:19*	*1*
Phenol-d5 (Surr)	*8*	*X*	*10 - 110*	*10/09/15 09:01*	*10/12/15 12:19*	*1*
Terphenyl-d14 (Surr)	*8*	*X*	*31 - 115*	*10/09/15 09:01*	*10/12/15 12:19*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U H	0.96	0.12	ug/L		10/13/15 08:39	10/14/15 11:15	1
bis (2-chloroisopropyl) ether	0.96	U H	0.96	0.18	ug/L		10/13/15 08:39	10/14/15 11:15	1
2,4,5-Trichlorophenol	4.8	U H	4.8	0.35	ug/L		10/13/15 08:39	10/14/15 11:15	1
2,4,6-Trichlorophenol	4.8	U H	4.8	0.25	ug/L		10/13/15 08:39	10/14/15 11:15	1
2,4-Dichlorophenol	1.9	U H	1.9	0.28	ug/L		10/13/15 08:39	10/14/15 11:15	1
2,4-Dimethylphenol	1.9	U H	1.9	0.30	ug/L		10/13/15 08:39	10/14/15 11:15	1
2,4-Dinitrophenol	38	U H	38	5.9	ug/L		10/13/15 08:39	10/14/15 11:15	1
2,4-Dinitrotoluene	4.8	U H	4.8	0.25	ug/L		10/13/15 08:39	10/14/15 11:15	1
2,6-Dinitrotoluene	4.8	U H	4.8	0.23	ug/L		10/13/15 08:39	10/14/15 11:15	1
2-Chloronaphthalene	0.96	U H	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 11:15	1
2-Chlorophenol	0.96	U H	0.96	0.13	ug/L		10/13/15 08:39	10/14/15 11:15	1
2-Methylnaphthalene	0.19	U H	0.19	0.036	ug/L		10/13/15 08:39	10/14/15 11:15	1
2-Methylphenol	0.96	U H	0.96	0.18	ug/L		10/13/15 08:39	10/14/15 11:15	1
2-Nitroaniline	1.9	U H	1.9	0.30	ug/L		10/13/15 08:39	10/14/15 11:15	1
2-Nitrophenol	1.9	U H	1.9	0.20	ug/L		10/13/15 08:39	10/14/15 11:15	1
3,3'-Dichlorobenzidine	4.8	U H	4.8	0.34	ug/L		10/13/15 08:39	10/14/15 11:15	1
3-Nitroaniline	1.9	U H	1.9	0.25	ug/L		10/13/15 08:39	10/14/15 11:15	1

Client Sample ID: DUP-GW-01 (100515)
Date Collected: 10/05/15 00:00
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-11
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	4.8	U H	4.8	0.50	ug/L		10/13/15 08:39	10/14/15 11:15	1
4-Bromophenyl phenyl ether	1.9	U H	1.9	0.33	ug/L		10/13/15 08:39	10/14/15 11:15	1
4-Chloro-3-methylphenol	1.9	U H	1.9	0.27	ug/L		10/13/15 08:39	10/14/15 11:15	1
4-Chloroaniline	1.9	U H	1.9	0.14	ug/L		10/13/15 08:39	10/14/15 11:15	1
4-Chlorophenyl phenyl ether	1.9	U H	1.9	0.28	ug/L		10/13/15 08:39	10/14/15 11:15	1
4-Nitroaniline	1.9	U H	1.9	0.23	ug/L		10/13/15 08:39	10/14/15 11:15	1
4-Nitrophenol	4.8	U H	4.8	0.56	ug/L		10/13/15 08:39	10/14/15 11:15	1
Acenaphthene	0.19	U H	0.19	0.042	ug/L		10/13/15 08:39	10/14/15 11:15	1
Acenaphthylene	0.19	U H	0.19	0.019	ug/L		10/13/15 08:39	10/14/15 11:15	1
Acetophenone	0.96	U H	0.96	0.13	ug/L		10/13/15 08:39	10/14/15 11:15	1
Anthracene	0.19	U H	0.19	0.030	ug/L		10/13/15 08:39	10/14/15 11:15	1
Atrazine	0.96	U H	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 11:15	1
Benzaldehyde	0.96	U H *	0.96	0.28	ug/L		10/13/15 08:39	10/14/15 11:15	1
Benzo[a]anthracene	0.19	U H	0.19	0.057	ug/L		10/13/15 08:39	10/14/15 11:15	1
Benzo[a]pyrene	0.19	U H	0.19	0.029	ug/L		10/13/15 08:39	10/14/15 11:15	1
Benzo[b]fluoranthene	0.19	U H	0.19	0.057	ug/L		10/13/15 08:39	10/14/15 11:15	1
Benzo[g,h,i]perylene	0.19	U H	0.19	0.048	ug/L		10/13/15 08:39	10/14/15 11:15	1
Benzo[k]fluoranthene	0.19	U H	0.19	0.046	ug/L		10/13/15 08:39	10/14/15 11:15	1
Bis(2-chloroethoxy)methane	0.96	U H	0.96	0.036	ug/L		10/13/15 08:39	10/14/15 11:15	1
Bis(2-chloroethyl)ether	0.96	U H	0.96	0.18	ug/L		10/13/15 08:39	10/14/15 11:15	1
Bis(2-ethylhexyl) phthalate	1.9	U H	1.9	1.5	ug/L		10/13/15 08:39	10/14/15 11:15	1
Butyl benzyl phthalate	0.96	U H	0.96	0.21	ug/L		10/13/15 08:39	10/14/15 11:15	1
Caprolactam	**42**	**H B**	4.8	0.36	ug/L		10/13/15 08:39	10/14/15 11:15	1
Carbazole	0.96	U H	0.96	0.10	ug/L		10/13/15 08:39	10/14/15 11:15	1
Chrysene	0.19	U H	0.19	0.034	ug/L		10/13/15 08:39	10/14/15 11:15	1
Dibenz(a,h)anthracene	0.19	U H	0.19	0.038	ug/L		10/13/15 08:39	10/14/15 11:15	1
Dibenzofuran	0.96	U H	0.96	0.13	ug/L		10/13/15 08:39	10/14/15 11:15	1
Diethyl phthalate	**0.23**	**J H**	0.96	0.12	ug/L		10/13/15 08:39	10/14/15 11:15	1
Dimethyl phthalate	0.96	U H	0.96	0.097	ug/L		10/13/15 08:39	10/14/15 11:15	1
Di-n-butyl phthalate	**1.2**	**H**	0.96	0.38	ug/L		10/13/15 08:39	10/14/15 11:15	1
Di-n-octyl phthalate	0.96	U H	0.96	0.35	ug/L		10/13/15 08:39	10/14/15 11:15	1
Fluoranthene	0.19	U H	0.19	0.026	ug/L		10/13/15 08:39	10/14/15 11:15	1
Fluorene	0.19	U H	0.19	0.033	ug/L		10/13/15 08:39	10/14/15 11:15	1
Hexachlorobenzene	0.96	U H	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 11:15	1
Hexachlorobutadiene	0.96	U H	0.96	0.14	ug/L		10/13/15 08:39	10/14/15 11:15	1
Hexachlorocyclopentadiene	9.6	U H	9.6	2.4	ug/L		10/13/15 08:39	10/14/15 11:15	1
Hexachloroethane	0.96	U H	0.96	0.21	ug/L		10/13/15 08:39	10/14/15 11:15	1
Indeno[1,2,3-cd]pyrene	0.19	U H	0.19	0.046	ug/L		10/13/15 08:39	10/14/15 11:15	1
Isophorone	0.96	U H	0.96	0.040	ug/L		10/13/15 08:39	10/14/15 11:15	1
Naphthalene	0.19	U H	0.19	0.041	ug/L		10/13/15 08:39	10/14/15 11:15	1
Nitrobenzene	0.96	U H	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 11:15	1
N-Nitrosodi-n-propylamine	0.96	U H	0.96	0.15	ug/L		10/13/15 08:39	10/14/15 11:15	1
N-Nitrosodiphenylamine	0.96	U H	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 11:15	1
Pentachlorophenol	38	U H	38	5.3	ug/L		10/13/15 08:39	10/14/15 11:15	1
Phenol	0.96	U H	0.96	0.14	ug/L		10/13/15 08:39	10/14/15 11:15	1
Phenanthrene	0.19	U H	0.19	0.030	ug/L		10/13/15 08:39	10/14/15 11:15	1
Pyrene	0.19	U H	0.19	0.027	ug/L		10/13/15 08:39	10/14/15 11:15	1
3 & 4 Methylphenol	1.9	U H	1.9	0.32	ug/L		10/13/15 08:39	10/14/15 11:15	1

Client Sample ID: DUP-GW-01 (100515)

Lab Sample ID: 240-56328-11

Date Collected: 10/05/15 00:00

Matrix: Water

Date Received: 10/08/15 09:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*40*		*29 - 110*	*10/13/15 08:39*	*10/14/15 11:15*	*1*
2-Fluorophenol (Surr)	*27*		*15 - 110*	*10/13/15 08:39*	*10/14/15 11:15*	*1*
2,4,6-Tribromophenol (Surr)	*36*		*21 - 128*	*10/13/15 08:39*	*10/14/15 11:15*	*1*
Nitrobenzene-d5 (Surr)	*50*		*31 - 110*	*10/13/15 08:39*	*10/14/15 11:15*	*1*
Phenol-d5 (Surr)	*16*		*10 - 110*	*10/13/15 08:39*	*10/14/15 11:15*	*1*
Terphenyl-d14 (Surr)	*16*	*X*	*31 - 115*	*10/13/15 08:39*	*10/14/15 11:15*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**41**		10	2.9	ug/L		10/09/15 10:45	10/15/15 00:19	1
Barium	**1100**		200	1.0	ug/L		10/09/15 10:45	10/15/15 00:19	1
Cadmium	**2.4**		2.0	0.14	ug/L		10/09/15 10:45	10/15/15 00:19	1
Chromium	**200**	**B**	5.0	0.55	ug/L		10/09/15 10:45	10/15/15 00:19	1
Lead	**85**		3.0	1.9	ug/L		10/09/15 10:45	10/15/15 00:19	1
Selenium	**22**		5.0	4.0	ug/L		10/09/15 10:45	10/15/15 00:19	1
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:45	10/15/15 00:19	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.32**		0.20	0.090	ug/L		10/09/15 14:00	10/14/15 09:37	1

Client Sample ID: VAP-3 (1-2)
Date Collected: 10/05/15 17:15
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-12
Matrix: Solid
Percent Solids: 81.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**7.9**	**J B ***	17	1.3	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Benzene	4.2	U	4.2	0.20	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Dichlorobromomethane	4.2	U	4.2	0.18	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Bromoform	4.2	U	4.2	0.32	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Bromomethane	4.2	U	4.2	0.60	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
2-Butanone (MEK)	**1.4**	**J B**	17	0.40	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Carbon disulfide	4.2	U	4.2	0.29	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Carbon tetrachloride	4.2	U	4.2	0.28	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Chlorobenzene	4.2	U	4.2	0.24	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Chloroethane	4.2	U	4.2	0.29	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Chloroform	4.2	U	4.2	0.18	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Chloromethane	4.2	U	4.2	1.1	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
1,1-Dichloroethane	4.2	U	4.2	1.0	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
1,2-Dichloroethane	4.2	U	4.2	0.17	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
1,1-Dichloroethene	4.2	U	4.2	0.41	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
1,2-Dichloropropane	4.2	U	4.2	0.24	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
cis-1,3-Dichloropropene	4.2	U	4.2	0.23	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
trans-1,3-Dichloropropene	4.2	U	4.2	0.18	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Ethylbenzene	4.2	U	4.2	0.27	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
2-Hexanone	17	U	17	0.59	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Methylene Chloride	4.2	U	4.2	0.89	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
4-Methyl-2-pentanone (MIBK)	17	U	17	0.24	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Styrene	4.2	U	4.2	0.23	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
1,1,2,2-Tetrachloroethane	4.2	U	4.2	0.13	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Tetrachloroethene	4.2	U	4.2	0.28	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Toluene	4.2	U	4.2	0.23	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Trichloroethene	4.2	U	4.2	0.22	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Vinyl chloride	4.2	U	4.2	0.33	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Xylenes, Total	8.4	U	8.4	0.53	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
1,1,1-Trichloroethane	4.2	U	4.2	0.22	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
1,1,2-Trichloroethane	4.2	U	4.2	0.41	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Cyclohexane	8.4	U	8.4	0.24	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
1,2-Dibromo-3-Chloropropane	8.4	U	8.4	1.6	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Ethylene Dibromide	4.2	U	4.2	0.21	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Dichlorodifluoromethane	4.2	U	4.2	0.34	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
cis-1,2-Dichloroethene	4.2	U	4.2	0.24	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
trans-1,2-Dichloroethene	4.2	U	4.2	0.31	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Isopropylbenzene	4.2	U	4.2	0.25	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Methyl acetate	8.4	U *	8.4	1.9	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Methyl tert-butyl ether	4.2	U	4.2	0.13	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	4.2	U	4.2	0.33	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
1,2,4-Trichlorobenzene	4.2	U	4.2	0.33	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
1,2-Dichlorobenzene	4.2	U	4.2	0.32	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
1,3-Dichlorobenzene	4.2	U	4.2	0.34	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
1,4-Dichlorobenzene	4.2	U	4.2	0.35	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Trichlorofluoromethane	4.2	U	4.2	0.22	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Chlorodibromomethane	4.2	U	4.2	0.13	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1
Methylcyclohexane	8.4	U	8.4	0.28	ug/Kg	☼	10/10/15 05:46	10/14/15 06:22	1

Client Sample ID: VAP-3 (1-2)
Date Collected: 10/05/15 17:15
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-12
Matrix: Solid
Percent Solids: 81.9

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*64 - 120*	*10/10/15 05:46*	*10/14/15 06:22*	*1*
4-Bromofluorobenzene (Surr)	*117*		*64 - 130*	*10/10/15 05:46*	*10/14/15 06:22*	*1*
Toluene-d8 (Surr)	*104*		*69 - 128*	*10/10/15 05:46*	*10/14/15 06:22*	*1*
Dibromofluoromethane (Surr)	*105*		*68 - 120*	*10/10/15 05:46*	*10/14/15 06:22*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	61	U	61	4.3	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
bis (2-chloroisopropyl) ether	120	U	120	12	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
2,4,5-Trichlorophenol	180	U	180	30	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
2,4,6-Trichlorophenol	180	U	180	11	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
2,4-Dichlorophenol	180	U	180	24	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
2,4-Dimethylphenol	180	U	180	24	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
2,4-Dinitrophenol	400	U	400	26	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
2,4-Dinitrotoluene	240	U F2	240	21	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
2,6-Dinitrotoluene	240	U	240	26	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
2-Chloronaphthalene	61	U	61	0.55	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
2-Chlorophenol	61	U	61	10	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
2-Methylnaphthalene	8.1	U	8.1	0.61	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
2-Methylphenol	240	U	240	13	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
2-Nitroaniline	240	U	240	11	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
2-Nitrophenol	61	U F2	61	10	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
3,3'-Dichlorobenzidine	120	U	120	22	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
3-Nitroaniline	240	U	240	20	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
4,6-Dinitro-2-methylphenol	180	U F1 F2	180	11	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
4-Bromophenyl phenyl ether	61	U	61	16	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
4-Chloro-3-methylphenol	180	U	180	26	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
4-Chloroaniline	180	U	180	21	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
4-Chlorophenyl phenyl ether	61	U	61	16	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
4-Nitroaniline	240	U	240	32	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
4-Nitrophenol	400	U	400	21	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Acenaphthene	8.1	U	8.1	0.93	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Acenaphthylene	8.1	U	8.1	0.43	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Acetophenone	120	U	120	11	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Anthracene	8.1	U	8.1	0.95	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Atrazine	240	U	240	11	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Benzaldehyde	120	U	120	15	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Benzo[a]anthracene	8.1	U	8.1	0.77	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Benzo[a]pyrene	8.1	U	8.1	0.78	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Benzo[b]fluoranthene	8.1	U	8.1	0.72	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Benzo[g,h,i]perylene	8.1	U	8.1	0.43	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Benzo[k]fluoranthene	8.1	U	8.1	0.83	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Bis(2-chloroethoxy)methane	120	U	120	27	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Bis(2-chloroethyl)ether	120	U	120	2.4	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Bis(2-ethylhexyl) phthalate	**25**	**J**	85	23	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Butyl benzyl phthalate	85	U	85	12	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Caprolactam	400	U	400	45	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Carbazole	61	U	61	33	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Chrysene	8.1	U	8.1	1.3	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Dibenz(a,h)anthracene	8.1	U	8.1	0.80	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1

Client Sample ID: VAP-3 (1-2)

Date Collected: 10/05/15 17:15
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-12

Matrix: Solid
Percent Solids: 81.9

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	61	U	61	0.80	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Diethyl phthalate	85	U	85	20	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Dimethyl phthalate	85	U	85	21	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Di-n-butyl phthalate	85	U	85	18	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Di-n-octyl phthalate	85	U F1 F2	85	9.6	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Fluoranthene	8.1	U	8.1	0.67	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Fluorene	8.1	U	8.1	0.65	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Hexachlorobenzene	8.1	U	8.1	2.6	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Hexachlorobutadiene	61	U	61	6.8	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Hexachlorocyclopentadiene	400	U F1	400	9.9	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Hexachloroethane	61	U	61	11	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Indeno[1,2,3-cd]pyrene	8.1	U	8.1	0.43	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Isophorone	61	U	61	16	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Naphthalene	8.1	U	8.1	1.0	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Nitrobenzene	120	U	120	2.7	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
N-Nitrosodi-n-propylamine	61	U	61	7.7	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
N-Nitrosodiphenylamine	61	U	61	26	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Pentachlorophenol	180	U	180	11	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Phenol	61	U	61	8.9	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Phenanthrene	8.1	U	8.1	0.89	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
Pyrene	8.1	U	8.1	0.54	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1
3 & 4 Methylphenol	490	U	490	24	ug/Kg	☼	10/14/15 10:32	10/16/15 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*67*		*24 - 110*	*10/14/15 10:32*	*10/16/15 17:46*	*1*
2-Fluorophenol (Surr)	*68*		*24 - 110*	*10/14/15 10:32*	*10/16/15 17:46*	*1*
2,4,6-Tribromophenol (Surr)	*46*		*10 - 110*	*10/14/15 10:32*	*10/16/15 17:46*	*1*
Nitrobenzene-d5 (Surr)	*64*		*20 - 110*	*10/14/15 10:32*	*10/16/15 17:46*	*1*
Phenol-d5 (Surr)	*68*		*26 - 110*	*10/14/15 10:32*	*10/16/15 17:46*	*1*
Terphenyl-d14 (Surr)	*75*		*36 - 110*	*10/14/15 10:32*	*10/16/15 17:46*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**10**		0.86	0.35	mg/Kg	☼	10/09/15 07:38	10/13/15 05:45	1
Barium	**66**		17	0.35	mg/Kg	☼	10/09/15 07:38	10/13/15 05:45	1
Cadmium	**0.068**	**J**	0.17	0.018	mg/Kg	☼	10/09/15 07:38	10/13/15 05:45	1
Chromium	**14**	**B**	0.43	0.065	mg/Kg	☼	10/09/15 07:38	10/13/15 05:45	1
Lead	**11**		0.26	0.17	mg/Kg	☼	10/09/15 07:38	10/13/15 05:45	1
Selenium	0.43	U	0.43	0.29	mg/Kg	☼	10/09/15 07:38	10/13/15 05:45	1
Silver	0.43	U	0.43	0.054	mg/Kg	☼	10/09/15 07:38	10/13/15 05:45	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.043**	**J**	0.12	0.017	mg/Kg	☼	10/09/15 10:00	10/13/15 11:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	2.0	U	2.0	0.64	mg/Kg	☼	10/09/15 11:05	10/12/15 15:29	2
Percent Solids	**82**		0.10	0.10	%			10/09/15 13:58	1
Percent Moisture	**18**		0.10	0.10	%			10/09/15 13:58	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-3-GW (15-16)
Date Collected: 10/06/15 08:06
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**1.6**	**J**	10	0.94	ug/L			10/14/15 04:20	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 04:20	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 04:20	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 04:20	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 04:20	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/14/15 04:20	1
Carbon disulfide	**0.56**	**J**	1.0	0.38	ug/L			10/14/15 04:20	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 04:20	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 04:20	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 04:20	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 04:20	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 04:20	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 04:20	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 04:20	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 04:20	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 04:20	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 04:20	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 04:20	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 04:20	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 04:20	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 04:20	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 04:20	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 04:20	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 04:20	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 04:20	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 04:20	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/14/15 04:20	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 04:20	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 04:20	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 04:20	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 04:20	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 04:20	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 04:20	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 04:20	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 04:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/14/15 04:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 04:20	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 04:20	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 04:20	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 04:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 04:20	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 04:20	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 04:20	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 04:20	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 04:20	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 04:20	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 04:20	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 04:20	1

Client Sample ID: VAP-3-GW (15-16)

Date Collected: 10/06/15 08:06
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-13

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*78 - 125*		*10/14/15 04:20*	*1*
4-Bromofluorobenzene (Surr)	*87*		*61 - 120*		*10/14/15 04:20*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/14/15 04:20*	*1*
Dibromofluoromethane (Surr)	*105*		*79 - 120*		*10/14/15 04:20*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/09/15 09:01	10/12/15 12:42	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/12/15 12:42	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/09/15 09:01	10/12/15 12:42	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/09/15 09:01	10/12/15 12:42	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/09/15 09:01	10/12/15 12:42	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/09/15 09:01	10/12/15 12:42	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/09/15 09:01	10/12/15 12:42	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/09/15 09:01	10/12/15 12:42	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/09/15 09:01	10/12/15 12:42	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 12:42	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/12/15 12:42	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/09/15 09:01	10/12/15 12:42	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/12/15 12:42	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/09/15 09:01	10/12/15 12:42	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/09/15 09:01	10/12/15 12:42	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/09/15 09:01	10/12/15 12:42	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/09/15 09:01	10/12/15 12:42	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/09/15 09:01	10/12/15 12:42	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/09/15 09:01	10/12/15 12:42	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/09/15 09:01	10/12/15 12:42	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/09/15 09:01	10/12/15 12:42	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/09/15 09:01	10/12/15 12:42	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/09/15 09:01	10/12/15 12:42	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/09/15 09:01	10/12/15 12:42	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/09/15 09:01	10/12/15 12:42	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/09/15 09:01	10/12/15 12:42	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/12/15 12:42	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/09/15 09:01	10/12/15 12:42	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 12:42	1
Benzaldehyde	0.96	U *	0.96	0.28	ug/L		10/09/15 09:01	10/12/15 12:42	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/09/15 09:01	10/12/15 12:42	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/09/15 09:01	10/12/15 12:42	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/09/15 09:01	10/12/15 12:42	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/09/15 09:01	10/12/15 12:42	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/09/15 09:01	10/12/15 12:42	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/09/15 09:01	10/12/15 12:42	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/12/15 12:42	1
Bis(2-ethylhexyl) phthalate	**2.1**	**B**	1.9	1.5	ug/L		10/09/15 09:01	10/12/15 12:42	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/09/15 09:01	10/12/15 12:42	1
Caprolactam	**2.0**	**J B**	4.8	0.36	ug/L		10/09/15 09:01	10/12/15 12:42	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/09/15 09:01	10/12/15 12:42	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/09/15 09:01	10/12/15 12:42	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/09/15 09:01	10/12/15 12:42	1

Client Sample ID: VAP-3-GW (15-16)
Date Collected: 10/06/15 08:06
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-13
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/12/15 12:42	1
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/09/15 09:01	10/12/15 12:42	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/09/15 09:01	10/12/15 12:42	1
Di-n-butyl phthalate	**0.47**	**J B**	0.96	0.38	ug/L		10/09/15 09:01	10/12/15 12:42	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/09/15 09:01	10/12/15 12:42	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/09/15 09:01	10/12/15 12:42	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/09/15 09:01	10/12/15 12:42	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 12:42	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/09/15 09:01	10/12/15 12:42	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/09/15 09:01	10/12/15 12:42	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/09/15 09:01	10/12/15 12:42	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/09/15 09:01	10/12/15 12:42	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/09/15 09:01	10/12/15 12:42	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/09/15 09:01	10/12/15 12:42	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 12:42	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/09/15 09:01	10/12/15 12:42	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 12:42	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/09/15 09:01	10/12/15 12:42	1
Phenol	0.96	U	0.96	0.14	ug/L		10/09/15 09:01	10/12/15 12:42	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/09/15 09:01	10/12/15 12:42	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/09/15 09:01	10/12/15 12:42	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/09/15 09:01	10/12/15 12:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*45*		*29 - 110*	*10/09/15 09:01*	*10/12/15 12:42*	*1*
2-Fluorophenol (Surr)	*42*		*15 - 110*	*10/09/15 09:01*	*10/12/15 12:42*	*1*
2,4,6-Tribromophenol (Surr)	*33*		*21 - 128*	*10/09/15 09:01*	*10/12/15 12:42*	*1*
Nitrobenzene-d5 (Surr)	*48*		*31 - 110*	*10/09/15 09:01*	*10/12/15 12:42*	*1*
Phenol-d5 (Surr)	*34*		*10 - 110*	*10/09/15 09:01*	*10/12/15 12:42*	*1*
Terphenyl-d14 (Surr)	*52*		*31 - 115*	*10/09/15 09:01*	*10/12/15 12:42*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**10**		10	2.9	ug/L		10/09/15 10:45	10/15/15 00:23	1
Barium	**230**		200	1.0	ug/L		10/09/15 10:45	10/15/15 00:23	1
Cadmium	**0.62**	**J**	2.0	0.14	ug/L		10/09/15 10:45	10/15/15 00:23	1
Chromium	**35**	**B**	5.0	0.55	ug/L		10/09/15 10:45	10/15/15 00:23	1
Lead	**11**		3.0	1.9	ug/L		10/09/15 10:45	10/15/15 00:23	1
Selenium	5.0	U	5.0	4.0	ug/L		10/09/15 10:45	10/15/15 00:23	1
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:45	10/15/15 00:23	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/09/15 14:00	10/14/15 09:39	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-3-GW (20-21)
Date Collected: 10/06/15 09:11
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-14
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**3.7**	**J**	10	0.94	ug/L			10/14/15 04:42	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 04:42	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 04:42	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 04:42	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 04:42	1
2-Butanone (MEK)	**0.73**	**J**	10	0.53	ug/L			10/14/15 04:42	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 04:42	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 04:42	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 04:42	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 04:42	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 04:42	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 04:42	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 04:42	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 04:42	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 04:42	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 04:42	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 04:42	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 04:42	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 04:42	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 04:42	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 04:42	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 04:42	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 04:42	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 04:42	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 04:42	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 04:42	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/14/15 04:42	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 04:42	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 04:42	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 04:42	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 04:42	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 04:42	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 04:42	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 04:42	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 04:42	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/14/15 04:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 04:42	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 04:42	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 04:42	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 04:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 04:42	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 04:42	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 04:42	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 04:42	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 04:42	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 04:42	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 04:42	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 04:42	1

Client Sample ID: VAP-3-GW (20-21)

Date Collected: 10/06/15 09:11
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-14

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*78 - 125*		*10/14/15 04:42*	*1*
4-Bromofluorobenzene (Surr)	*90*		*61 - 120*		*10/14/15 04:42*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*10/14/15 04:42*	*1*
Dibromofluoromethane (Surr)	*103*		*79 - 120*		*10/14/15 04:42*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/13/15 08:39	10/14/15 11:38	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/13/15 08:39	10/14/15 11:38	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/13/15 08:39	10/14/15 11:38	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/13/15 08:39	10/14/15 11:38	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/13/15 08:39	10/14/15 11:38	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/13/15 08:39	10/14/15 11:38	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/13/15 08:39	10/14/15 11:38	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/13/15 08:39	10/14/15 11:38	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/13/15 08:39	10/14/15 11:38	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 11:38	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/13/15 08:39	10/14/15 11:38	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/13/15 08:39	10/14/15 11:38	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/13/15 08:39	10/14/15 11:38	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/13/15 08:39	10/14/15 11:38	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/13/15 08:39	10/14/15 11:38	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/13/15 08:39	10/14/15 11:38	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/13/15 08:39	10/14/15 11:38	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/13/15 08:39	10/14/15 11:38	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/13/15 08:39	10/14/15 11:38	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/13/15 08:39	10/14/15 11:38	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/13/15 08:39	10/14/15 11:38	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/13/15 08:39	10/14/15 11:38	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/13/15 08:39	10/14/15 11:38	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/13/15 08:39	10/14/15 11:38	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/13/15 08:39	10/14/15 11:38	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/13/15 08:39	10/14/15 11:38	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/13/15 08:39	10/14/15 11:38	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/13/15 08:39	10/14/15 11:38	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 11:38	1
Benzaldehyde	0.96	U *	0.96	0.28	ug/L		10/13/15 08:39	10/14/15 11:38	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/13/15 08:39	10/14/15 11:38	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/13/15 08:39	10/14/15 11:38	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/13/15 08:39	10/14/15 11:38	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/13/15 08:39	10/14/15 11:38	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/13/15 08:39	10/14/15 11:38	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/13/15 08:39	10/14/15 11:38	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/13/15 08:39	10/14/15 11:38	1
Bis(2-ethylhexyl) phthalate	**1.5**	**J**	1.9	1.5	ug/L		10/13/15 08:39	10/14/15 11:38	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/13/15 08:39	10/14/15 11:38	1
Caprolactam	**95**	**B**	4.8	0.36	ug/L		10/13/15 08:39	10/14/15 11:38	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/13/15 08:39	10/14/15 11:38	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/13/15 08:39	10/14/15 11:38	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/13/15 08:39	10/14/15 11:38	1

Client Sample ID: VAP-3-GW (20-21)

Date Collected: 10/06/15 09:11
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-14
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/13/15 08:39	10/14/15 11:38	1
Diethyl phthalate	**0.41**	**J**	0.96	0.12	ug/L		10/13/15 08:39	10/14/15 11:38	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/13/15 08:39	10/14/15 11:38	1
Di-n-butyl phthalate	**0.68**	**J**	0.96	0.38	ug/L		10/13/15 08:39	10/14/15 11:38	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/13/15 08:39	10/14/15 11:38	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/13/15 08:39	10/14/15 11:38	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/13/15 08:39	10/14/15 11:38	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 11:38	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/13/15 08:39	10/14/15 11:38	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/13/15 08:39	10/14/15 11:38	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/13/15 08:39	10/14/15 11:38	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/13/15 08:39	10/14/15 11:38	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/13/15 08:39	10/14/15 11:38	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/13/15 08:39	10/14/15 11:38	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 11:38	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/13/15 08:39	10/14/15 11:38	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 11:38	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/13/15 08:39	10/14/15 11:38	1
Phenol	0.96	U	0.96	0.14	ug/L		10/13/15 08:39	10/14/15 11:38	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/13/15 08:39	10/14/15 11:38	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/13/15 08:39	10/14/15 11:38	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/13/15 08:39	10/14/15 11:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*46*		*29 - 110*	*10/13/15 08:39*	*10/14/15 11:38*	*1*
2-Fluorophenol (Surr)	*28*		*15 - 110*	*10/13/15 08:39*	*10/14/15 11:38*	*1*
2,4,6-Tribromophenol (Surr)	*48*		*21 - 128*	*10/13/15 08:39*	*10/14/15 11:38*	*1*
Nitrobenzene-d5 (Surr)	*49*		*31 - 110*	*10/13/15 08:39*	*10/14/15 11:38*	*1*
Phenol-d5 (Surr)	*17*		*10 - 110*	*10/13/15 08:39*	*10/14/15 11:38*	*1*
Terphenyl-d14 (Surr)	*38*		*31 - 115*	*10/13/15 08:39*	*10/14/15 11:38*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**13**		10	2.9	ug/L		10/09/15 10:45	10/15/15 00:31	1
Barium	**210**		200	1.0	ug/L		10/09/15 10:45	10/15/15 00:31	1
Cadmium	**0.23**	**J**	2.0	0.14	ug/L		10/09/15 10:45	10/15/15 00:31	1
Chromium	**73**	**B**	5.0	0.55	ug/L		10/09/15 10:45	10/15/15 00:31	1
Lead	**9.8**		3.0	1.9	ug/L		10/09/15 10:45	10/15/15 00:31	1
Selenium	5.0	U	5.0	4.0	ug/L		10/09/15 10:45	10/15/15 00:31	1
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:45	10/15/15 00:31	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/09/15 14:00	10/14/15 09:28	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-3-GW (25-26)
Date Collected: 10/06/15 09:39
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-15
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	4.5	J	10	0.94	ug/L			10/14/15 05:05	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 05:05	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 05:05	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 05:05	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 05:05	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/14/15 05:05	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 05:05	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 05:05	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 05:05	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 05:05	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 05:05	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 05:05	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 05:05	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 05:05	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 05:05	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 05:05	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 05:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 05:05	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 05:05	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 05:05	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 05:05	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 05:05	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 05:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 05:05	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 05:05	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 05:05	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/14/15 05:05	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 05:05	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 05:05	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 05:05	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 05:05	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 05:05	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 05:05	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 05:05	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 05:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/14/15 05:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 05:05	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 05:05	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 05:05	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 05:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 05:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 05:05	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 05:05	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 05:05	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 05:05	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 05:05	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 05:05	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 05:05	1

Client Sample ID: VAP-3-GW (25-26)
Date Collected: 10/06/15 09:39
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-15
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*78 - 125*		*10/14/15 05:05*	*1*
4-Bromofluorobenzene (Surr)	*90*		*61 - 120*		*10/14/15 05:05*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*10/14/15 05:05*	*1*
Dibromofluoromethane (Surr)	*103*		*79 - 120*		*10/14/15 05:05*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/09/15 09:01	10/12/15 16:38	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/12/15 16:38	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/09/15 09:01	10/12/15 16:38	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/09/15 09:01	10/12/15 16:38	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/09/15 09:01	10/12/15 16:38	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/09/15 09:01	10/12/15 16:38	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/09/15 09:01	10/12/15 16:38	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/09/15 09:01	10/12/15 16:38	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/09/15 09:01	10/12/15 16:38	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 16:38	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/12/15 16:38	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/09/15 09:01	10/12/15 16:38	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/12/15 16:38	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/09/15 09:01	10/12/15 16:38	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/09/15 09:01	10/12/15 16:38	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/09/15 09:01	10/12/15 16:38	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/09/15 09:01	10/12/15 16:38	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/09/15 09:01	10/12/15 16:38	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/09/15 09:01	10/12/15 16:38	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/09/15 09:01	10/12/15 16:38	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/09/15 09:01	10/12/15 16:38	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/09/15 09:01	10/12/15 16:38	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/09/15 09:01	10/12/15 16:38	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/09/15 09:01	10/12/15 16:38	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/09/15 09:01	10/12/15 16:38	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/09/15 09:01	10/12/15 16:38	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/12/15 16:38	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/09/15 09:01	10/12/15 16:38	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 16:38	1
Benzaldehyde	0.96	U *	0.96	0.28	ug/L		10/09/15 09:01	10/12/15 16:38	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/09/15 09:01	10/12/15 16:38	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/09/15 09:01	10/12/15 16:38	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/09/15 09:01	10/12/15 16:38	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/09/15 09:01	10/12/15 16:38	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/09/15 09:01	10/12/15 16:38	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/09/15 09:01	10/12/15 16:38	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/12/15 16:38	1
Bis(2-ethylhexyl) phthalate	**1.8**	**J B**	1.9	1.5	ug/L		10/09/15 09:01	10/12/15 16:38	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/09/15 09:01	10/12/15 16:38	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/09/15 09:01	10/12/15 16:38	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/09/15 09:01	10/12/15 16:38	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/09/15 09:01	10/12/15 16:38	1
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/12/15 16:38	1

Client Sample ID: VAP-3-GW (25-26)

Date Collected: 10/06/15 09:39
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-15

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	**0.23**	**J**	0.96	0.12	ug/L		10/09/15 09:01	10/12/15 16:38	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/09/15 09:01	10/12/15 16:38	1
Di-n-butyl phthalate	**0.71**	**J B**	0.96	0.38	ug/L		10/09/15 09:01	10/12/15 16:38	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/09/15 09:01	10/12/15 16:38	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/09/15 09:01	10/12/15 16:38	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/09/15 09:01	10/12/15 16:38	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 16:38	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/09/15 09:01	10/12/15 16:38	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/09/15 09:01	10/12/15 16:38	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/09/15 09:01	10/12/15 16:38	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/09/15 09:01	10/12/15 16:38	1
Isophorone	**0.069**	**J**	0.96	0.040	ug/L		10/09/15 09:01	10/12/15 16:38	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/09/15 09:01	10/12/15 16:38	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 16:38	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/09/15 09:01	10/12/15 16:38	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/12/15 16:38	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/09/15 09:01	10/12/15 16:38	1
Phenol	0.96	U	0.96	0.14	ug/L		10/09/15 09:01	10/12/15 16:38	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/09/15 09:01	10/12/15 16:38	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/09/15 09:01	10/12/15 16:38	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/09/15 09:01	10/12/15 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*17*	*X*	*29 - 110*	*10/09/15 09:01*	*10/12/15 16:38*	*1*
2-Fluorophenol (Surr)	*17*		*15 - 110*	*10/09/15 09:01*	*10/12/15 16:38*	*1*
2,4,6-Tribromophenol (Surr)	*16*	*X*	*21 - 128*	*10/09/15 09:01*	*10/12/15 16:38*	*1*
Nitrobenzene-d5 (Surr)	*18*	*X*	*31 - 110*	*10/09/15 09:01*	*10/12/15 16:38*	*1*
Phenol-d5 (Surr)	*8*	*X*	*10 - 110*	*10/09/15 09:01*	*10/12/15 16:38*	*1*
Terphenyl-d14 (Surr)	*18*	*X*	*31 - 115*	*10/09/15 09:01*	*10/12/15 16:38*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**1000**	**B**	96	7.2	ug/L		10/09/15 09:01	10/13/15 13:53	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*23*	*X*	*29 - 110*	*10/09/15 09:01*	*10/13/15 13:53*	*20*
2-Fluorophenol (Surr)	*19*		*15 - 110*	*10/09/15 09:01*	*10/13/15 13:53*	*20*
2,4,6-Tribromophenol (Surr)	*10*	*X*	*21 - 128*	*10/09/15 09:01*	*10/13/15 13:53*	*20*
Nitrobenzene-d5 (Surr)	*19*	*X*	*31 - 110*	*10/09/15 09:01*	*10/13/15 13:53*	*20*
Phenol-d5 (Surr)	*17*		*10 - 110*	*10/09/15 09:01*	*10/13/15 13:53*	*20*
Terphenyl-d14 (Surr)	*25*	*X*	*31 - 115*	*10/09/15 09:01*	*10/13/15 13:53*	*20*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**16**		10	2.9	ug/L		10/09/15 10:45	10/15/15 00:35	1
Barium	**120**	**J**	200	1.0	ug/L		10/09/15 10:45	10/15/15 00:35	1
Cadmium	**0.41**	**J**	2.0	0.14	ug/L		10/09/15 10:45	10/15/15 00:35	1
Chromium	**29**	**B**	5.0	0.55	ug/L		10/09/15 10:45	10/15/15 00:35	1
Lead	**13**		3.0	1.9	ug/L		10/09/15 10:45	10/15/15 00:35	1
Selenium	5.0	U	5.0	4.0	ug/L		10/09/15 10:45	10/15/15 00:35	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-3-GW (25-26)
Date Collected: 10/06/15 09:39
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-15
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:45	10/15/15 00:35	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/09/15 14:00	10/14/15 09:26	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-3-GW (30-31)
Date Collected: 10/06/15 10:10
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-16
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**5.2**	**J**	10	0.94	ug/L			10/14/15 05:27	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 05:27	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 05:27	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 05:27	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 05:27	1
2-Butanone (MEK)	**1.3**	**J**	10	0.53	ug/L			10/14/15 05:27	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 05:27	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 05:27	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 05:27	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 05:27	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 05:27	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 05:27	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 05:27	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 05:27	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 05:27	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 05:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 05:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 05:27	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 05:27	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 05:27	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 05:27	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 05:27	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 05:27	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 05:27	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 05:27	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 05:27	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/14/15 05:27	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 05:27	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 05:27	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 05:27	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 05:27	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 05:27	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 05:27	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 05:27	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 05:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/14/15 05:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 05:27	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 05:27	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 05:27	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 05:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 05:27	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 05:27	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 05:27	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 05:27	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 05:27	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 05:27	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 05:27	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 05:27	1

Client Sample ID: VAP-3-GW (30-31)

Date Collected: 10/06/15 10:10
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-16

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*78 - 125*		*10/14/15 05:27*	*1*
4-Bromofluorobenzene (Surr)	*92*		*61 - 120*		*10/14/15 05:27*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*10/14/15 05:27*	*1*
Dibromofluoromethane (Surr)	*103*		*79 - 120*		*10/14/15 05:27*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/13/15 08:39	10/14/15 12:25	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/13/15 08:39	10/14/15 12:25	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/13/15 08:39	10/14/15 12:25	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/13/15 08:39	10/14/15 12:25	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/13/15 08:39	10/14/15 12:25	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/13/15 08:39	10/14/15 12:25	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/13/15 08:39	10/14/15 12:25	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/13/15 08:39	10/14/15 12:25	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/13/15 08:39	10/14/15 12:25	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 12:25	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/13/15 08:39	10/14/15 12:25	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/13/15 08:39	10/14/15 12:25	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/13/15 08:39	10/14/15 12:25	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/13/15 08:39	10/14/15 12:25	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/13/15 08:39	10/14/15 12:25	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/13/15 08:39	10/14/15 12:25	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/13/15 08:39	10/14/15 12:25	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/13/15 08:39	10/14/15 12:25	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/13/15 08:39	10/14/15 12:25	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/13/15 08:39	10/14/15 12:25	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/13/15 08:39	10/14/15 12:25	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/13/15 08:39	10/14/15 12:25	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/13/15 08:39	10/14/15 12:25	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/13/15 08:39	10/14/15 12:25	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/13/15 08:39	10/14/15 12:25	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/13/15 08:39	10/14/15 12:25	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/13/15 08:39	10/14/15 12:25	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/13/15 08:39	10/14/15 12:25	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 12:25	1
Benzaldehyde	0.96	U *	0.96	0.28	ug/L		10/13/15 08:39	10/14/15 12:25	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/13/15 08:39	10/14/15 12:25	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/13/15 08:39	10/14/15 12:25	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/13/15 08:39	10/14/15 12:25	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/13/15 08:39	10/14/15 12:25	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/13/15 08:39	10/14/15 12:25	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/13/15 08:39	10/14/15 12:25	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/13/15 08:39	10/14/15 12:25	1
Bis(2-ethylhexyl) phthalate	**1.5**	**J**	1.9	1.5	ug/L		10/13/15 08:39	10/14/15 12:25	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/13/15 08:39	10/14/15 12:25	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/13/15 08:39	10/14/15 12:25	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/13/15 08:39	10/14/15 12:25	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/13/15 08:39	10/14/15 12:25	1
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/13/15 08:39	10/14/15 12:25	1

Client Sample ID: VAP-3-GW (30-31)

Date Collected: 10/06/15 10:10
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-16

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	**0.57**	**J**	0.96	0.12	ug/L		10/13/15 08:39	10/14/15 12:25	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/13/15 08:39	10/14/15 12:25	1
Di-n-butyl phthalate	**1.3**		0.96	0.38	ug/L		10/13/15 08:39	10/14/15 12:25	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/13/15 08:39	10/14/15 12:25	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/13/15 08:39	10/14/15 12:25	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/13/15 08:39	10/14/15 12:25	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 12:25	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/13/15 08:39	10/14/15 12:25	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/13/15 08:39	10/14/15 12:25	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/13/15 08:39	10/14/15 12:25	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/13/15 08:39	10/14/15 12:25	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/13/15 08:39	10/14/15 12:25	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/13/15 08:39	10/14/15 12:25	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 12:25	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/13/15 08:39	10/14/15 12:25	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/13/15 08:39	10/14/15 12:25	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/13/15 08:39	10/14/15 12:25	1
Phenol	0.96	U	0.96	0.14	ug/L		10/13/15 08:39	10/14/15 12:25	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/13/15 08:39	10/14/15 12:25	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/13/15 08:39	10/14/15 12:25	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/13/15 08:39	10/14/15 12:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*53*		*29 - 110*	*10/13/15 08:39*	*10/14/15 12:25*	*1*
2-Fluorophenol (Surr)	*26*		*15 - 110*	*10/13/15 08:39*	*10/14/15 12:25*	*1*
2,4,6-Tribromophenol (Surr)	*49*		*21 - 128*	*10/13/15 08:39*	*10/14/15 12:25*	*1*
Nitrobenzene-d5 (Surr)	*52*		*31 - 110*	*10/13/15 08:39*	*10/14/15 12:25*	*1*
Phenol-d5 (Surr)	*17*		*10 - 110*	*10/13/15 08:39*	*10/14/15 12:25*	*1*
Terphenyl-d14 (Surr)	*42*		*31 - 115*	*10/13/15 08:39*	*10/14/15 12:25*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**190**	**B**	24	1.8	ug/L		10/13/15 08:39	10/14/15 19:03	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*51*		*29 - 110*	*10/13/15 08:39*	*10/14/15 19:03*	*5*
2-Fluorophenol (Surr)	*24*		*15 - 110*	*10/13/15 08:39*	*10/14/15 19:03*	*5*
2,4,6-Tribromophenol (Surr)	*39*		*21 - 128*	*10/13/15 08:39*	*10/14/15 19:03*	*5*
Nitrobenzene-d5 (Surr)	*50*		*31 - 110*	*10/13/15 08:39*	*10/14/15 19:03*	*5*
Phenol-d5 (Surr)	*15*		*10 - 110*	*10/13/15 08:39*	*10/14/15 19:03*	*5*
Terphenyl-d14 (Surr)	*47*		*31 - 115*	*10/13/15 08:39*	*10/14/15 19:03*	*5*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**27**		10	2.9	ug/L		10/09/15 10:45	10/15/15 00:47	1
Barium	**2300**		200	1.0	ug/L		10/09/15 10:45	10/15/15 00:47	1
Cadmium	**1.3**	**J**	2.0	0.14	ug/L		10/09/15 10:45	10/15/15 00:47	1
Chromium	**870**	**B**	5.0	0.55	ug/L		10/09/15 10:45	10/15/15 00:47	1
Lead	**260**		3.0	1.9	ug/L		10/09/15 10:45	10/15/15 00:47	1
Selenium	**19**		5.0	4.0	ug/L		10/09/15 10:45	10/15/15 00:47	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-3-GW (30-31)
Date Collected: 10/06/15 10:10
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-16
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U L	5.0	0.92	ug/L		10/09/15 10:45	10/15/15 00:47	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.0		0.20	0.090	ug/L		10/09/15 14:00	10/14/15 09:19	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-3-GW (35-36)
Date Collected: 10/06/15 10:58
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-17
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**4.6**	**J**	10	0.94	ug/L			10/14/15 05:49	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 05:49	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 05:49	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 05:49	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 05:49	1
2-Butanone (MEK)	**0.67**	**J**	10	0.53	ug/L			10/14/15 05:49	1
Carbon disulfide	**0.38**	**J**	1.0	0.38	ug/L			10/14/15 05:49	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 05:49	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 05:49	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 05:49	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 05:49	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 05:49	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 05:49	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 05:49	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 05:49	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 05:49	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 05:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 05:49	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 05:49	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 05:49	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 05:49	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 05:49	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 05:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 05:49	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 05:49	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 05:49	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/14/15 05:49	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 05:49	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 05:49	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 05:49	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 05:49	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 05:49	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 05:49	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 05:49	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 05:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/14/15 05:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 05:49	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 05:49	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 05:49	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 05:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 05:49	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 05:49	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 05:49	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 05:49	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 05:49	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 05:49	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 05:49	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 05:49	1

Client Sample ID: VAP-3-GW (35-36)

Lab Sample ID: 240-56328-17

Date Collected: 10/06/15 10:58

Matrix: Water

Date Received: 10/08/15 09:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*78 - 125*		*10/14/15 05:49*	*1*
4-Bromofluorobenzene (Surr)	*96*		*61 - 120*		*10/14/15 05:49*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/14/15 05:49*	*1*
Dibromofluoromethane (Surr)	*105*		*79 - 120*		*10/14/15 05:49*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 17:25	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/09/15 09:01	10/12/15 17:25	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/09/15 09:01	10/12/15 17:25	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/09/15 09:01	10/12/15 17:25	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/09/15 09:01	10/12/15 17:25	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/09/15 09:01	10/12/15 17:25	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/09/15 09:01	10/12/15 17:25	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/09/15 09:01	10/12/15 17:25	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/09/15 09:01	10/12/15 17:25	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 17:25	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/09/15 09:01	10/12/15 17:25	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/09/15 09:01	10/12/15 17:25	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/09/15 09:01	10/12/15 17:25	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/09/15 09:01	10/12/15 17:25	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/09/15 09:01	10/12/15 17:25	1
3,3'-Dichlorobenzidine	4.6	U	4.6	0.33	ug/L		10/09/15 09:01	10/12/15 17:25	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/09/15 09:01	10/12/15 17:25	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/09/15 09:01	10/12/15 17:25	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/09/15 09:01	10/12/15 17:25	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/09/15 09:01	10/12/15 17:25	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/09/15 09:01	10/12/15 17:25	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/09/15 09:01	10/12/15 17:25	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/09/15 09:01	10/12/15 17:25	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/09/15 09:01	10/12/15 17:25	1
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/09/15 09:01	10/12/15 17:25	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/09/15 09:01	10/12/15 17:25	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/09/15 09:01	10/12/15 17:25	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/09/15 09:01	10/12/15 17:25	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 17:25	1
Benzaldehyde	0.93	U *	0.93	0.27	ug/L		10/09/15 09:01	10/12/15 17:25	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/09/15 09:01	10/12/15 17:25	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/09/15 09:01	10/12/15 17:25	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/09/15 09:01	10/12/15 17:25	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/09/15 09:01	10/12/15 17:25	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/09/15 09:01	10/12/15 17:25	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/09/15 09:01	10/12/15 17:25	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/09/15 09:01	10/12/15 17:25	1
Bis(2-ethylhexyl) phthalate	**2.1**	**B**	1.9	1.4	ug/L		10/09/15 09:01	10/12/15 17:25	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/09/15 09:01	10/12/15 17:25	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/09/15 09:01	10/12/15 17:25	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/09/15 09:01	10/12/15 17:25	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/09/15 09:01	10/12/15 17:25	1
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/09/15 09:01	10/12/15 17:25	1

Client Sample ID: VAP-3-GW (35-36)
Date Collected: 10/06/15 10:58
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-17
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	0.93	U	0.93	0.12	ug/L		10/09/15 09:01	10/12/15 17:25	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/09/15 09:01	10/12/15 17:25	1
Di-n-butyl phthalate	**0.90**	**J B**	0.93	0.37	ug/L		10/09/15 09:01	10/12/15 17:25	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/09/15 09:01	10/12/15 17:25	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/09/15 09:01	10/12/15 17:25	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/09/15 09:01	10/12/15 17:25	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 17:25	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/09/15 09:01	10/12/15 17:25	1
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/09/15 09:01	10/12/15 17:25	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/09/15 09:01	10/12/15 17:25	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/09/15 09:01	10/12/15 17:25	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/09/15 09:01	10/12/15 17:25	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/09/15 09:01	10/12/15 17:25	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 17:25	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/09/15 09:01	10/12/15 17:25	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/09/15 09:01	10/12/15 17:25	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/09/15 09:01	10/12/15 17:25	1
Phenol	0.93	U	0.93	0.14	ug/L		10/09/15 09:01	10/12/15 17:25	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/09/15 09:01	10/12/15 17:25	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/09/15 09:01	10/12/15 17:25	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/09/15 09:01	10/12/15 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*33*		*29 - 110*	*10/09/15 09:01*	*10/12/15 17:25*	*1*
2-Fluorophenol (Surr)	*36*		*15 - 110*	*10/09/15 09:01*	*10/12/15 17:25*	*1*
2,4,6-Tribromophenol (Surr)	*28*		*21 - 128*	*10/09/15 09:01*	*10/12/15 17:25*	*1*
Nitrobenzene-d5 (Surr)	*34*		*31 - 110*	*10/09/15 09:01*	*10/12/15 17:25*	*1*
Phenol-d5 (Surr)	*14*		*10 - 110*	*10/09/15 09:01*	*10/12/15 17:25*	*1*
Terphenyl-d14 (Surr)	*32*		*31 - 115*	*10/09/15 09:01*	*10/12/15 17:25*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**1500**	**B**	120	8.6	ug/L		10/09/15 09:01	10/13/15 12:20	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*29 - 110*	*10/09/15 09:01*	*10/13/15 12:20*	*25*
2-Fluorophenol (Surr)	*62*		*15 - 110*	*10/09/15 09:01*	*10/13/15 12:20*	*25*
2,4,6-Tribromophenol (Surr)	*35*		*21 - 128*	*10/09/15 09:01*	*10/13/15 12:20*	*25*
Nitrobenzene-d5 (Surr)	*58*		*31 - 110*	*10/09/15 09:01*	*10/13/15 12:20*	*25*
Phenol-d5 (Surr)	*54*		*10 - 110*	*10/09/15 09:01*	*10/13/15 12:20*	*25*
Terphenyl-d14 (Surr)	*78*		*31 - 115*	*10/09/15 09:01*	*10/13/15 12:20*	*25*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**8.6**	**J**	10	2.9	ug/L		10/09/15 10:45	10/15/15 00:51	1
Barium	**380**		200	1.0	ug/L		10/09/15 10:45	10/15/15 00:51	1
Cadmium	**0.31**	**J**	2.0	0.14	ug/L		10/09/15 10:45	10/15/15 00:51	1
Chromium	**140**	**B**	5.0	0.55	ug/L		10/09/15 10:45	10/15/15 00:51	1
Lead	**35**		3.0	1.9	ug/L		10/09/15 10:45	10/15/15 00:51	1
Selenium	5.0	U	5.0	4.0	ug/L		10/09/15 10:45	10/15/15 00:51	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-3-GW (35-36)
Date Collected: 10/06/15 10:58
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-17
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:45	10/15/15 00:51	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/09/15 14:00	10/14/15 09:17	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-3-GW (40-41)
Date Collected: 10/06/15 11:30
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-18
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**6.1**	**J**	10	0.94	ug/L			10/14/15 06:11	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 06:11	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 06:11	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 06:11	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 06:11	1
2-Butanone (MEK)	**1.4**	**J**	10	0.53	ug/L			10/14/15 06:11	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 06:11	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 06:11	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 06:11	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 06:11	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 06:11	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 06:11	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 06:11	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 06:11	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 06:11	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 06:11	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 06:11	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 06:11	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 06:11	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 06:11	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 06:11	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 06:11	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 06:11	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 06:11	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 06:11	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 06:11	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/14/15 06:11	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 06:11	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 06:11	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 06:11	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 06:11	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 06:11	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 06:11	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 06:11	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 06:11	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/14/15 06:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 06:11	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 06:11	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 06:11	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 06:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 06:11	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 06:11	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 06:11	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 06:11	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 06:11	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 06:11	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 06:11	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 06:11	1

Client Sample ID: VAP-3-GW (40-41)

Date Collected: 10/06/15 11:30
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-18

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*78 - 125*		*10/14/15 06:11*	*1*
4-Bromofluorobenzene (Surr)	*92*		*61 - 120*		*10/14/15 06:11*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/14/15 06:11*	*1*
Dibromofluoromethane (Surr)	*100*		*79 - 120*		*10/14/15 06:11*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 17:48	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/09/15 09:01	10/12/15 17:48	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/09/15 09:01	10/12/15 17:48	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/09/15 09:01	10/12/15 17:48	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/09/15 09:01	10/12/15 17:48	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/09/15 09:01	10/12/15 17:48	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/09/15 09:01	10/12/15 17:48	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/09/15 09:01	10/12/15 17:48	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/09/15 09:01	10/12/15 17:48	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 17:48	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/09/15 09:01	10/12/15 17:48	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/09/15 09:01	10/12/15 17:48	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/09/15 09:01	10/12/15 17:48	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/09/15 09:01	10/12/15 17:48	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/09/15 09:01	10/12/15 17:48	1
3,3'-Dichlorobenzidine	4.6	U	4.6	0.33	ug/L		10/09/15 09:01	10/12/15 17:48	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/09/15 09:01	10/12/15 17:48	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/09/15 09:01	10/12/15 17:48	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/09/15 09:01	10/12/15 17:48	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/09/15 09:01	10/12/15 17:48	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/09/15 09:01	10/12/15 17:48	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/09/15 09:01	10/12/15 17:48	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/09/15 09:01	10/12/15 17:48	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/09/15 09:01	10/12/15 17:48	1
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/09/15 09:01	10/12/15 17:48	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/09/15 09:01	10/12/15 17:48	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/09/15 09:01	10/12/15 17:48	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/09/15 09:01	10/12/15 17:48	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 17:48	1
Benzaldehyde	0.93	U *	0.93	0.27	ug/L		10/09/15 09:01	10/12/15 17:48	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/09/15 09:01	10/12/15 17:48	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/09/15 09:01	10/12/15 17:48	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/09/15 09:01	10/12/15 17:48	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/09/15 09:01	10/12/15 17:48	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/09/15 09:01	10/12/15 17:48	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/09/15 09:01	10/12/15 17:48	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/09/15 09:01	10/12/15 17:48	1
Bis(2-ethylhexyl) phthalate	**2.1**	**B**	1.9	1.4	ug/L		10/09/15 09:01	10/12/15 17:48	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/09/15 09:01	10/12/15 17:48	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/09/15 09:01	10/12/15 17:48	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/09/15 09:01	10/12/15 17:48	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/09/15 09:01	10/12/15 17:48	1
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/09/15 09:01	10/12/15 17:48	1

Client Sample ID: VAP-3-GW (40-41)

Date Collected: 10/06/15 11:30
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-18

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	0.93	U	0.93	0.12	ug/L		10/09/15 09:01	10/12/15 17:48	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/09/15 09:01	10/12/15 17:48	1
Di-n-butyl phthalate	**0.66**	**J B**	0.93	0.37	ug/L		10/09/15 09:01	10/12/15 17:48	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/09/15 09:01	10/12/15 17:48	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/09/15 09:01	10/12/15 17:48	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/09/15 09:01	10/12/15 17:48	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 17:48	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/09/15 09:01	10/12/15 17:48	1
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/09/15 09:01	10/12/15 17:48	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/09/15 09:01	10/12/15 17:48	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/09/15 09:01	10/12/15 17:48	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/09/15 09:01	10/12/15 17:48	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/09/15 09:01	10/12/15 17:48	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 17:48	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/09/15 09:01	10/12/15 17:48	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/09/15 09:01	10/12/15 17:48	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/09/15 09:01	10/12/15 17:48	1
Phenol	0.93	U	0.93	0.14	ug/L		10/09/15 09:01	10/12/15 17:48	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/09/15 09:01	10/12/15 17:48	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/09/15 09:01	10/12/15 17:48	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/09/15 09:01	10/12/15 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*49*		*29 - 110*	*10/09/15 09:01*	*10/12/15 17:48*	*1*
2-Fluorophenol (Surr)	*50*		*15 - 110*	*10/09/15 09:01*	*10/12/15 17:48*	*1*
2,4,6-Tribromophenol (Surr)	*36*		*21 - 128*	*10/09/15 09:01*	*10/12/15 17:48*	*1*
Nitrobenzene-d5 (Surr)	*48*		*31 - 110*	*10/09/15 09:01*	*10/12/15 17:48*	*1*
Phenol-d5 (Surr)	*40*		*10 - 110*	*10/09/15 09:01*	*10/12/15 17:48*	*1*
Terphenyl-d14 (Surr)	*42*		*31 - 115*	*10/09/15 09:01*	*10/12/15 17:48*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**800**	**B**	58	4.3	ug/L		10/09/15 09:01	10/13/15 12:43	12.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*73*		*29 - 110*	*10/09/15 09:01*	*10/13/15 12:43*	*12.5*
2-Fluorophenol (Surr)	*65*		*15 - 110*	*10/09/15 09:01*	*10/13/15 12:43*	*12.5*
2,4,6-Tribromophenol (Surr)	*29*		*21 - 128*	*10/09/15 09:01*	*10/13/15 12:43*	*12.5*
Nitrobenzene-d5 (Surr)	*60*		*31 - 110*	*10/09/15 09:01*	*10/13/15 12:43*	*12.5*
Phenol-d5 (Surr)	*55*		*10 - 110*	*10/09/15 09:01*	*10/13/15 12:43*	*12.5*
Terphenyl-d14 (Surr)	*62*		*31 - 115*	*10/09/15 09:01*	*10/13/15 12:43*	*12.5*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**17**		10	2.9	ug/L		10/09/15 10:45	10/15/15 00:55	1
Barium	**1100**		200	1.0	ug/L		10/09/15 10:45	10/15/15 00:55	1
Cadmium	**1.2**	**J**	2.0	0.14	ug/L		10/09/15 10:45	10/15/15 00:55	1
Chromium	**470**	**B**	5.0	0.55	ug/L		10/09/15 10:45	10/15/15 00:55	1
Lead	**150**		3.0	1.9	ug/L		10/09/15 10:45	10/15/15 00:55	1
Selenium	**9.5**		5.0	4.0	ug/L		10/09/15 10:45	10/15/15 00:55	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-3-GW (40-41)
Date Collected: 10/06/15 11:30
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-18
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:45	10/15/15 00:55	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17	J	0.20	0.090	ug/L		10/09/15 14:00	10/14/15 09:15	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-3-GW (45-46)
Date Collected: 10/06/15 12:04
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-19
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**2.8**	**J**	10	0.94	ug/L			10/14/15 06:34	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 06:34	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 06:34	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 06:34	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 06:34	1
2-Butanone (MEK)	**0.81**	**J**	10	0.53	ug/L			10/14/15 06:34	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 06:34	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 06:34	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 06:34	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 06:34	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 06:34	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 06:34	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 06:34	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 06:34	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 06:34	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 06:34	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 06:34	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 06:34	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 06:34	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 06:34	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 06:34	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 06:34	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 06:34	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 06:34	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 06:34	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 06:34	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/14/15 06:34	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 06:34	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 06:34	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 06:34	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 06:34	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 06:34	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 06:34	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 06:34	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 06:34	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/14/15 06:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 06:34	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 06:34	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 06:34	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 06:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 06:34	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 06:34	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 06:34	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 06:34	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 06:34	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 06:34	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 06:34	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 06:34	1

Client Sample ID: VAP-3-GW (45-46)

Lab Sample ID: 240-56328-19

Date Collected: 10/06/15 12:04

Matrix: Water

Date Received: 10/08/15 09:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*103*		*78 - 125*		*10/14/15 06:34*	*1*
4-Bromofluorobenzene (Surr)	*90*		*61 - 120*		*10/14/15 06:34*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/14/15 06:34*	*1*
Dibromofluoromethane (Surr)	*102*		*79 - 120*		*10/14/15 06:34*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 18:12	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/09/15 09:01	10/12/15 18:12	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/09/15 09:01	10/12/15 18:12	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/09/15 09:01	10/12/15 18:12	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/09/15 09:01	10/12/15 18:12	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/09/15 09:01	10/12/15 18:12	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/09/15 09:01	10/12/15 18:12	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/09/15 09:01	10/12/15 18:12	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/09/15 09:01	10/12/15 18:12	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 18:12	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/09/15 09:01	10/12/15 18:12	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/09/15 09:01	10/12/15 18:12	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/09/15 09:01	10/12/15 18:12	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/09/15 09:01	10/12/15 18:12	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/09/15 09:01	10/12/15 18:12	1
3,3'-Dichlorobenzidine	4.6	U	4.6	0.33	ug/L		10/09/15 09:01	10/12/15 18:12	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/09/15 09:01	10/12/15 18:12	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/09/15 09:01	10/12/15 18:12	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/09/15 09:01	10/12/15 18:12	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/09/15 09:01	10/12/15 18:12	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/09/15 09:01	10/12/15 18:12	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/09/15 09:01	10/12/15 18:12	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/09/15 09:01	10/12/15 18:12	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/09/15 09:01	10/12/15 18:12	1
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/09/15 09:01	10/12/15 18:12	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/09/15 09:01	10/12/15 18:12	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/09/15 09:01	10/12/15 18:12	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/09/15 09:01	10/12/15 18:12	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 18:12	1
Benzaldehyde	0.93	U *	0.93	0.27	ug/L		10/09/15 09:01	10/12/15 18:12	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/09/15 09:01	10/12/15 18:12	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/09/15 09:01	10/12/15 18:12	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/09/15 09:01	10/12/15 18:12	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/09/15 09:01	10/12/15 18:12	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/09/15 09:01	10/12/15 18:12	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/09/15 09:01	10/12/15 18:12	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/09/15 09:01	10/12/15 18:12	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	1.4	ug/L		10/09/15 09:01	10/12/15 18:12	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/09/15 09:01	10/12/15 18:12	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/09/15 09:01	10/12/15 18:12	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/09/15 09:01	10/12/15 18:12	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/09/15 09:01	10/12/15 18:12	1
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/09/15 09:01	10/12/15 18:12	1

Client Sample ID: VAP-3-GW (45-46)
Date Collected: 10/06/15 12:04
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-19
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	0.93	U	0.93	0.12	ug/L		10/09/15 09:01	10/12/15 18:12	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/09/15 09:01	10/12/15 18:12	1
Di-n-butyl phthalate	**0.56**	**J B**	0.93	0.37	ug/L		10/09/15 09:01	10/12/15 18:12	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/09/15 09:01	10/12/15 18:12	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/09/15 09:01	10/12/15 18:12	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/09/15 09:01	10/12/15 18:12	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 18:12	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/09/15 09:01	10/12/15 18:12	1
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/09/15 09:01	10/12/15 18:12	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/09/15 09:01	10/12/15 18:12	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/09/15 09:01	10/12/15 18:12	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/09/15 09:01	10/12/15 18:12	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/09/15 09:01	10/12/15 18:12	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/12/15 18:12	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/09/15 09:01	10/12/15 18:12	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/09/15 09:01	10/12/15 18:12	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/09/15 09:01	10/12/15 18:12	1
Phenol	0.93	U	0.93	0.14	ug/L		10/09/15 09:01	10/12/15 18:12	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/09/15 09:01	10/12/15 18:12	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/09/15 09:01	10/12/15 18:12	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/09/15 09:01	10/12/15 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*41*		*29 - 110*	*10/09/15 09:01*	*10/12/15 18:12*	*1*
2-Fluorophenol (Surr)	*42*		*15 - 110*	*10/09/15 09:01*	*10/12/15 18:12*	*1*
2,4,6-Tribromophenol (Surr)	*34*		*21 - 128*	*10/09/15 09:01*	*10/12/15 18:12*	*1*
Nitrobenzene-d5 (Surr)	*43*		*31 - 110*	*10/09/15 09:01*	*10/12/15 18:12*	*1*
Phenol-d5 (Surr)	*34*		*10 - 110*	*10/09/15 09:01*	*10/12/15 18:12*	*1*
Terphenyl-d14 (Surr)	*36*		*31 - 115*	*10/09/15 09:01*	*10/12/15 18:12*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**330**	**B**	31	2.3	ug/L		10/09/15 09:01	10/13/15 13:07	6.6666

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*47*		*29 - 110*	*10/09/15 09:01*	*10/13/15 13:07*	*6.6666*
2-Fluorophenol (Surr)	*46*		*15 - 110*	*10/09/15 09:01*	*10/13/15 13:07*	*6.6666*
2,4,6-Tribromophenol (Surr)	*24*		*21 - 128*	*10/09/15 09:01*	*10/13/15 13:07*	*6.6666*
Nitrobenzene-d5 (Surr)	*46*		*31 - 110*	*10/09/15 09:01*	*10/13/15 13:07*	*6.6666*
Phenol-d5 (Surr)	*39*		*10 - 110*	*10/09/15 09:01*	*10/13/15 13:07*	*6.6666*
Terphenyl-d14 (Surr)	*38*		*31 - 115*	*10/09/15 09:01*	*10/13/15 13:07*	*6.6666*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**8.1**	**J**	10	2.9	ug/L		10/09/15 10:45	10/15/15 00:59	1
Barium	**410**		200	1.0	ug/L		10/09/15 10:45	10/15/15 00:59	1
Cadmium	**2.7**		2.0	0.14	ug/L		10/09/15 10:45	10/15/15 00:59	1
Chromium	**140**	**B**	5.0	0.55	ug/L		10/09/15 10:45	10/15/15 00:59	1
Lead	**39**		3.0	1.9	ug/L		10/09/15 10:45	10/15/15 00:59	1
Selenium	**21**		5.0	4.0	ug/L		10/09/15 10:45	10/15/15 00:59	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-3-GW (45-46)
Date Collected: 10/06/15 12:04
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-19
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:45	10/15/15 00:59	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.095	J	0.20	0.090	ug/L		10/09/15 14:00	10/14/15 09:41	1

Client Sample ID: VAP-3-GW (49-50)
Date Collected: 10/06/15 12:55
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-20
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**4.5**	**J**	10	0.94	ug/L			10/14/15 06:56	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 06:56	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 06:56	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 06:56	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 06:56	1
2-Butanone (MEK)	**0.83**	**J**	10	0.53	ug/L			10/14/15 06:56	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 06:56	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 06:56	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 06:56	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 06:56	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 06:56	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 06:56	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 06:56	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 06:56	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 06:56	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 06:56	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 06:56	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 06:56	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 06:56	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 06:56	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 06:56	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 06:56	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 06:56	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 06:56	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 06:56	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 06:56	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/14/15 06:56	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 06:56	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 06:56	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 06:56	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 06:56	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 06:56	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 06:56	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 06:56	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 06:56	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/14/15 06:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 06:56	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 06:56	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 06:56	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 06:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 06:56	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 06:56	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 06:56	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 06:56	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 06:56	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 06:56	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 06:56	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 06:56	1

Client Sample ID: VAP-3-GW (49-50)

Date Collected: 10/06/15 12:55
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-20

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*78 - 125*		*10/14/15 06:56*	*1*
4-Bromofluorobenzene (Surr)	*90*		*61 - 120*		*10/14/15 06:56*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/14/15 06:56*	*1*
Dibromofluoromethane (Surr)	*103*		*79 - 120*		*10/14/15 06:56*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/13/15 14:40	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/09/15 09:01	10/13/15 14:40	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/09/15 09:01	10/13/15 14:40	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/09/15 09:01	10/13/15 14:40	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/09/15 09:01	10/13/15 14:40	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/09/15 09:01	10/13/15 14:40	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/09/15 09:01	10/13/15 14:40	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/09/15 09:01	10/13/15 14:40	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/09/15 09:01	10/13/15 14:40	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/13/15 14:40	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/09/15 09:01	10/13/15 14:40	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/09/15 09:01	10/13/15 14:40	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/09/15 09:01	10/13/15 14:40	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/09/15 09:01	10/13/15 14:40	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/09/15 09:01	10/13/15 14:40	1
3,3'-Dichlorobenzidine	4.6	U	4.6	0.33	ug/L		10/09/15 09:01	10/13/15 14:40	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/09/15 09:01	10/13/15 14:40	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/09/15 09:01	10/13/15 14:40	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/09/15 09:01	10/13/15 14:40	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/09/15 09:01	10/13/15 14:40	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/09/15 09:01	10/13/15 14:40	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/09/15 09:01	10/13/15 14:40	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/09/15 09:01	10/13/15 14:40	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/09/15 09:01	10/13/15 14:40	1
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/09/15 09:01	10/13/15 14:40	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/09/15 09:01	10/13/15 14:40	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/09/15 09:01	10/13/15 14:40	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/09/15 09:01	10/13/15 14:40	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/13/15 14:40	1
Benzaldehyde	0.93	U *	0.93	0.27	ug/L		10/09/15 09:01	10/13/15 14:40	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/09/15 09:01	10/13/15 14:40	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/09/15 09:01	10/13/15 14:40	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/09/15 09:01	10/13/15 14:40	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/09/15 09:01	10/13/15 14:40	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/09/15 09:01	10/13/15 14:40	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/09/15 09:01	10/13/15 14:40	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/09/15 09:01	10/13/15 14:40	1
Bis(2-ethylhexyl) phthalate	**1.6**	**J B**	1.9	1.4	ug/L		10/09/15 09:01	10/13/15 14:40	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/09/15 09:01	10/13/15 14:40	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/09/15 09:01	10/13/15 14:40	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/09/15 09:01	10/13/15 14:40	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/09/15 09:01	10/13/15 14:40	1
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/09/15 09:01	10/13/15 14:40	1

Client Sample ID: VAP-3-GW (49-50)
Date Collected: 10/06/15 12:55
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-20
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	0.93	U	0.93	0.12	ug/L		10/09/15 09:01	10/13/15 14:40	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/09/15 09:01	10/13/15 14:40	1
Di-n-butyl phthalate	**1.1**	**B**	0.93	0.37	ug/L		10/09/15 09:01	10/13/15 14:40	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/09/15 09:01	10/13/15 14:40	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/09/15 09:01	10/13/15 14:40	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/09/15 09:01	10/13/15 14:40	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/13/15 14:40	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/09/15 09:01	10/13/15 14:40	1
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/09/15 09:01	10/13/15 14:40	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/09/15 09:01	10/13/15 14:40	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/09/15 09:01	10/13/15 14:40	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/09/15 09:01	10/13/15 14:40	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/09/15 09:01	10/13/15 14:40	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/09/15 09:01	10/13/15 14:40	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/09/15 09:01	10/13/15 14:40	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/09/15 09:01	10/13/15 14:40	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/09/15 09:01	10/13/15 14:40	1
Phenol	0.93	U	0.93	0.14	ug/L		10/09/15 09:01	10/13/15 14:40	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/09/15 09:01	10/13/15 14:40	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/09/15 09:01	10/13/15 14:40	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/09/15 09:01	10/13/15 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*41*		*29 - 110*	*10/09/15 09:01*	*10/13/15 14:40*	*1*
2-Fluorophenol (Surr)	*51*		*15 - 110*	*10/09/15 09:01*	*10/13/15 14:40*	*1*
2,4,6-Tribromophenol (Surr)	*30*		*21 - 128*	*10/09/15 09:01*	*10/13/15 14:40*	*1*
Nitrobenzene-d5 (Surr)	*46*		*31 - 110*	*10/09/15 09:01*	*10/13/15 14:40*	*1*
Phenol-d5 (Surr)	*21*		*10 - 110*	*10/09/15 09:01*	*10/13/15 14:40*	*1*
Terphenyl-d14 (Surr)	*40*		*31 - 115*	*10/09/15 09:01*	*10/13/15 14:40*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**1600**	**B**	120	8.6	ug/L		10/09/15 09:01	10/14/15 12:48	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*59*		*29 - 110*	*10/09/15 09:01*	*10/14/15 12:48*	*25*
2-Fluorophenol (Surr)	*65*		*15 - 110*	*10/09/15 09:01*	*10/14/15 12:48*	*25*
2,4,6-Tribromophenol (Surr)	*32*		*21 - 128*	*10/09/15 09:01*	*10/14/15 12:48*	*25*
Nitrobenzene-d5 (Surr)	*55*		*31 - 110*	*10/09/15 09:01*	*10/14/15 12:48*	*25*
Phenol-d5 (Surr)	*54*		*10 - 110*	*10/09/15 09:01*	*10/14/15 12:48*	*25*
Terphenyl-d14 (Surr)	*62*		*31 - 115*	*10/09/15 09:01*	*10/14/15 12:48*	*25*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**23**		10	2.9	ug/L		10/09/15 10:45	10/15/15 01:04	1
Barium	**380**		200	1.0	ug/L		10/09/15 10:45	10/15/15 01:04	1
Cadmium	**0.54**	**J**	2.0	0.14	ug/L		10/09/15 10:45	10/15/15 01:04	1
Chromium	**140**	**B**	5.0	0.55	ug/L		10/09/15 10:45	10/15/15 01:04	1
Lead	**34**		3.0	1.9	ug/L		10/09/15 10:45	10/15/15 01:04	1
Selenium	5.0	U	5.0	4.0	ug/L		10/09/15 10:45	10/15/15 01:04	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-3-GW (49-50)
Date Collected: 10/06/15 12:55
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-20
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:45	10/15/15 01:04	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.16	J	0.20	0.090	ug/L		10/09/15 14:00	10/14/15 09:56	1

Client Sample ID: VAP-4 (6-8)

Date Collected: 10/06/15 14:52
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-21

Matrix: Solid
Percent Solids: 80.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**9.3**	**J B ***	17	1.4	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Benzene	4.3	U	4.3	0.21	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Dichlorobromomethane	4.3	U	4.3	0.18	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Bromoform	4.3	U	4.3	0.33	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Bromomethane	4.3	U	4.3	0.62	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
2-Butanone (MEK)	**1.3**	**J B**	17	0.42	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Carbon disulfide	**0.52**	**J**	4.3	0.30	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Carbon tetrachloride	4.3	U	4.3	0.29	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Chlorobenzene	4.3	U	4.3	0.25	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Chloroethane	4.3	U	4.3	0.30	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Chloroform	4.3	U	4.3	0.18	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Chloromethane	4.3	U	4.3	1.1	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
1,1-Dichloroethane	4.3	U	4.3	1.1	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
1,2-Dichloroethane	4.3	U	4.3	0.17	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
1,1-Dichloroethene	4.3	U	4.3	0.43	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
1,2-Dichloropropane	4.3	U	4.3	0.24	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
cis-1,3-Dichloropropene	4.3	U	4.3	0.23	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
trans-1,3-Dichloropropene	4.3	U	4.3	0.18	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Ethylbenzene	4.3	U	4.3	0.28	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
2-Hexanone	17	U	17	0.61	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Methylene Chloride	4.3	U	4.3	0.92	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
4-Methyl-2-pentanone (MIBK)	17	U	17	0.25	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Styrene	4.3	U	4.3	0.23	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
1,1,2,2-Tetrachloroethane	4.3	U	4.3	0.14	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Tetrachloroethene	4.3	U	4.3	0.29	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Toluene	4.3	U	4.3	0.23	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Trichloroethene	4.3	U	4.3	0.23	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Vinyl chloride	4.3	U	4.3	0.34	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Xylenes, Total	8.7	U	8.7	0.55	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
1,1,1-Trichloroethane	4.3	U	4.3	0.23	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
1,1,2-Trichloroethane	4.3	U	4.3	0.43	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Cyclohexane	8.7	U	8.7	0.25	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
1,2-Dibromo-3-Chloropropane	8.7	U	8.7	1.6	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Ethylene Dibromide	4.3	U	4.3	0.22	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Dichlorodifluoromethane	4.3	U	4.3	0.35	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
cis-1,2-Dichloroethene	4.3	U	4.3	0.24	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
trans-1,2-Dichloroethene	4.3	U	4.3	0.32	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Isopropylbenzene	4.3	U	4.3	0.26	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Methyl acetate	8.7	U *	8.7	2.0	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Methyl tert-butyl ether	4.3	U	4.3	0.13	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	4.3	U	4.3	0.34	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
1,2,4-Trichlorobenzene	4.3	U	4.3	0.34	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
1,2-Dichlorobenzene	4.3	U	4.3	0.33	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
1,3-Dichlorobenzene	4.3	U	4.3	0.35	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
1,4-Dichlorobenzene	4.3	U	4.3	0.36	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Trichlorofluoromethane	4.3	U	4.3	0.23	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Chlorodibromomethane	4.3	U	4.3	0.14	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1
Methylcyclohexane	8.7	U	8.7	0.29	ug/Kg	☼	10/10/15 05:46	10/14/15 07:47	1

Client Sample ID: VAP-4 (6-8)

Date Collected: 10/06/15 14:52
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-21

Matrix: Solid
Percent Solids: 80.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*109*		*64 - 120*	*10/10/15 05:46*	*10/14/15 07:47*	*1*
4-Bromofluorobenzene (Surr)	*117*		*64 - 130*	*10/10/15 05:46*	*10/14/15 07:47*	*1*
Toluene-d8 (Surr)	*102*		*69 - 128*	*10/10/15 05:46*	*10/14/15 07:47*	*1*
Dibromofluoromethane (Surr)	*108*		*68 - 120*	*10/10/15 05:46*	*10/14/15 07:47*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	61	U	61	4.3	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
bis (2-chloroisopropyl) ether	120	U	120	12	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
2,4,5-Trichlorophenol	180	U	180	30	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
2,4,6-Trichlorophenol	180	U	180	11	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
2,4-Dichlorophenol	180	U	180	24	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
2,4-Dimethylphenol	180	U	180	24	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
2,4-Dinitrophenol	400	U	400	26	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
2,4-Dinitrotoluene	240	U	240	21	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
2,6-Dinitrotoluene	240	U	240	26	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
2-Chloronaphthalene	61	U	61	0.55	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
2-Chlorophenol	61	U	61	10	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
2-Methylnaphthalene	8.1	U	8.1	0.61	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
2-Methylphenol	240	U	240	13	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
2-Nitroaniline	240	U	240	11	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
2-Nitrophenol	61	U	61	10	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
3,3'-Dichlorobenzidine	120	U	120	22	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
3-Nitroaniline	240	U	240	19	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
4,6-Dinitro-2-methylphenol	180	U	180	11	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
4-Bromophenyl phenyl ether	61	U	61	16	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
4-Chloro-3-methylphenol	180	U	180	26	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
4-Chloroaniline	180	U	180	21	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
4-Chlorophenyl phenyl ether	61	U	61	16	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
4-Nitroaniline	240	U	240	32	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
4-Nitrophenol	400	U	400	21	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Acenaphthene	8.1	U	8.1	0.93	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Acenaphthylene	8.1	U	8.1	0.43	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Acetophenone	120	U	120	11	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Anthracene	8.1	U	8.1	0.95	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Atrazine	240	U	240	11	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Benzaldehyde	120	U	120	15	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Benzo[a]anthracene	8.1	U	8.1	0.77	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Benzo[a]pyrene	8.1	U	8.1	0.78	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Benzo[b]fluoranthene	8.1	U	8.1	0.72	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Benzo[g,h,i]perylene	8.1	U	8.1	0.43	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Benzo[k]fluoranthene	8.1	U	8.1	0.83	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Bis(2-chloroethoxy)methane	120	U	120	27	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Bis(2-chloroethyl)ether	120	U	120	2.4	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Bis(2-ethylhexyl) phthalate	**27**	**J**	85	23	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Butyl benzyl phthalate	85	U	85	12	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Caprolactam	400	U	400	45	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Carbazole	61	U	61	33	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Chrysene	8.1	U	8.1	1.3	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Dibenz(a,h)anthracene	8.1	U	8.1	0.80	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1

Client Sample ID: VAP-4 (6-8)

Date Collected: 10/06/15 14:52
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-21

Matrix: Solid
Percent Solids: 80.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	61	U	61	0.80	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Diethyl phthalate	85	U	85	19	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Dimethyl phthalate	85	U	85	21	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Di-n-butyl phthalate	**27**	**J B**	85	18	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Di-n-octyl phthalate	85	U	85	9.6	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Fluoranthene	8.1	U	8.1	0.67	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Fluorene	8.1	U	8.1	0.65	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Hexachlorobenzene	8.1	U	8.1	2.6	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Hexachlorobutadiene	61	U	61	6.8	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Hexachlorocyclopentadiene	400	U	400	9.9	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Hexachloroethane	61	U	61	11	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Indeno[1,2,3-cd]pyrene	8.1	U	8.1	0.43	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Isophorone	61	U	61	16	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Naphthalene	8.1	U	8.1	1.0	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Nitrobenzene	120	U	120	2.7	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
N-Nitrosodi-n-propylamine	61	U	61	7.7	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
N-Nitrosodiphenylamine	61	U	61	26	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Pentachlorophenol	180	U	180	11	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Phenol	61	U	61	8.9	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Phenanthrene	8.1	U	8.1	0.89	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
Pyrene	8.1	U	8.1	0.54	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1
3 & 4 Methylphenol	490	U	490	24	ug/Kg	☼	10/09/15 07:30	10/13/15 14:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*24 - 110*	*10/09/15 07:30*	*10/13/15 14:35*	*1*
2-Fluorophenol (Surr)	*71*		*24 - 110*	*10/09/15 07:30*	*10/13/15 14:35*	*1*
2,4,6-Tribromophenol (Surr)	*23*		*10 - 110*	*10/09/15 07:30*	*10/13/15 14:35*	*1*
Nitrobenzene-d5 (Surr)	*67*		*20 - 110*	*10/09/15 07:30*	*10/13/15 14:35*	*1*
Phenol-d5 (Surr)	*70*		*26 - 110*	*10/09/15 07:30*	*10/13/15 14:35*	*1*
Terphenyl-d14 (Surr)	*84*		*36 - 110*	*10/09/15 07:30*	*10/13/15 14:35*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.3**		0.86	0.35	mg/Kg	☼	10/09/15 07:38	10/13/15 06:13	1
Barium	**440**		17	0.35	mg/Kg	☼	10/09/15 07:38	10/13/15 06:13	1
Cadmium	**0.048**	**J**	0.17	0.018	mg/Kg	☼	10/09/15 07:38	10/13/15 06:13	1
Chromium	**8.2**	**B**	0.43	0.064	mg/Kg	☼	10/09/15 07:38	10/13/15 06:13	1
Lead	**6.9**		0.26	0.17	mg/Kg	☼	10/09/15 07:38	10/13/15 06:13	1
Selenium	0.43	U	0.43	0.29	mg/Kg	☼	10/09/15 07:38	10/13/15 06:13	1
Silver	0.43	U	0.43	0.054	mg/Kg	☼	10/09/15 07:38	10/13/15 06:13	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12	U	0.12	0.017	mg/Kg	☼	10/09/15 10:00	10/13/15 11:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	**0.35**	**J**	0.99	0.32	mg/Kg	☼	10/09/15 11:05	10/12/15 15:19	1
Percent Solids	**81**		0.10	0.10	%			10/09/15 13:58	1
Percent Moisture	**19**		0.10	0.10	%			10/09/15 13:58	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-4-GW (15-16)
Date Collected: 10/06/15 15:03
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-22
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**1.3**	**J**	10	0.94	ug/L			10/14/15 07:19	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 07:19	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 07:19	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 07:19	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 07:19	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/14/15 07:19	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 07:19	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 07:19	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 07:19	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 07:19	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 07:19	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 07:19	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 07:19	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 07:19	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 07:19	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 07:19	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 07:19	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 07:19	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 07:19	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 07:19	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 07:19	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 07:19	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 07:19	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 07:19	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 07:19	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 07:19	1
Trichloroethene	**0.83**	**J**	1.0	0.22	ug/L			10/14/15 07:19	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 07:19	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 07:19	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 07:19	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 07:19	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 07:19	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 07:19	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 07:19	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 07:19	1
cis-1,2-Dichloroethene	**0.47**	**J**	1.0	0.26	ug/L			10/14/15 07:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 07:19	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 07:19	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 07:19	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 07:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 07:19	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 07:19	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 07:19	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 07:19	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 07:19	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 07:19	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 07:19	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 07:19	1

Client Sample ID: VAP-4-GW (15-16)

Lab Sample ID: 240-56328-22

Date Collected: 10/06/15 15:03

Matrix: Water

Date Received: 10/08/15 09:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*105*		*78 - 125*		*10/14/15 07:19*	*1*
4-Bromofluorobenzene (Surr)	*87*		*61 - 120*		*10/14/15 07:19*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/14/15 07:19*	*1*
Dibromofluoromethane (Surr)	*102*		*79 - 120*		*10/14/15 07:19*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/09/15 09:01	10/13/15 15:04	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/13/15 15:04	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/09/15 09:01	10/13/15 15:04	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/09/15 09:01	10/13/15 15:04	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/09/15 09:01	10/13/15 15:04	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/09/15 09:01	10/13/15 15:04	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/09/15 09:01	10/13/15 15:04	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/09/15 09:01	10/13/15 15:04	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/09/15 09:01	10/13/15 15:04	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/13/15 15:04	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/13/15 15:04	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/09/15 09:01	10/13/15 15:04	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/13/15 15:04	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/09/15 09:01	10/13/15 15:04	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/09/15 09:01	10/13/15 15:04	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/09/15 09:01	10/13/15 15:04	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/09/15 09:01	10/13/15 15:04	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/09/15 09:01	10/13/15 15:04	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/09/15 09:01	10/13/15 15:04	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/09/15 09:01	10/13/15 15:04	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/09/15 09:01	10/13/15 15:04	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/09/15 09:01	10/13/15 15:04	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/09/15 09:01	10/13/15 15:04	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/09/15 09:01	10/13/15 15:04	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/09/15 09:01	10/13/15 15:04	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/09/15 09:01	10/13/15 15:04	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/13/15 15:04	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/09/15 09:01	10/13/15 15:04	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/13/15 15:04	1
Benzaldehyde	0.96	U *	0.96	0.28	ug/L		10/09/15 09:01	10/13/15 15:04	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/09/15 09:01	10/13/15 15:04	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/09/15 09:01	10/13/15 15:04	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/09/15 09:01	10/13/15 15:04	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/09/15 09:01	10/13/15 15:04	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/09/15 09:01	10/13/15 15:04	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/09/15 09:01	10/13/15 15:04	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:01	10/13/15 15:04	1
Bis(2-ethylhexyl) phthalate	**3.0**	**B**	1.9	1.5	ug/L		10/09/15 09:01	10/13/15 15:04	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/09/15 09:01	10/13/15 15:04	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/09/15 09:01	10/13/15 15:04	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/09/15 09:01	10/13/15 15:04	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/09/15 09:01	10/13/15 15:04	1
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/09/15 09:01	10/13/15 15:04	1

Client Sample ID: VAP-4-GW (15-16)

Date Collected: 10/06/15 15:03
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-22

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	**0.31**	**J**	0.96	0.12	ug/L		10/09/15 09:01	10/13/15 15:04	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/09/15 09:01	10/13/15 15:04	1
Di-n-butyl phthalate	**1.2**	**B**	0.96	0.38	ug/L		10/09/15 09:01	10/13/15 15:04	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/09/15 09:01	10/13/15 15:04	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/09/15 09:01	10/13/15 15:04	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/09/15 09:01	10/13/15 15:04	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/13/15 15:04	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/09/15 09:01	10/13/15 15:04	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/09/15 09:01	10/13/15 15:04	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/09/15 09:01	10/13/15 15:04	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/09/15 09:01	10/13/15 15:04	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/09/15 09:01	10/13/15 15:04	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/09/15 09:01	10/13/15 15:04	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/13/15 15:04	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/09/15 09:01	10/13/15 15:04	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/09/15 09:01	10/13/15 15:04	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/09/15 09:01	10/13/15 15:04	1
Phenol	0.96	U	0.96	0.14	ug/L		10/09/15 09:01	10/13/15 15:04	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/09/15 09:01	10/13/15 15:04	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/09/15 09:01	10/13/15 15:04	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/09/15 09:01	10/13/15 15:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*37*		*29 - 110*	*10/09/15 09:01*	*10/13/15 15:04*	*1*
2-Fluorophenol (Surr)	*40*		*15 - 110*	*10/09/15 09:01*	*10/13/15 15:04*	*1*
2,4,6-Tribromophenol (Surr)	*32*		*21 - 128*	*10/09/15 09:01*	*10/13/15 15:04*	*1*
Nitrobenzene-d5 (Surr)	*40*		*31 - 110*	*10/09/15 09:01*	*10/13/15 15:04*	*1*
Phenol-d5 (Surr)	*34*		*10 - 110*	*10/09/15 09:01*	*10/13/15 15:04*	*1*
Terphenyl-d14 (Surr)	*34*		*31 - 115*	*10/09/15 09:01*	*10/13/15 15:04*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**240**	**B**	24	1.8	ug/L		10/09/15 09:01	10/14/15 13:12	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*34*		*29 - 110*	*10/09/15 09:01*	*10/14/15 13:12*	*5*
2-Fluorophenol (Surr)	*35*		*15 - 110*	*10/09/15 09:01*	*10/14/15 13:12*	*5*
2,4,6-Tribromophenol (Surr)	*24*		*21 - 128*	*10/09/15 09:01*	*10/14/15 13:12*	*5*
Nitrobenzene-d5 (Surr)	*34*		*31 - 110*	*10/09/15 09:01*	*10/14/15 13:12*	*5*
Phenol-d5 (Surr)	*28*		*10 - 110*	*10/09/15 09:01*	*10/14/15 13:12*	*5*
Terphenyl-d14 (Surr)	*32*		*31 - 115*	*10/09/15 09:01*	*10/14/15 13:12*	*5*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**130**		10	2.9	ug/L		10/09/15 10:45	10/15/15 01:08	1
Barium	**980**		200	1.0	ug/L		10/09/15 10:45	10/15/15 01:08	1
Cadmium	**1.9**	**J**	2.0	0.14	ug/L		10/09/15 10:45	10/15/15 01:08	1
Chromium	**260**	**B**	5.0	0.55	ug/L		10/09/15 10:45	10/15/15 01:08	1
Lead	**57**		3.0	1.9	ug/L		10/09/15 10:45	10/15/15 01:08	1
Selenium	**4.1**	**J**	5.0	4.0	ug/L		10/09/15 10:45	10/15/15 01:08	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-4-GW (15-16)
Date Collected: 10/06/15 15:03
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-22
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:45	10/15/15 01:08	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.22		0.20	0.090	ug/L		10/09/15 14:00	10/14/15 09:58	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-4-GW (20-21)
Date Collected: 10/06/15 15:31
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-23
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**3.0**	**J**	10	0.94	ug/L			10/14/15 07:42	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 07:42	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 07:42	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 07:42	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 07:42	1
2-Butanone (MEK)	**1.3**	**J**	10	0.53	ug/L			10/14/15 07:42	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 07:42	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 07:42	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 07:42	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 07:42	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 07:42	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 07:42	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 07:42	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 07:42	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 07:42	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 07:42	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 07:42	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 07:42	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 07:42	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 07:42	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 07:42	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 07:42	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 07:42	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 07:42	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 07:42	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 07:42	1
Trichloroethene	**12**		1.0	0.22	ug/L			10/14/15 07:42	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 07:42	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 07:42	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 07:42	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 07:42	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 07:42	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 07:42	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 07:42	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 07:42	1
cis-1,2-Dichloroethene	**10**		1.0	0.26	ug/L			10/14/15 07:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 07:42	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 07:42	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 07:42	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 07:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 07:42	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 07:42	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 07:42	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 07:42	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 07:42	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 07:42	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 07:42	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 07:42	1

Client Sample ID: VAP-4-GW (20-21)

Date Collected: 10/06/15 15:31
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-23

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*78 - 125*		*10/14/15 07:42*	*1*
4-Bromofluorobenzene (Surr)	*87*		*61 - 120*		*10/14/15 07:42*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/14/15 07:42*	*1*
Dibromofluoromethane (Surr)	*103*		*79 - 120*		*10/14/15 07:42*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/09/15 09:01	10/13/15 15:27	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/09/15 09:01	10/13/15 15:27	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/09/15 09:01	10/13/15 15:27	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/09/15 09:01	10/13/15 15:27	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/09/15 09:01	10/13/15 15:27	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/09/15 09:01	10/13/15 15:27	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/09/15 09:01	10/13/15 15:27	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/09/15 09:01	10/13/15 15:27	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/09/15 09:01	10/13/15 15:27	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/09/15 09:01	10/13/15 15:27	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/09/15 09:01	10/13/15 15:27	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/09/15 09:01	10/13/15 15:27	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/09/15 09:01	10/13/15 15:27	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/09/15 09:01	10/13/15 15:27	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/09/15 09:01	10/13/15 15:27	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/09/15 09:01	10/13/15 15:27	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/09/15 09:01	10/13/15 15:27	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/09/15 09:01	10/13/15 15:27	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/09/15 09:01	10/13/15 15:27	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/09/15 09:01	10/13/15 15:27	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/09/15 09:01	10/13/15 15:27	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/09/15 09:01	10/13/15 15:27	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/09/15 09:01	10/13/15 15:27	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/09/15 09:01	10/13/15 15:27	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/09/15 09:01	10/13/15 15:27	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/09/15 09:01	10/13/15 15:27	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/09/15 09:01	10/13/15 15:27	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/09/15 09:01	10/13/15 15:27	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/09/15 09:01	10/13/15 15:27	1
Benzaldehyde	1.0	U *	1.0	0.30	ug/L		10/09/15 09:01	10/13/15 15:27	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/09/15 09:01	10/13/15 15:27	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/09/15 09:01	10/13/15 15:27	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/09/15 09:01	10/13/15 15:27	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/09/15 09:01	10/13/15 15:27	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/09/15 09:01	10/13/15 15:27	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/09/15 09:01	10/13/15 15:27	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/09/15 09:01	10/13/15 15:27	1
Bis(2-ethylhexyl) phthalate	**2.3**	**B**	2.0	1.5	ug/L		10/09/15 09:01	10/13/15 15:27	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/09/15 09:01	10/13/15 15:27	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/09/15 09:01	10/13/15 15:27	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/09/15 09:01	10/13/15 15:27	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/09/15 09:01	10/13/15 15:27	1
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/09/15 09:01	10/13/15 15:27	1

Client Sample ID: VAP-4-GW (20-21)

Date Collected: 10/06/15 15:31
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-23

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/09/15 09:01	10/13/15 15:27	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/09/15 09:01	10/13/15 15:27	1
Di-n-butyl phthalate	**1.0**	**B**	1.0	0.40	ug/L		10/09/15 09:01	10/13/15 15:27	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/09/15 09:01	10/13/15 15:27	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/09/15 09:01	10/13/15 15:27	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/09/15 09:01	10/13/15 15:27	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/09/15 09:01	10/13/15 15:27	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/09/15 09:01	10/13/15 15:27	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/09/15 09:01	10/13/15 15:27	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/09/15 09:01	10/13/15 15:27	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/09/15 09:01	10/13/15 15:27	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/09/15 09:01	10/13/15 15:27	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/09/15 09:01	10/13/15 15:27	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/09/15 09:01	10/13/15 15:27	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/09/15 09:01	10/13/15 15:27	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/09/15 09:01	10/13/15 15:27	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/09/15 09:01	10/13/15 15:27	1
Phenol	1.0	U	1.0	0.15	ug/L		10/09/15 09:01	10/13/15 15:27	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/09/15 09:01	10/13/15 15:27	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/09/15 09:01	10/13/15 15:27	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/09/15 09:01	10/13/15 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*42*		*29 - 110*	*10/09/15 09:01*	*10/13/15 15:27*	*1*
2-Fluorophenol (Surr)	*41*		*15 - 110*	*10/09/15 09:01*	*10/13/15 15:27*	*1*
2,4,6-Tribromophenol (Surr)	*36*		*21 - 128*	*10/09/15 09:01*	*10/13/15 15:27*	*1*
Nitrobenzene-d5 (Surr)	*44*		*31 - 110*	*10/09/15 09:01*	*10/13/15 15:27*	*1*
Phenol-d5 (Surr)	*35*		*10 - 110*	*10/09/15 09:01*	*10/13/15 15:27*	*1*
Terphenyl-d14 (Surr)	*42*		*31 - 115*	*10/09/15 09:01*	*10/13/15 15:27*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**170**	**B**	20	1.5	ug/L		10/09/15 09:01	10/14/15 13:35	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*46*		*29 - 110*	*10/09/15 09:01*	*10/14/15 13:35*	*4*
2-Fluorophenol (Surr)	*43*		*15 - 110*	*10/09/15 09:01*	*10/14/15 13:35*	*4*
2,4,6-Tribromophenol (Surr)	*32*		*21 - 128*	*10/09/15 09:01*	*10/14/15 13:35*	*4*
Nitrobenzene-d5 (Surr)	*44*		*31 - 110*	*10/09/15 09:01*	*10/14/15 13:35*	*4*
Phenol-d5 (Surr)	*35*		*10 - 110*	*10/09/15 09:01*	*10/14/15 13:35*	*4*
Terphenyl-d14 (Surr)	*45*		*31 - 115*	*10/09/15 09:01*	*10/14/15 13:35*	*4*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**19**		10	2.9	ug/L		10/09/15 10:45	10/15/15 01:12	1
Barium	**410**		200	1.0	ug/L		10/09/15 10:45	10/15/15 01:12	1
Cadmium	**0.24**	**J**	2.0	0.14	ug/L		10/09/15 10:45	10/15/15 01:12	1
Chromium	**130**	**B**	5.0	0.55	ug/L		10/09/15 10:45	10/15/15 01:12	1
Lead	**32**		3.0	1.9	ug/L		10/09/15 10:45	10/15/15 01:12	1
Selenium	5.0	U	5.0	4.0	ug/L		10/09/15 10:45	10/15/15 01:12	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-4-GW (20-21)
Date Collected: 10/06/15 15:31
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-23
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:45	10/15/15 01:12	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/09/15 14:00	10/14/15 09:11	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-4-GW (25-26)
Date Collected: 10/06/15 16:06
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-24
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/14/15 15:12	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 15:12	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 15:12	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 15:12	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 15:12	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/14/15 15:12	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 15:12	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 15:12	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 15:12	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 15:12	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 15:12	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 15:12	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 15:12	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 15:12	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 15:12	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 15:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 15:12	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 15:12	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 15:12	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 15:12	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 15:12	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 15:12	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 15:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 15:12	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 15:12	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 15:12	1
Trichloroethene	**19**		1.0	0.22	ug/L			10/14/15 15:12	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 15:12	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 15:12	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 15:12	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 15:12	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 15:12	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 15:12	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 15:12	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 15:12	1
cis-1,2-Dichloroethene	**18**		1.0	0.26	ug/L			10/14/15 15:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 15:12	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 15:12	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 15:12	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 15:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 15:12	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 15:12	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 15:12	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 15:12	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 15:12	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 15:12	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 15:12	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 15:12	1

Client Sample ID: VAP-4-GW (25-26)

Date Collected: 10/06/15 16:06
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-24

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*78 - 125*		*10/14/15 15:12*	*1*
4-Bromofluorobenzene (Surr)	*102*		*61 - 120*		*10/14/15 15:12*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/14/15 15:12*	*1*
Dibromofluoromethane (Surr)	*107*		*79 - 120*		*10/14/15 15:12*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/09/15 09:01	10/13/15 15:51	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/09/15 09:01	10/13/15 15:51	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/09/15 09:01	10/13/15 15:51	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/09/15 09:01	10/13/15 15:51	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/09/15 09:01	10/13/15 15:51	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/09/15 09:01	10/13/15 15:51	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/09/15 09:01	10/13/15 15:51	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/09/15 09:01	10/13/15 15:51	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/09/15 09:01	10/13/15 15:51	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/09/15 09:01	10/13/15 15:51	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/09/15 09:01	10/13/15 15:51	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/09/15 09:01	10/13/15 15:51	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/09/15 09:01	10/13/15 15:51	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/09/15 09:01	10/13/15 15:51	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/09/15 09:01	10/13/15 15:51	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/09/15 09:01	10/13/15 15:51	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/09/15 09:01	10/13/15 15:51	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/09/15 09:01	10/13/15 15:51	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/09/15 09:01	10/13/15 15:51	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/09/15 09:01	10/13/15 15:51	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/09/15 09:01	10/13/15 15:51	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/09/15 09:01	10/13/15 15:51	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/09/15 09:01	10/13/15 15:51	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/09/15 09:01	10/13/15 15:51	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/09/15 09:01	10/13/15 15:51	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/09/15 09:01	10/13/15 15:51	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/09/15 09:01	10/13/15 15:51	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/09/15 09:01	10/13/15 15:51	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/09/15 09:01	10/13/15 15:51	1
Benzaldehyde	1.0	U *	1.0	0.30	ug/L		10/09/15 09:01	10/13/15 15:51	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/09/15 09:01	10/13/15 15:51	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/09/15 09:01	10/13/15 15:51	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/09/15 09:01	10/13/15 15:51	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/09/15 09:01	10/13/15 15:51	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/09/15 09:01	10/13/15 15:51	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/09/15 09:01	10/13/15 15:51	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/09/15 09:01	10/13/15 15:51	1
Bis(2-ethylhexyl) phthalate	**2.2**	**B**	2.0	1.5	ug/L		10/09/15 09:01	10/13/15 15:51	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/09/15 09:01	10/13/15 15:51	1
Caprolactam	**45**	**B**	5.0	0.37	ug/L		10/09/15 09:01	10/13/15 15:51	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/09/15 09:01	10/13/15 15:51	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/09/15 09:01	10/13/15 15:51	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/09/15 09:01	10/13/15 15:51	1

Client Sample ID: VAP-4-GW (25-26)

Date Collected: 10/06/15 16:06
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-24

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/09/15 09:01	10/13/15 15:51	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/09/15 09:01	10/13/15 15:51	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/09/15 09:01	10/13/15 15:51	1
Di-n-butyl phthalate	**1.1**	**B**	1.0	0.40	ug/L		10/09/15 09:01	10/13/15 15:51	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/09/15 09:01	10/13/15 15:51	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/09/15 09:01	10/13/15 15:51	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/09/15 09:01	10/13/15 15:51	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/09/15 09:01	10/13/15 15:51	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/09/15 09:01	10/13/15 15:51	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/09/15 09:01	10/13/15 15:51	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/09/15 09:01	10/13/15 15:51	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/09/15 09:01	10/13/15 15:51	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/09/15 09:01	10/13/15 15:51	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/09/15 09:01	10/13/15 15:51	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/09/15 09:01	10/13/15 15:51	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/09/15 09:01	10/13/15 15:51	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/09/15 09:01	10/13/15 15:51	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/09/15 09:01	10/13/15 15:51	1
Phenol	1.0	U	1.0	0.15	ug/L		10/09/15 09:01	10/13/15 15:51	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/09/15 09:01	10/13/15 15:51	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/09/15 09:01	10/13/15 15:51	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/09/15 09:01	10/13/15 15:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*68*		*29 - 110*	*10/09/15 09:01*	*10/13/15 15:51*	*1*
2-Fluorophenol (Surr)	*64*		*15 - 110*	*10/09/15 09:01*	*10/13/15 15:51*	*1*
2,4,6-Tribromophenol (Surr)	*53*		*21 - 128*	*10/09/15 09:01*	*10/13/15 15:51*	*1*
Nitrobenzene-d5 (Surr)	*67*		*31 - 110*	*10/09/15 09:01*	*10/13/15 15:51*	*1*
Phenol-d5 (Surr)	*53*		*10 - 110*	*10/09/15 09:01*	*10/13/15 15:51*	*1*
Terphenyl-d14 (Surr)	*79*		*31 - 115*	*10/09/15 09:01*	*10/13/15 15:51*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**19**		10	2.9	ug/L		10/09/15 10:45	10/15/15 01:16	1
Barium	**260**		200	1.0	ug/L		10/09/15 10:45	10/15/15 01:16	1
Cadmium	**0.21**	**J**	2.0	0.14	ug/L		10/09/15 10:45	10/15/15 01:16	1
Chromium	**100**	**B**	5.0	0.55	ug/L		10/09/15 10:45	10/15/15 01:16	1
Lead	**34**		3.0	1.9	ug/L		10/09/15 10:45	10/15/15 01:16	1
Selenium	5.0	U	5.0	4.0	ug/L		10/09/15 10:45	10/15/15 01:16	1
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:45	10/15/15 01:16	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.38**		0.20	0.090	ug/L		10/09/15 14:00	10/14/15 09:13	1

Client Sample ID: VAP-4-GW (30-31)
Date Collected: 10/06/15 16:36
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-25
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/14/15 15:35	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 15:35	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 15:35	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 15:35	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 15:35	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/14/15 15:35	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 15:35	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 15:35	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 15:35	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 15:35	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 15:35	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 15:35	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 15:35	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 15:35	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 15:35	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 15:35	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 15:35	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 15:35	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 15:35	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 15:35	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 15:35	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 15:35	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 15:35	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 15:35	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 15:35	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 15:35	1
Trichloroethene	**6.6**		1.0	0.22	ug/L			10/14/15 15:35	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 15:35	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 15:35	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 15:35	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 15:35	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 15:35	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 15:35	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 15:35	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 15:35	1
cis-1,2-Dichloroethene	**5.2**		1.0	0.26	ug/L			10/14/15 15:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 15:35	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 15:35	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 15:35	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 15:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 15:35	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 15:35	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 15:35	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 15:35	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 15:35	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 15:35	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 15:35	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 15:35	1

Client Sample ID: VAP-4-GW (30-31)

Lab Sample ID: 240-56328-25

Date Collected: 10/06/15 16:36

Matrix: Water

Date Received: 10/08/15 09:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*101*		*78 - 125*		*10/14/15 15:35*	*1*
4-Bromofluorobenzene (Surr)	*98*		*61 - 120*		*10/14/15 15:35*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/14/15 15:35*	*1*
Dibromofluoromethane (Surr)	*98*		*79 - 120*		*10/14/15 15:35*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/09/15 09:05	10/12/15 13:29	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:05	10/12/15 13:29	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/09/15 09:05	10/12/15 13:29	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/09/15 09:05	10/12/15 13:29	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/09/15 09:05	10/12/15 13:29	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/09/15 09:05	10/12/15 13:29	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/09/15 09:05	10/12/15 13:29	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/09/15 09:05	10/12/15 13:29	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/09/15 09:05	10/12/15 13:29	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/09/15 09:05	10/12/15 13:29	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/09/15 09:05	10/12/15 13:29	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/09/15 09:05	10/12/15 13:29	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/09/15 09:05	10/12/15 13:29	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/09/15 09:05	10/12/15 13:29	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/09/15 09:05	10/12/15 13:29	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/09/15 09:05	10/12/15 13:29	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/09/15 09:05	10/12/15 13:29	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/09/15 09:05	10/12/15 13:29	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/09/15 09:05	10/12/15 13:29	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/09/15 09:05	10/12/15 13:29	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/09/15 09:05	10/12/15 13:29	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/09/15 09:05	10/12/15 13:29	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/09/15 09:05	10/12/15 13:29	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/09/15 09:05	10/12/15 13:29	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/09/15 09:05	10/12/15 13:29	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/09/15 09:05	10/12/15 13:29	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/09/15 09:05	10/12/15 13:29	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/09/15 09:05	10/12/15 13:29	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/09/15 09:05	10/12/15 13:29	1
Benzaldehyde	0.96	U	0.96	0.28	ug/L		10/09/15 09:05	10/12/15 13:29	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/09/15 09:05	10/12/15 13:29	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/09/15 09:05	10/12/15 13:29	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/09/15 09:05	10/12/15 13:29	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/09/15 09:05	10/12/15 13:29	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/09/15 09:05	10/12/15 13:29	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/09/15 09:05	10/12/15 13:29	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:05	10/12/15 13:29	1
Bis(2-ethylhexyl) phthalate	**1.6**	**J B**	1.9	1.5	ug/L		10/09/15 09:05	10/12/15 13:29	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/09/15 09:05	10/12/15 13:29	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/09/15 09:05	10/12/15 13:29	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/09/15 09:05	10/12/15 13:29	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/09/15 09:05	10/12/15 13:29	1
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/09/15 09:05	10/12/15 13:29	1

Client Sample ID: VAP-4-GW (30-31)
Date Collected: 10/06/15 16:36
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-25
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/09/15 09:05	10/12/15 13:29	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/09/15 09:05	10/12/15 13:29	1
Di-n-butyl phthalate	**1.2**		0.96	0.38	ug/L		10/09/15 09:05	10/12/15 13:29	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/09/15 09:05	10/12/15 13:29	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/09/15 09:05	10/12/15 13:29	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/09/15 09:05	10/12/15 13:29	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:05	10/12/15 13:29	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/09/15 09:05	10/12/15 13:29	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/09/15 09:05	10/12/15 13:29	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/09/15 09:05	10/12/15 13:29	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/09/15 09:05	10/12/15 13:29	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/09/15 09:05	10/12/15 13:29	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/09/15 09:05	10/12/15 13:29	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:05	10/12/15 13:29	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/09/15 09:05	10/12/15 13:29	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/09/15 09:05	10/12/15 13:29	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/09/15 09:05	10/12/15 13:29	1
Phenol	0.96	U	0.96	0.14	ug/L		10/09/15 09:05	10/12/15 13:29	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/09/15 09:05	10/12/15 13:29	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/09/15 09:05	10/12/15 13:29	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/09/15 09:05	10/12/15 13:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*32*		*29 - 110*	*10/09/15 09:05*	*10/12/15 13:29*	*1*
2-Fluorophenol (Surr)	*34*		*15 - 110*	*10/09/15 09:05*	*10/12/15 13:29*	*1*
2,4,6-Tribromophenol (Surr)	*27*		*21 - 128*	*10/09/15 09:05*	*10/12/15 13:29*	*1*
Nitrobenzene-d5 (Surr)	*37*		*31 - 110*	*10/09/15 09:05*	*10/12/15 13:29*	*1*
Phenol-d5 (Surr)	*27*		*10 - 110*	*10/09/15 09:05*	*10/12/15 13:29*	*1*
Terphenyl-d14 (Surr)	*29*	*X*	*31 - 115*	*10/09/15 09:05*	*10/12/15 13:29*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**190**	**B**	19	1.4	ug/L		10/09/15 09:05	10/13/15 11:09	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*30*		*29 - 110*	*10/09/15 09:05*	*10/13/15 11:09*	*4*
2-Fluorophenol (Surr)	*31*		*15 - 110*	*10/09/15 09:05*	*10/13/15 11:09*	*4*
2,4,6-Tribromophenol (Surr)	*21*		*21 - 128*	*10/09/15 09:05*	*10/13/15 11:09*	*4*
Nitrobenzene-d5 (Surr)	*33*		*31 - 110*	*10/09/15 09:05*	*10/13/15 11:09*	*4*
Phenol-d5 (Surr)	*26*		*10 - 110*	*10/09/15 09:05*	*10/13/15 11:09*	*4*
Terphenyl-d14 (Surr)	*26*	*X*	*31 - 115*	*10/09/15 09:05*	*10/13/15 11:09*	*4*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**96**		10	2.9	ug/L		10/09/15 10:52	10/13/15 04:07	1
Barium	**1300**	**B**	200	1.0	ug/L		10/09/15 10:52	10/13/15 04:07	1
Cadmium	**1.6**	**J**	2.0	0.14	ug/L		10/09/15 10:52	10/13/15 04:07	1
Chromium	**550**		5.0	0.55	ug/L		10/09/15 10:52	10/13/15 04:07	1
Lead	**280**		3.0	1.9	ug/L		10/09/15 10:52	10/13/15 04:07	1
Selenium	5.0	U	5.0	4.0	ug/L		10/09/15 10:52	10/13/15 04:07	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-4-GW (30-31) — **Lab Sample ID: 240-56328-25**
Date Collected: 10/06/15 16:36 — **Matrix: Water**
Date Received: 10/08/15 09:30

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U L	5.0	0.92	ug/L		10/09/15 10:52	10/13/15 04:07	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	2.3		0.20	0.090	ug/L		10/09/15 14:00	10/13/15 09:57	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-4-GW (35-36)
Date Collected: 10/07/15 08:11
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-26
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**1.4**	**J**	10	0.94	ug/L			10/14/15 15:57	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 15:57	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 15:57	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 15:57	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 15:57	1
2-Butanone (MEK)	**0.86**	**J**	10	0.53	ug/L			10/14/15 15:57	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 15:57	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 15:57	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 15:57	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 15:57	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 15:57	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 15:57	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 15:57	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 15:57	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 15:57	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 15:57	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 15:57	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 15:57	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 15:57	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 15:57	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 15:57	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 15:57	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 15:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 15:57	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 15:57	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 15:57	1
Trichloroethene	**0.95**	**J**	1.0	0.22	ug/L			10/14/15 15:57	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 15:57	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 15:57	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 15:57	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 15:57	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 15:57	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 15:57	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 15:57	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 15:57	1
cis-1,2-Dichloroethene	**1.2**		1.0	0.26	ug/L			10/14/15 15:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 15:57	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 15:57	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 15:57	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 15:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 15:57	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 15:57	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 15:57	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 15:57	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 15:57	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 15:57	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 15:57	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 15:57	1

Client Sample ID: VAP-4-GW (35-36)

Lab Sample ID: 240-56328-26

Date Collected: 10/07/15 08:11

Matrix: Water

Date Received: 10/08/15 09:30

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*103*		*78 - 125*		*10/14/15 15:57*	*1*
4-Bromofluorobenzene (Surr)	*96*		*61 - 120*		*10/14/15 15:57*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/14/15 15:57*	*1*
Dibromofluoromethane (Surr)	*99*		*79 - 120*		*10/14/15 15:57*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 15:53	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/09/15 09:05	10/11/15 15:53	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/09/15 09:05	10/11/15 15:53	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/09/15 09:05	10/11/15 15:53	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/09/15 09:05	10/11/15 15:53	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/09/15 09:05	10/11/15 15:53	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/09/15 09:05	10/11/15 15:53	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/09/15 09:05	10/11/15 15:53	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/09/15 09:05	10/11/15 15:53	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 15:53	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/09/15 09:05	10/11/15 15:53	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/09/15 09:05	10/11/15 15:53	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/09/15 09:05	10/11/15 15:53	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/09/15 09:05	10/11/15 15:53	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/09/15 09:05	10/11/15 15:53	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/09/15 09:05	10/11/15 15:53	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/09/15 09:05	10/11/15 15:53	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/09/15 09:05	10/11/15 15:53	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/09/15 09:05	10/11/15 15:53	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/09/15 09:05	10/11/15 15:53	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/09/15 09:05	10/11/15 15:53	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/09/15 09:05	10/11/15 15:53	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/09/15 09:05	10/11/15 15:53	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/09/15 09:05	10/11/15 15:53	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/09/15 09:05	10/11/15 15:53	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/09/15 09:05	10/11/15 15:53	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/09/15 09:05	10/11/15 15:53	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/09/15 09:05	10/11/15 15:53	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 15:53	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/09/15 09:05	10/11/15 15:53	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/09/15 09:05	10/11/15 15:53	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/09/15 09:05	10/11/15 15:53	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/09/15 09:05	10/11/15 15:53	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/09/15 09:05	10/11/15 15:53	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/09/15 09:05	10/11/15 15:53	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/09/15 09:05	10/11/15 15:53	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/09/15 09:05	10/11/15 15:53	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	1.5	ug/L		10/09/15 09:05	10/11/15 15:53	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/09/15 09:05	10/11/15 15:53	1
Caprolactam	**72**	**B**	5.0	0.37	ug/L		10/09/15 09:05	10/11/15 15:53	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/09/15 09:05	10/11/15 15:53	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/09/15 09:05	10/11/15 15:53	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/09/15 09:05	10/11/15 15:53	1

Client Sample ID: VAP-4-GW (35-36)

Date Collected: 10/07/15 08:11
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-26

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/09/15 09:05	10/11/15 15:53	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/09/15 09:05	10/11/15 15:53	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/09/15 09:05	10/11/15 15:53	1
Di-n-butyl phthalate	**0.67**	**J**	1.0	0.40	ug/L		10/09/15 09:05	10/11/15 15:53	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/09/15 09:05	10/11/15 15:53	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/09/15 09:05	10/11/15 15:53	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/09/15 09:05	10/11/15 15:53	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 15:53	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/09/15 09:05	10/11/15 15:53	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/09/15 09:05	10/11/15 15:53	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/09/15 09:05	10/11/15 15:53	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/09/15 09:05	10/11/15 15:53	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/09/15 09:05	10/11/15 15:53	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/09/15 09:05	10/11/15 15:53	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 15:53	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/09/15 09:05	10/11/15 15:53	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/09/15 09:05	10/11/15 15:53	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/09/15 09:05	10/11/15 15:53	1
Phenol	**12**		1.0	0.15	ug/L		10/09/15 09:05	10/11/15 15:53	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/09/15 09:05	10/11/15 15:53	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/09/15 09:05	10/11/15 15:53	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/09/15 09:05	10/11/15 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*13*	*X*	*29 - 110*	*10/09/15 09:05*	*10/11/15 15:53*	*1*
2-Fluorophenol (Surr)	*16*		*15 - 110*	*10/09/15 09:05*	*10/11/15 15:53*	*1*
2,4,6-Tribromophenol (Surr)	*10*	*X*	*21 - 128*	*10/09/15 09:05*	*10/11/15 15:53*	*1*
Nitrobenzene-d5 (Surr)	*15*	*X*	*31 - 110*	*10/09/15 09:05*	*10/11/15 15:53*	*1*
Phenol-d5 (Surr)	*14*		*10 - 110*	*10/09/15 09:05*	*10/11/15 15:53*	*1*
Terphenyl-d14 (Surr)	*11*	*X*	*31 - 115*	*10/09/15 09:05*	*10/11/15 15:53*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**66**		10	2.9	ug/L		10/09/15 10:52	10/13/15 04:11	1
Barium	**2400**	**B**	200	1.0	ug/L		10/09/15 10:52	10/13/15 04:11	1
Cadmium	**3.9**		2.0	0.14	ug/L		10/09/15 10:52	10/13/15 04:11	1
Chromium	**670**		5.0	0.55	ug/L		10/09/15 10:52	10/13/15 04:11	1
Lead	**230**		3.0	1.9	ug/L		10/09/15 10:52	10/13/15 04:11	1
Selenium	**11**		5.0	4.0	ug/L		10/09/15 10:52	10/13/15 04:11	1
Silver	5.0	U L	5.0	0.92	ug/L		10/09/15 10:52	10/13/15 04:11	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.0**		0.20	0.090	ug/L		10/09/15 14:00	10/13/15 10:04	1

Client Sample ID: VAP-4-GW (40-41)
Date Collected: 10/07/15 08:45
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-27
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/14/15 16:19	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 16:19	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 16:19	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 16:19	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 16:19	1
2-Butanone (MEK)	**0.53**	**J**	10	0.53	ug/L			10/14/15 16:19	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 16:19	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 16:19	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 16:19	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 16:19	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 16:19	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 16:19	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 16:19	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 16:19	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 16:19	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 16:19	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 16:19	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 16:19	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 16:19	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 16:19	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 16:19	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 16:19	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 16:19	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 16:19	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 16:19	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 16:19	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/14/15 16:19	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 16:19	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 16:19	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 16:19	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 16:19	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 16:19	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 16:19	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 16:19	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 16:19	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/14/15 16:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 16:19	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 16:19	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 16:19	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 16:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 16:19	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 16:19	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 16:19	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 16:19	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 16:19	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 16:19	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 16:19	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 16:19	1

Client Sample ID: VAP-4-GW (40-41)

Date Collected: 10/07/15 08:45
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-27

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*78 - 125*		*10/14/15 16:19*	*1*
4-Bromofluorobenzene (Surr)	*95*		*61 - 120*		*10/14/15 16:19*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/14/15 16:19*	*1*
Dibromofluoromethane (Surr)	*100*		*79 - 120*		*10/14/15 16:19*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/09/15 09:05	10/11/15 16:16	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:05	10/11/15 16:16	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/09/15 09:05	10/11/15 16:16	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/09/15 09:05	10/11/15 16:16	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/09/15 09:05	10/11/15 16:16	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/09/15 09:05	10/11/15 16:16	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/09/15 09:05	10/11/15 16:16	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/09/15 09:05	10/11/15 16:16	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/09/15 09:05	10/11/15 16:16	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/09/15 09:05	10/11/15 16:16	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/09/15 09:05	10/11/15 16:16	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/09/15 09:05	10/11/15 16:16	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/09/15 09:05	10/11/15 16:16	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/09/15 09:05	10/11/15 16:16	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/09/15 09:05	10/11/15 16:16	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/09/15 09:05	10/11/15 16:16	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/09/15 09:05	10/11/15 16:16	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/09/15 09:05	10/11/15 16:16	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/09/15 09:05	10/11/15 16:16	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/09/15 09:05	10/11/15 16:16	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/09/15 09:05	10/11/15 16:16	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/09/15 09:05	10/11/15 16:16	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/09/15 09:05	10/11/15 16:16	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/09/15 09:05	10/11/15 16:16	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/09/15 09:05	10/11/15 16:16	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/09/15 09:05	10/11/15 16:16	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/09/15 09:05	10/11/15 16:16	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/09/15 09:05	10/11/15 16:16	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/09/15 09:05	10/11/15 16:16	1
Benzaldehyde	0.96	U	0.96	0.28	ug/L		10/09/15 09:05	10/11/15 16:16	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/09/15 09:05	10/11/15 16:16	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/09/15 09:05	10/11/15 16:16	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/09/15 09:05	10/11/15 16:16	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/09/15 09:05	10/11/15 16:16	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/09/15 09:05	10/11/15 16:16	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/09/15 09:05	10/11/15 16:16	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:05	10/11/15 16:16	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	1.5	ug/L		10/09/15 09:05	10/11/15 16:16	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/09/15 09:05	10/11/15 16:16	1
Caprolactam	**6.8**	**B**	4.8	0.36	ug/L		10/09/15 09:05	10/11/15 16:16	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/09/15 09:05	10/11/15 16:16	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/09/15 09:05	10/11/15 16:16	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/09/15 09:05	10/11/15 16:16	1

Client Sample ID: VAP-4-GW (40-41)

Date Collected: 10/07/15 08:45
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-27

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/09/15 09:05	10/11/15 16:16	1
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/09/15 09:05	10/11/15 16:16	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/09/15 09:05	10/11/15 16:16	1
Di-n-butyl phthalate	**0.61**	**J**	0.96	0.38	ug/L		10/09/15 09:05	10/11/15 16:16	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/09/15 09:05	10/11/15 16:16	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/09/15 09:05	10/11/15 16:16	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/09/15 09:05	10/11/15 16:16	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:05	10/11/15 16:16	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/09/15 09:05	10/11/15 16:16	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/09/15 09:05	10/11/15 16:16	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/09/15 09:05	10/11/15 16:16	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/09/15 09:05	10/11/15 16:16	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/09/15 09:05	10/11/15 16:16	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/09/15 09:05	10/11/15 16:16	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:05	10/11/15 16:16	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/09/15 09:05	10/11/15 16:16	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/09/15 09:05	10/11/15 16:16	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/09/15 09:05	10/11/15 16:16	1
Phenol	0.96	U	0.96	0.14	ug/L		10/09/15 09:05	10/11/15 16:16	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/09/15 09:05	10/11/15 16:16	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/09/15 09:05	10/11/15 16:16	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/09/15 09:05	10/11/15 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*44*		*29 - 110*	*10/09/15 09:05*	*10/11/15 16:16*	*1*
2-Fluorophenol (Surr)	*44*		*15 - 110*	*10/09/15 09:05*	*10/11/15 16:16*	*1*
2,4,6-Tribromophenol (Surr)	*35*		*21 - 128*	*10/09/15 09:05*	*10/11/15 16:16*	*1*
Nitrobenzene-d5 (Surr)	*49*		*31 - 110*	*10/09/15 09:05*	*10/11/15 16:16*	*1*
Phenol-d5 (Surr)	*35*		*10 - 110*	*10/09/15 09:05*	*10/11/15 16:16*	*1*
Terphenyl-d14 (Surr)	*44*		*31 - 115*	*10/09/15 09:05*	*10/11/15 16:16*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**15**		10	2.9	ug/L		10/09/15 10:52	10/13/15 04:15	1
Barium	**1400**	**B**	200	1.0	ug/L		10/09/15 10:52	10/13/15 04:15	1
Cadmium	**1.4**	**J**	2.0	0.14	ug/L		10/09/15 10:52	10/13/15 04:15	1
Chromium	**380**		5.0	0.55	ug/L		10/09/15 10:52	10/13/15 04:15	1
Lead	**130**		3.0	1.9	ug/L		10/09/15 10:52	10/13/15 04:15	1
Selenium	**7.0**		5.0	4.0	ug/L		10/09/15 10:52	10/13/15 04:15	1
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:52	10/13/15 04:15	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/09/15 14:00	10/13/15 10:06	1

Client Sample ID: VAP-4-GW (45-46)
Date Collected: 10/07/15 09:18
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-28
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/14/15 16:41	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 16:41	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 16:41	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 16:41	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 16:41	1
2-Butanone (MEK)	**0.54**	**J**	10	0.53	ug/L			10/14/15 16:41	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 16:41	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 16:41	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 16:41	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 16:41	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 16:41	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 16:41	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 16:41	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 16:41	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 16:41	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 16:41	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 16:41	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 16:41	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 16:41	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 16:41	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 16:41	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 16:41	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 16:41	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 16:41	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 16:41	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 16:41	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/14/15 16:41	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 16:41	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 16:41	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 16:41	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 16:41	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 16:41	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 16:41	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 16:41	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 16:41	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/14/15 16:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 16:41	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 16:41	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 16:41	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 16:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 16:41	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 16:41	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 16:41	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 16:41	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 16:41	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 16:41	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 16:41	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 16:41	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-4-GW (45-46)
Date Collected: 10/07/15 09:18
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-28
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*103*		*78 - 125*		*10/14/15 16:41*	*1*
4-Bromofluorobenzene (Surr)	*98*		*61 - 120*		*10/14/15 16:41*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/14/15 16:41*	*1*
Dibromofluoromethane (Surr)	*101*		*79 - 120*		*10/14/15 16:41*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/13/15 13:06	10/14/15 10:05	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/13/15 13:06	10/14/15 10:05	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/13/15 13:06	10/14/15 10:05	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/13/15 13:06	10/14/15 10:05	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/13/15 13:06	10/14/15 10:05	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/13/15 13:06	10/14/15 10:05	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/13/15 13:06	10/14/15 10:05	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/13/15 13:06	10/14/15 10:05	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/13/15 13:06	10/14/15 10:05	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/13/15 13:06	10/14/15 10:05	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/13/15 13:06	10/14/15 10:05	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/13/15 13:06	10/14/15 10:05	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/13/15 13:06	10/14/15 10:05	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/13/15 13:06	10/14/15 10:05	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/13/15 13:06	10/14/15 10:05	1
3,3'-Dichlorobenzidine	4.6	U	4.6	0.33	ug/L		10/13/15 13:06	10/14/15 10:05	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/13/15 13:06	10/14/15 10:05	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/13/15 13:06	10/14/15 10:05	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/13/15 13:06	10/14/15 10:05	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/13/15 13:06	10/14/15 10:05	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/13/15 13:06	10/14/15 10:05	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/13/15 13:06	10/14/15 10:05	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/13/15 13:06	10/14/15 10:05	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/13/15 13:06	10/14/15 10:05	1
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/13/15 13:06	10/14/15 10:05	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/13/15 13:06	10/14/15 10:05	1
Acetophenone	**0.28**	**J**	0.93	0.13	ug/L		10/13/15 13:06	10/14/15 10:05	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/13/15 13:06	10/14/15 10:05	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/13/15 13:06	10/14/15 10:05	1
Benzaldehyde	0.93	U *	0.93	0.27	ug/L		10/13/15 13:06	10/14/15 10:05	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/13/15 13:06	10/14/15 10:05	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/13/15 13:06	10/14/15 10:05	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/13/15 13:06	10/14/15 10:05	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/13/15 13:06	10/14/15 10:05	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/13/15 13:06	10/14/15 10:05	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/13/15 13:06	10/14/15 10:05	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/13/15 13:06	10/14/15 10:05	1
Bis(2-ethylhexyl) phthalate	**1.6**	**J**	1.9	1.4	ug/L		10/13/15 13:06	10/14/15 10:05	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/13/15 13:06	10/14/15 10:05	1
Caprolactam	**58**	**B**	4.6	0.34	ug/L		10/13/15 13:06	10/14/15 10:05	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/13/15 13:06	10/14/15 10:05	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/13/15 13:06	10/14/15 10:05	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/13/15 13:06	10/14/15 10:05	1

Client Sample ID: VAP-4-GW (45-46)

Date Collected: 10/07/15 09:18
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-28

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/13/15 13:06	10/14/15 10:05	1
Diethyl phthalate	0.93	U	0.93	0.12	ug/L		10/13/15 13:06	10/14/15 10:05	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/13/15 13:06	10/14/15 10:05	1
Di-n-butyl phthalate	**1.5**		0.93	0.37	ug/L		10/13/15 13:06	10/14/15 10:05	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/13/15 13:06	10/14/15 10:05	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/13/15 13:06	10/14/15 10:05	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/13/15 13:06	10/14/15 10:05	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/13/15 13:06	10/14/15 10:05	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/13/15 13:06	10/14/15 10:05	1
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/13/15 13:06	10/14/15 10:05	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/13/15 13:06	10/14/15 10:05	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/13/15 13:06	10/14/15 10:05	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/13/15 13:06	10/14/15 10:05	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/13/15 13:06	10/14/15 10:05	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/13/15 13:06	10/14/15 10:05	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/13/15 13:06	10/14/15 10:05	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/13/15 13:06	10/14/15 10:05	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/13/15 13:06	10/14/15 10:05	1
Phenol	0.93	U	0.93	0.14	ug/L		10/13/15 13:06	10/14/15 10:05	1
Phenanthrene	**0.33**		0.19	0.029	ug/L		10/13/15 13:06	10/14/15 10:05	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/13/15 13:06	10/14/15 10:05	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/13/15 13:06	10/14/15 10:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*42*		*29 - 110*	*10/13/15 13:06*	*10/14/15 10:05*	*1*
2-Fluorophenol (Surr)	*27*		*15 - 110*	*10/13/15 13:06*	*10/14/15 10:05*	*1*
2,4,6-Tribromophenol (Surr)	*37*		*21 - 128*	*10/13/15 13:06*	*10/14/15 10:05*	*1*
Nitrobenzene-d5 (Surr)	*46*		*31 - 110*	*10/13/15 13:06*	*10/14/15 10:05*	*1*
Phenol-d5 (Surr)	*17*		*10 - 110*	*10/13/15 13:06*	*10/14/15 10:05*	*1*
Terphenyl-d14 (Surr)	*34*		*31 - 115*	*10/13/15 13:06*	*10/14/15 10:05*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**15**		10	2.9	ug/L		10/09/15 10:52	10/13/15 04:19	1
Barium	**1500**	**B**	200	1.0	ug/L		10/09/15 10:52	10/13/15 04:19	1
Cadmium	**2.1**		2.0	0.14	ug/L		10/09/15 10:52	10/13/15 04:19	1
Chromium	**690**		5.0	0.55	ug/L		10/09/15 10:52	10/13/15 04:19	1
Lead	**190**		3.0	1.9	ug/L		10/09/15 10:52	10/13/15 04:19	1
Selenium	**11**		5.0	4.0	ug/L		10/09/15 10:52	10/13/15 04:19	1
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:52	10/13/15 04:19	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.15**	**J**	0.20	0.090	ug/L		10/09/15 14:00	10/13/15 10:08	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-4-GW (48-49)
Date Collected: 10/07/15 09:55
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-29
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**1.7**	**J**	10	0.94	ug/L			10/13/15 20:52	1
Benzene	1.0	U	1.0	0.35	ug/L			10/13/15 20:52	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/13/15 20:52	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/13/15 20:52	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/13/15 20:52	1
2-Butanone (MEK)	**1.5**	**J**	10	0.53	ug/L			10/13/15 20:52	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/13/15 20:52	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/13/15 20:52	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/13/15 20:52	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/13/15 20:52	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/13/15 20:52	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/13/15 20:52	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/13/15 20:52	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/13/15 20:52	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/13/15 20:52	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/13/15 20:52	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/13/15 20:52	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/13/15 20:52	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/13/15 20:52	1
2-Hexanone	10	U	10	0.48	ug/L			10/13/15 20:52	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/13/15 20:52	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/13/15 20:52	1
Styrene	1.0	U	1.0	0.45	ug/L			10/13/15 20:52	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/13/15 20:52	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/13/15 20:52	1
Toluene	**0.26**	**J**	1.0	0.23	ug/L			10/13/15 20:52	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/13/15 20:52	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/13/15 20:52	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/13/15 20:52	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/13/15 20:52	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/13/15 20:52	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/13/15 20:52	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/13/15 20:52	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/13/15 20:52	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/13/15 20:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/13/15 20:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/13/15 20:52	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/13/15 20:52	1
Methyl acetate	10	U	10	2.3	ug/L			10/13/15 20:52	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/13/15 20:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/13/15 20:52	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/13/15 20:52	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/13/15 20:52	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/13/15 20:52	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/13/15 20:52	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/13/15 20:52	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/13/15 20:52	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/13/15 20:52	1

Client Sample ID: VAP-4-GW (48-49)

Date Collected: 10/07/15 09:55
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-29

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*93*		*78 - 125*		*10/13/15 20:52*	*1*
4-Bromofluorobenzene (Surr)	*85*		*61 - 120*		*10/13/15 20:52*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*10/13/15 20:52*	*1*
Dibromofluoromethane (Surr)	*98*		*79 - 120*		*10/13/15 20:52*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/09/15 09:05	10/11/15 17:03	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/09/15 09:05	10/11/15 17:03	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/09/15 09:05	10/11/15 17:03	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/09/15 09:05	10/11/15 17:03	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/09/15 09:05	10/11/15 17:03	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/09/15 09:05	10/11/15 17:03	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/09/15 09:05	10/11/15 17:03	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/09/15 09:05	10/11/15 17:03	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/09/15 09:05	10/11/15 17:03	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/09/15 09:05	10/11/15 17:03	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/09/15 09:05	10/11/15 17:03	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/09/15 09:05	10/11/15 17:03	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/09/15 09:05	10/11/15 17:03	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/09/15 09:05	10/11/15 17:03	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/09/15 09:05	10/11/15 17:03	1
3,3'-Dichlorobenzidine	4.6	U	4.6	0.33	ug/L		10/09/15 09:05	10/11/15 17:03	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/09/15 09:05	10/11/15 17:03	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/09/15 09:05	10/11/15 17:03	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/09/15 09:05	10/11/15 17:03	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/09/15 09:05	10/11/15 17:03	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/09/15 09:05	10/11/15 17:03	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/09/15 09:05	10/11/15 17:03	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/09/15 09:05	10/11/15 17:03	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/09/15 09:05	10/11/15 17:03	1
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/09/15 09:05	10/11/15 17:03	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/09/15 09:05	10/11/15 17:03	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/09/15 09:05	10/11/15 17:03	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/09/15 09:05	10/11/15 17:03	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/09/15 09:05	10/11/15 17:03	1
Benzaldehyde	0.93	U	0.93	0.27	ug/L		10/09/15 09:05	10/11/15 17:03	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/09/15 09:05	10/11/15 17:03	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/09/15 09:05	10/11/15 17:03	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/09/15 09:05	10/11/15 17:03	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/09/15 09:05	10/11/15 17:03	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/09/15 09:05	10/11/15 17:03	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/09/15 09:05	10/11/15 17:03	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/09/15 09:05	10/11/15 17:03	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	1.4	ug/L		10/09/15 09:05	10/11/15 17:03	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/09/15 09:05	10/11/15 17:03	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/09/15 09:05	10/11/15 17:03	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/09/15 09:05	10/11/15 17:03	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/09/15 09:05	10/11/15 17:03	1
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/09/15 09:05	10/11/15 17:03	1

Client Sample ID: VAP-4-GW (48-49)

Date Collected: 10/07/15 09:55
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-29

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	0.93	U	0.93	0.12	ug/L		10/09/15 09:05	10/11/15 17:03	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/09/15 09:05	10/11/15 17:03	1
Di-n-butyl phthalate	**0.94**		0.93	0.37	ug/L		10/09/15 09:05	10/11/15 17:03	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/09/15 09:05	10/11/15 17:03	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/09/15 09:05	10/11/15 17:03	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/09/15 09:05	10/11/15 17:03	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/09/15 09:05	10/11/15 17:03	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/09/15 09:05	10/11/15 17:03	1
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/09/15 09:05	10/11/15 17:03	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/09/15 09:05	10/11/15 17:03	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/09/15 09:05	10/11/15 17:03	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/09/15 09:05	10/11/15 17:03	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/09/15 09:05	10/11/15 17:03	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/09/15 09:05	10/11/15 17:03	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/09/15 09:05	10/11/15 17:03	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/09/15 09:05	10/11/15 17:03	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/09/15 09:05	10/11/15 17:03	1
Phenol	0.93	U	0.93	0.14	ug/L		10/09/15 09:05	10/11/15 17:03	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/09/15 09:05	10/11/15 17:03	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/09/15 09:05	10/11/15 17:03	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/09/15 09:05	10/11/15 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*38*		*29 - 110*	*10/09/15 09:05*	*10/11/15 17:03*	*1*
2-Fluorophenol (Surr)	*38*		*15 - 110*	*10/09/15 09:05*	*10/11/15 17:03*	*1*
2,4,6-Tribromophenol (Surr)	*33*		*21 - 128*	*10/09/15 09:05*	*10/11/15 17:03*	*1*
Nitrobenzene-d5 (Surr)	*29*	*X*	*31 - 110*	*10/09/15 09:05*	*10/11/15 17:03*	*1*
Phenol-d5 (Surr)	*32*		*10 - 110*	*10/09/15 09:05*	*10/11/15 17:03*	*1*
Terphenyl-d14 (Surr)	*34*		*31 - 115*	*10/09/15 09:05*	*10/11/15 17:03*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**110**	**B**	19	1.4	ug/L		10/09/15 09:05	10/12/15 13:53	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*36*		*29 - 110*	*10/09/15 09:05*	*10/12/15 13:53*	*4*
2-Fluorophenol (Surr)	*36*		*15 - 110*	*10/09/15 09:05*	*10/12/15 13:53*	*4*
2,4,6-Tribromophenol (Surr)	*24*		*21 - 128*	*10/09/15 09:05*	*10/12/15 13:53*	*4*
Nitrobenzene-d5 (Surr)	*27*	*X*	*31 - 110*	*10/09/15 09:05*	*10/12/15 13:53*	*4*
Phenol-d5 (Surr)	*28*		*10 - 110*	*10/09/15 09:05*	*10/12/15 13:53*	*4*
Terphenyl-d14 (Surr)	*31*		*31 - 115*	*10/09/15 09:05*	*10/12/15 13:53*	*4*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**56**		10	2.9	ug/L		10/09/15 10:52	10/13/15 04:23	1
Barium	**2400**	**B**	200	1.0	ug/L		10/09/15 10:52	10/13/15 04:23	1
Cadmium	**4.1**		2.0	0.14	ug/L		10/09/15 10:52	10/13/15 04:23	1
Chromium	**2000**		5.0	0.55	ug/L		10/09/15 10:52	10/13/15 04:23	1
Lead	**220**		3.0	1.9	ug/L		10/09/15 10:52	10/13/15 04:23	1
Selenium	**12**		5.0	4.0	ug/L		10/09/15 10:52	10/13/15 04:23	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-4-GW (48-49)
Date Collected: 10/07/15 09:55
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-29
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U L	5.0	0.92	ug/L		10/09/15 10:52	10/13/15 04:23	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.54		0.20	0.090	ug/L		10/09/15 14:00	10/13/15 10:12	1

Client Sample ID: VAP-5 (4-6)
Date Collected: 10/07/15 11:37
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-30
Matrix: Solid
Percent Solids: 80.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	18	U *	18	1.4	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Benzene	4.4	U	4.4	0.21	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Dichlorobromomethane	4.4	U	4.4	0.19	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Bromoform	4.4	U	4.4	0.34	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Bromomethane	4.4	U	4.4	0.63	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
2-Butanone (MEK)	**1.1**	**J B**	18	0.43	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Carbon disulfide	4.4	U	4.4	0.30	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Carbon tetrachloride	4.4	U	4.4	0.29	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Chlorobenzene	4.4	U	4.4	0.26	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Chloroethane	4.4	U	4.4	0.30	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Chloroform	4.4	U	4.4	0.19	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Chloromethane	4.4	U	4.4	1.2	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
1,1-Dichloroethane	4.4	U	4.4	1.1	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
1,2-Dichloroethane	4.4	U	4.4	0.18	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
1,1-Dichloroethene	4.4	U	4.4	0.43	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
1,2-Dichloropropane	4.4	U	4.4	0.25	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
cis-1,3-Dichloropropene	4.4	U	4.4	0.24	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
trans-1,3-Dichloropropene	4.4	U	4.4	0.19	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Ethylbenzene	4.4	U	4.4	0.28	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
2-Hexanone	18	U	18	0.62	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Methylene Chloride	4.4	U	4.4	0.94	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
4-Methyl-2-pentanone (MIBK)	18	U	18	0.26	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Styrene	4.4	U	4.4	0.24	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
1,1,2,2-Tetrachloroethane	4.4	U	4.4	0.14	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Tetrachloroethene	4.4	U	4.4	0.29	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Toluene	4.4	U	4.4	0.24	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Trichloroethene	4.4	U	4.4	0.23	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Vinyl chloride	4.4	U	4.4	0.35	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Xylenes, Total	8.9	U	8.9	0.56	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
1,1,1-Trichloroethane	4.4	U	4.4	0.23	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
1,1,2-Trichloroethane	4.4	U	4.4	0.43	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Cyclohexane	8.9	U	8.9	0.26	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
1,2-Dibromo-3-Chloropropane	8.9	U	8.9	1.6	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Ethylene Dibromide	4.4	U	4.4	0.22	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Dichlorodifluoromethane	4.4	U	4.4	0.35	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
cis-1,2-Dichloroethene	4.4	U	4.4	0.25	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
trans-1,2-Dichloroethene	4.4	U	4.4	0.33	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Isopropylbenzene	4.4	U	4.4	0.27	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Methyl acetate	8.9	U *	8.9	2.0	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Methyl tert-butyl ether	4.4	U	4.4	0.13	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	4.4	U	4.4	0.35	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
1,2,4-Trichlorobenzene	4.4	U	4.4	0.35	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
1,2-Dichlorobenzene	4.4	U	4.4	0.34	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
1,3-Dichlorobenzene	4.4	U	4.4	0.35	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
1,4-Dichlorobenzene	4.4	U	4.4	0.36	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Trichlorofluoromethane	4.4	U	4.4	0.23	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Chlorodibromomethane	4.4	U	4.4	0.14	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1
Methylcyclohexane	8.9	U	8.9	0.29	ug/Kg	☼	10/10/15 05:46	10/14/15 08:08	1

Client Sample ID: VAP-5 (4-6)

Date Collected: 10/07/15 11:37
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-30

Matrix: Solid
Percent Solids: 80.0

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*64 - 120*	*10/10/15 05:46*	*10/14/15 08:08*	*1*
4-Bromofluorobenzene (Surr)	*116*		*64 - 130*	*10/10/15 05:46*	*10/14/15 08:08*	*1*
Toluene-d8 (Surr)	*100*		*69 - 128*	*10/10/15 05:46*	*10/14/15 08:08*	*1*
Dibromofluoromethane (Surr)	*99*		*68 - 120*	*10/10/15 05:46*	*10/14/15 08:08*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	63	U	63	4.4	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
bis (2-chloroisopropyl) ether	130	U	130	12	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
2,4,5-Trichlorophenol	190	U	190	31	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
2,4,6-Trichlorophenol	190	U	190	11	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
2,4-Dichlorophenol	190	U	190	25	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
2,4-Dimethylphenol	190	U	190	25	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
2,4-Dinitrophenol	410	U	410	26	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
2,4-Dinitrotoluene	250	U	250	21	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
2,6-Dinitrotoluene	250	U	250	26	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
2-Chloronaphthalene	63	U	63	0.56	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
2-Chlorophenol	63	U	63	10	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
2-Methylnaphthalene	8.3	U	8.3	0.63	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
2-Methylphenol	250	U	250	14	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
2-Nitroaniline	250	U	250	11	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
2-Nitrophenol	63	U	63	10	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
3,3'-Dichlorobenzidine	130	U	130	23	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
3-Nitroaniline	250	U	250	20	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
4,6-Dinitro-2-methylphenol	190	U	190	12	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
4-Bromophenyl phenyl ether	63	U	63	16	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
4-Chloro-3-methylphenol	190	U	190	26	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
4-Chloroaniline	190	U	190	21	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
4-Chlorophenyl phenyl ether	63	U	63	16	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
4-Nitroaniline	250	U	250	33	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
4-Nitrophenol	410	U	410	21	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Acenaphthene	8.3	U	8.3	0.95	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Acenaphthylene	8.3	U	8.3	0.44	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Acetophenone	130	U	130	12	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Anthracene	8.3	U	8.3	0.98	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Atrazine	250	U	250	11	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Benzaldehyde	130	U	130	15	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Benzo[a]anthracene	8.3	U	8.3	0.79	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Benzo[a]pyrene	8.3	U	8.3	0.80	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Benzo[b]fluoranthene	8.3	U	8.3	0.74	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Benzo[g,h,i]perylene	8.3	U	8.3	0.44	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Benzo[k]fluoranthene	8.3	U	8.3	0.85	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Bis(2-chloroethoxy)methane	130	U	130	28	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Bis(2-chloroethyl)ether	130	U	130	2.5	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Bis(2-ethylhexyl) phthalate	88	U	88	24	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Butyl benzyl phthalate	88	U	88	13	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Caprolactam	410	U	410	46	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Carbazole	63	U	63	34	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Chrysene	8.3	U	8.3	1.4	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Dibenz(a,h)anthracene	8.3	U	8.3	0.83	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1

Client Sample ID: VAP-5 (4-6)

Date Collected: 10/07/15 11:37
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-30

Matrix: Solid
Percent Solids: 80.0

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	63	U	63	0.83	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Diethyl phthalate	88	U	88	20	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Dimethyl phthalate	88	U	88	21	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Di-n-butyl phthalate	88	U	88	19	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Di-n-octyl phthalate	88	U	88	9.9	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Fluoranthene	8.3	U	8.3	0.69	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Fluorene	8.3	U	8.3	0.66	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Hexachlorobenzene	8.3	U	8.3	2.6	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Hexachlorobutadiene	63	U	63	7.0	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Hexachlorocyclopentadiene	410	U	410	10	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Hexachloroethane	63	U	63	11	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Indeno[1,2,3-cd]pyrene	8.3	U	8.3	0.44	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Isophorone	63	U	63	16	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Naphthalene	8.3	U	8.3	1.0	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Nitrobenzene	130	U	130	2.8	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
N-Nitrosodi-n-propylamine	63	U	63	7.9	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
N-Nitrosodiphenylamine	63	U	63	26	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Pentachlorophenol	190	U	190	11	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Phenol	63	U	63	9.1	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Phenanthrene	8.3	U	8.3	0.91	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
Pyrene	8.3	U	8.3	0.55	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1
3 & 4 Methylphenol	500	U	500	25	ug/Kg	☼	10/14/15 11:39	10/16/15 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*60*		*24 - 110*	*10/14/15 11:39*	*10/16/15 16:58*	*1*
2-Fluorophenol (Surr)	*60*		*24 - 110*	*10/14/15 11:39*	*10/16/15 16:58*	*1*
2,4,6-Tribromophenol (Surr)	*23*		*10 - 110*	*10/14/15 11:39*	*10/16/15 16:58*	*1*
Nitrobenzene-d5 (Surr)	*56*		*20 - 110*	*10/14/15 11:39*	*10/16/15 16:58*	*1*
Phenol-d5 (Surr)	*60*		*26 - 110*	*10/14/15 11:39*	*10/16/15 16:58*	*1*
Terphenyl-d14 (Surr)	*72*		*36 - 110*	*10/14/15 11:39*	*10/16/15 16:58*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.1**		0.91	0.37	mg/Kg	☼	10/09/15 07:38	10/13/15 06:25	1
Barium	**110**		18	0.37	mg/Kg	☼	10/09/15 07:38	10/13/15 06:25	1
Cadmium	**0.11**	**J**	0.18	0.019	mg/Kg	☼	10/09/15 07:38	10/13/15 06:25	1
Chromium	**9.2**	**B**	0.45	0.068	mg/Kg	☼	10/09/15 07:38	10/13/15 06:25	1
Lead	**8.7**		0.27	0.18	mg/Kg	☼	10/09/15 07:38	10/13/15 06:25	1
Selenium	**0.44**	**J**	0.45	0.31	mg/Kg	☼	10/09/15 07:38	10/13/15 06:25	1
Silver	0.45	U	0.45	0.057	mg/Kg	☼	10/09/15 07:38	10/13/15 06:25	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11	U	0.11	0.015	mg/Kg	☼	10/09/15 10:00	10/13/15 12:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	1.0	U	1.0	0.33	mg/Kg	☼	10/09/15 11:05	10/12/15 15:22	1
Percent Solids	**80**		0.10	0.10	%			10/09/15 13:58	1
Percent Moisture	**20**		0.10	0.10	%			10/09/15 13:58	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-5-GW (15-16)
Date Collected: 10/07/15 12:00
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-31
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	80	U	80	7.5	ug/L			10/14/15 17:04	8
Benzene	8.0	U	8.0	2.8	ug/L			10/14/15 17:04	8
Dichlorobromomethane	8.0	U	8.0	2.3	ug/L			10/14/15 17:04	8
Bromoform	8.0	U	8.0	4.5	ug/L			10/14/15 17:04	8
Bromomethane	8.0	U	8.0	3.5	ug/L			10/14/15 17:04	8
2-Butanone (MEK)	80	U	80	4.2	ug/L			10/14/15 17:04	8
Carbon disulfide	8.0	U	8.0	3.0	ug/L			10/14/15 17:04	8
Carbon tetrachloride	8.0	U	8.0	3.4	ug/L			10/14/15 17:04	8
Chlorobenzene	8.0	U	8.0	2.0	ug/L			10/14/15 17:04	8
Chloroethane	8.0	U	8.0	2.6	ug/L			10/14/15 17:04	8
Chloroform	8.0	U	8.0	2.0	ug/L			10/14/15 17:04	8
Chloromethane	8.0	U	8.0	3.5	ug/L			10/14/15 17:04	8
1,1-Dichloroethane	8.0	U	8.0	2.4	ug/L			10/14/15 17:04	8
1,2-Dichloroethane	8.0	U	8.0	1.8	ug/L			10/14/15 17:04	8
1,1-Dichloroethene	8.0	U	8.0	3.6	ug/L			10/14/15 17:04	8
1,2-Dichloropropane	8.0	U	8.0	2.0	ug/L			10/14/15 17:04	8
cis-1,3-Dichloropropene	8.0	U	8.0	3.7	ug/L			10/14/15 17:04	8
trans-1,3-Dichloropropene	8.0	U	8.0	4.5	ug/L			10/14/15 17:04	8
Ethylbenzene	8.0	U	8.0	2.0	ug/L			10/14/15 17:04	8
2-Hexanone	80	U	80	3.8	ug/L			10/14/15 17:04	8
Methylene Chloride	8.0	U	8.0	2.6	ug/L			10/14/15 17:04	8
4-Methyl-2-pentanone (MIBK)	80	U	80	7.9	ug/L			10/14/15 17:04	8
Styrene	8.0	U	8.0	3.6	ug/L			10/14/15 17:04	8
1,1,2,2-Tetrachloroethane	8.0	U	8.0	1.8	ug/L			10/14/15 17:04	8
Tetrachloroethene	8.0	U	8.0	2.5	ug/L			10/14/15 17:04	8
Toluene	8.0	U	8.0	1.8	ug/L			10/14/15 17:04	8
Trichloroethene	**81**		8.0	1.8	ug/L			10/14/15 17:04	8
Vinyl chloride	8.0	U	8.0	2.3	ug/L			10/14/15 17:04	8
Xylenes, Total	16	U	16	4.2	ug/L			10/14/15 17:04	8
1,1,1-Trichloroethane	8.0	U	8.0	3.5	ug/L			10/14/15 17:04	8
1,1,2-Trichloroethane	8.0	U	8.0	1.9	ug/L			10/14/15 17:04	8
Cyclohexane	8.0	U	8.0	3.6	ug/L			10/14/15 17:04	8
1,2-Dibromo-3-Chloropropane	16	U	16	6.6	ug/L			10/14/15 17:04	8
Ethylene Dibromide	8.0	U	8.0	2.6	ug/L			10/14/15 17:04	8
Dichlorodifluoromethane	8.0	U	8.0	2.6	ug/L			10/14/15 17:04	8
cis-1,2-Dichloroethene	**220**		8.0	2.1	ug/L			10/14/15 17:04	8
trans-1,2-Dichloroethene	8.0	U	8.0	2.4	ug/L			10/14/15 17:04	8
Isopropylbenzene	8.0	U	8.0	2.8	ug/L			10/14/15 17:04	8
Methyl acetate	80	U	80	18	ug/L			10/14/15 17:04	8
Methyl tert-butyl ether	8.0	U	8.0	1.6	ug/L			10/14/15 17:04	8
1,1,2-Trichloro-1,2,2-trifluoroethane	8.0	U	8.0	3.6	ug/L			10/14/15 17:04	8
1,2,4-Trichlorobenzene	8.0	U	8.0	2.6	ug/L			10/14/15 17:04	8
1,2-Dichlorobenzene	8.0	U	8.0	2.0	ug/L			10/14/15 17:04	8
1,3-Dichlorobenzene	8.0	U	8.0	1.5	ug/L			10/14/15 17:04	8
1,4-Dichlorobenzene	8.0	U	8.0	2.2	ug/L			10/14/15 17:04	8
Trichlorofluoromethane	8.0	U	8.0	3.9	ug/L			10/14/15 17:04	8
Chlorodibromomethane	8.0	U	8.0	3.4	ug/L			10/14/15 17:04	8
Methylcyclohexane	8.0	U	8.0	3.4	ug/L			10/14/15 17:04	8

Client Sample ID: VAP-5-GW (15-16)

Date Collected: 10/07/15 12:00
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-31

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*78 - 125*		*10/14/15 17:04*	*8*
4-Bromofluorobenzene (Surr)	*97*		*61 - 120*		*10/14/15 17:04*	*8*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/14/15 17:04*	*8*
Dibromofluoromethane (Surr)	*102*		*79 - 120*		*10/14/15 17:04*	*8*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 17:26	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/09/15 09:05	10/11/15 17:26	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/09/15 09:05	10/11/15 17:26	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/09/15 09:05	10/11/15 17:26	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/09/15 09:05	10/11/15 17:26	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/09/15 09:05	10/11/15 17:26	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/09/15 09:05	10/11/15 17:26	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/09/15 09:05	10/11/15 17:26	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/09/15 09:05	10/11/15 17:26	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 17:26	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/09/15 09:05	10/11/15 17:26	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/09/15 09:05	10/11/15 17:26	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/09/15 09:05	10/11/15 17:26	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/09/15 09:05	10/11/15 17:26	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/09/15 09:05	10/11/15 17:26	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/09/15 09:05	10/11/15 17:26	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/09/15 09:05	10/11/15 17:26	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/09/15 09:05	10/11/15 17:26	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/09/15 09:05	10/11/15 17:26	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/09/15 09:05	10/11/15 17:26	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/09/15 09:05	10/11/15 17:26	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/09/15 09:05	10/11/15 17:26	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/09/15 09:05	10/11/15 17:26	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/09/15 09:05	10/11/15 17:26	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/09/15 09:05	10/11/15 17:26	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/09/15 09:05	10/11/15 17:26	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/09/15 09:05	10/11/15 17:26	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/09/15 09:05	10/11/15 17:26	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 17:26	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/09/15 09:05	10/11/15 17:26	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/09/15 09:05	10/11/15 17:26	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/09/15 09:05	10/11/15 17:26	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/09/15 09:05	10/11/15 17:26	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/09/15 09:05	10/11/15 17:26	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/09/15 09:05	10/11/15 17:26	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/09/15 09:05	10/11/15 17:26	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/09/15 09:05	10/11/15 17:26	1
Bis(2-ethylhexyl) phthalate	**1.7**	**J B**	2.0	1.5	ug/L		10/09/15 09:05	10/11/15 17:26	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/09/15 09:05	10/11/15 17:26	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/09/15 09:05	10/11/15 17:26	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/09/15 09:05	10/11/15 17:26	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/09/15 09:05	10/11/15 17:26	1
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/09/15 09:05	10/11/15 17:26	1

Client Sample ID: VAP-5-GW (15-16)

Date Collected: 10/07/15 12:00
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-31

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/09/15 09:05	10/11/15 17:26	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/09/15 09:05	10/11/15 17:26	1
Di-n-butyl phthalate	**0.72**	**J**	1.0	0.40	ug/L		10/09/15 09:05	10/11/15 17:26	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/09/15 09:05	10/11/15 17:26	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/09/15 09:05	10/11/15 17:26	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/09/15 09:05	10/11/15 17:26	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 17:26	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/09/15 09:05	10/11/15 17:26	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/09/15 09:05	10/11/15 17:26	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/09/15 09:05	10/11/15 17:26	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/09/15 09:05	10/11/15 17:26	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/09/15 09:05	10/11/15 17:26	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/09/15 09:05	10/11/15 17:26	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 17:26	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/09/15 09:05	10/11/15 17:26	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/09/15 09:05	10/11/15 17:26	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/09/15 09:05	10/11/15 17:26	1
Phenol	**6.1**		1.0	0.15	ug/L		10/09/15 09:05	10/11/15 17:26	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/09/15 09:05	10/11/15 17:26	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/09/15 09:05	10/11/15 17:26	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/09/15 09:05	10/11/15 17:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*39*		*29 - 110*	*10/09/15 09:05*	*10/11/15 17:26*	*1*
2-Fluorophenol (Surr)	*41*		*15 - 110*	*10/09/15 09:05*	*10/11/15 17:26*	*1*
2,4,6-Tribromophenol (Surr)	*36*		*21 - 128*	*10/09/15 09:05*	*10/11/15 17:26*	*1*
Nitrobenzene-d5 (Surr)	*45*		*31 - 110*	*10/09/15 09:05*	*10/11/15 17:26*	*1*
Phenol-d5 (Surr)	*34*		*10 - 110*	*10/09/15 09:05*	*10/11/15 17:26*	*1*
Terphenyl-d14 (Surr)	*30*	*X*	*31 - 115*	*10/09/15 09:05*	*10/11/15 17:26*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**120**	**B**	20	1.5	ug/L		10/09/15 09:05	10/12/15 13:06	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*39*		*29 - 110*	*10/09/15 09:05*	*10/12/15 13:06*	*4*
2-Fluorophenol (Surr)	*40*		*15 - 110*	*10/09/15 09:05*	*10/12/15 13:06*	*4*
2,4,6-Tribromophenol (Surr)	*26*		*21 - 128*	*10/09/15 09:05*	*10/12/15 13:06*	*4*
Nitrobenzene-d5 (Surr)	*42*		*31 - 110*	*10/09/15 09:05*	*10/12/15 13:06*	*4*
Phenol-d5 (Surr)	*31*		*10 - 110*	*10/09/15 09:05*	*10/12/15 13:06*	*4*
Terphenyl-d14 (Surr)	*30*	*X*	*31 - 115*	*10/09/15 09:05*	*10/12/15 13:06*	*4*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**14**		10	2.9	ug/L		10/09/15 10:52	10/13/15 04:27	1
Barium	**440**	**B**	200	1.0	ug/L		10/09/15 10:52	10/13/15 04:27	1
Cadmium	**1.0**	**J**	2.0	0.14	ug/L		10/09/15 10:52	10/13/15 04:27	1
Chromium	**100**		5.0	0.55	ug/L		10/09/15 10:52	10/13/15 04:27	1
Lead	**37**		3.0	1.9	ug/L		10/09/15 10:52	10/13/15 04:27	1
Selenium	5.0	U	5.0	4.0	ug/L		10/09/15 10:52	10/13/15 04:27	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-5-GW (15-16)
Date Collected: 10/07/15 12:00
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-31
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:52	10/13/15 04:27	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.0		0.20	0.090	ug/L		10/09/15 14:00	10/13/15 10:10	1

Client Sample ID: VAP-5-GW (20-21)
Date Collected: 10/07/15 12:28
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-32
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	100	U	100	9.4	ug/L			10/14/15 17:26	10
Benzene	10	U F2	10	3.5	ug/L			10/14/15 17:26	10
Dichlorobromomethane	10	U	10	2.9	ug/L			10/14/15 17:26	10
Bromoform	10	U	10	5.6	ug/L			10/14/15 17:26	10
Bromomethane	10	U	10	4.4	ug/L			10/14/15 17:26	10
2-Butanone (MEK)	100	U	100	5.3	ug/L			10/14/15 17:26	10
Carbon disulfide	10	U F2	10	3.8	ug/L			10/14/15 17:26	10
Carbon tetrachloride	10	U F2	10	4.3	ug/L			10/14/15 17:26	10
Chlorobenzene	10	U	10	2.5	ug/L			10/14/15 17:26	10
Chloroethane	10	U	10	3.2	ug/L			10/14/15 17:26	10
Chloroform	10	U F2	10	2.5	ug/L			10/14/15 17:26	10
Chloromethane	10	U	10	4.4	ug/L			10/14/15 17:26	10
1,1-Dichloroethane	10	U F2	10	3.0	ug/L			10/14/15 17:26	10
1,2-Dichloroethane	10	U	10	2.3	ug/L			10/14/15 17:26	10
1,1-Dichloroethene	10	U F2	10	4.5	ug/L			10/14/15 17:26	10
1,2-Dichloropropane	10	U	10	2.5	ug/L			10/14/15 17:26	10
cis-1,3-Dichloropropene	10	U	10	4.6	ug/L			10/14/15 17:26	10
trans-1,3-Dichloropropene	10	U	10	5.6	ug/L			10/14/15 17:26	10
Ethylbenzene	10	U F2	10	2.5	ug/L			10/14/15 17:26	10
2-Hexanone	100	U	100	4.8	ug/L			10/14/15 17:26	10
Methylene Chloride	10	U F2	10	3.3	ug/L			10/14/15 17:26	10
4-Methyl-2-pentanone (MIBK)	100	U	100	9.9	ug/L			10/14/15 17:26	10
Styrene	10	U	10	4.5	ug/L			10/14/15 17:26	10
1,1,2,2-Tetrachloroethane	10	U	10	2.2	ug/L			10/14/15 17:26	10
Tetrachloroethene	10	U F2	10	3.1	ug/L			10/14/15 17:26	10
Toluene	10	U F2	10	2.3	ug/L			10/14/15 17:26	10
Trichloroethene	**130**		10	2.2	ug/L			10/14/15 17:26	10
Vinyl chloride	10	U	10	2.9	ug/L			10/14/15 17:26	10
Xylenes, Total	20	U F2	20	5.2	ug/L			10/14/15 17:26	10
1,1,1-Trichloroethane	10	U F2	10	4.4	ug/L			10/14/15 17:26	10
1,1,2-Trichloroethane	10	U	10	2.4	ug/L			10/14/15 17:26	10
Cyclohexane	10	U F2	10	4.5	ug/L			10/14/15 17:26	10
1,2-Dibromo-3-Chloropropane	20	U	20	8.2	ug/L			10/14/15 17:26	10
Ethylene Dibromide	10	U	10	3.2	ug/L			10/14/15 17:26	10
Dichlorodifluoromethane	10	U	10	3.2	ug/L			10/14/15 17:26	10
cis-1,2-Dichloroethene	**390**	**F1**	10	2.6	ug/L			10/14/15 17:26	10
trans-1,2-Dichloroethene	10	U F2	10	3.0	ug/L			10/14/15 17:26	10
Isopropylbenzene	10	U F2	10	3.5	ug/L			10/14/15 17:26	10
Methyl acetate	100	U	100	23	ug/L			10/14/15 17:26	10
Methyl tert-butyl ether	10	U F2	10	2.0	ug/L			10/14/15 17:26	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10	4.5	ug/L			10/14/15 17:26	10
1,2,4-Trichlorobenzene	10	U	10	3.2	ug/L			10/14/15 17:26	10
1,2-Dichlorobenzene	10	U	10	2.5	ug/L			10/14/15 17:26	10
1,3-Dichlorobenzene	10	U	10	1.9	ug/L			10/14/15 17:26	10
1,4-Dichlorobenzene	10	U	10	2.7	ug/L			10/14/15 17:26	10
Trichlorofluoromethane	10	U	10	4.9	ug/L			10/14/15 17:26	10
Chlorodibromomethane	10	U	10	4.3	ug/L			10/14/15 17:26	10
Methylcyclohexane	10	U F2	10	4.3	ug/L			10/14/15 17:26	10

Client Sample ID: VAP-5-GW (20-21)

Date Collected: 10/07/15 12:28
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-32

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*78 - 125*		*10/14/15 17:26*	*10*
4-Bromofluorobenzene (Surr)	*98*		*61 - 120*		*10/14/15 17:26*	*10*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/14/15 17:26*	*10*
Dibromofluoromethane (Surr)	*105*		*79 - 120*		*10/14/15 17:26*	*10*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/09/15 09:05	10/11/15 17:50	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/09/15 09:05	10/11/15 17:50	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/09/15 09:05	10/11/15 17:50	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/09/15 09:05	10/11/15 17:50	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/09/15 09:05	10/11/15 17:50	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/09/15 09:05	10/11/15 17:50	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/09/15 09:05	10/11/15 17:50	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/09/15 09:05	10/11/15 17:50	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/09/15 09:05	10/11/15 17:50	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/09/15 09:05	10/11/15 17:50	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/09/15 09:05	10/11/15 17:50	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/09/15 09:05	10/11/15 17:50	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/09/15 09:05	10/11/15 17:50	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/09/15 09:05	10/11/15 17:50	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/09/15 09:05	10/11/15 17:50	1
3,3'-Dichlorobenzidine	4.6	U	4.6	0.33	ug/L		10/09/15 09:05	10/11/15 17:50	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/09/15 09:05	10/11/15 17:50	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/09/15 09:05	10/11/15 17:50	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/09/15 09:05	10/11/15 17:50	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/09/15 09:05	10/11/15 17:50	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/09/15 09:05	10/11/15 17:50	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/09/15 09:05	10/11/15 17:50	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/09/15 09:05	10/11/15 17:50	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/09/15 09:05	10/11/15 17:50	1
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/09/15 09:05	10/11/15 17:50	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/09/15 09:05	10/11/15 17:50	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/09/15 09:05	10/11/15 17:50	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/09/15 09:05	10/11/15 17:50	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/09/15 09:05	10/11/15 17:50	1
Benzaldehyde	0.93	U	0.93	0.27	ug/L		10/09/15 09:05	10/11/15 17:50	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/09/15 09:05	10/11/15 17:50	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/09/15 09:05	10/11/15 17:50	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/09/15 09:05	10/11/15 17:50	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/09/15 09:05	10/11/15 17:50	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/09/15 09:05	10/11/15 17:50	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/09/15 09:05	10/11/15 17:50	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/09/15 09:05	10/11/15 17:50	1
Bis(2-ethylhexyl) phthalate	**3.1**	**B**	1.9	1.4	ug/L		10/09/15 09:05	10/11/15 17:50	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/09/15 09:05	10/11/15 17:50	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/09/15 09:05	10/11/15 17:50	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/09/15 09:05	10/11/15 17:50	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/09/15 09:05	10/11/15 17:50	1
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/09/15 09:05	10/11/15 17:50	1

Client Sample ID: VAP-5-GW (20-21)

Date Collected: 10/07/15 12:28
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-32

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	**0.22**	**J**	0.93	0.12	ug/L		10/09/15 09:05	10/11/15 17:50	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/09/15 09:05	10/11/15 17:50	1
Di-n-butyl phthalate	**1.1**		0.93	0.37	ug/L		10/09/15 09:05	10/11/15 17:50	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/09/15 09:05	10/11/15 17:50	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/09/15 09:05	10/11/15 17:50	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/09/15 09:05	10/11/15 17:50	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/09/15 09:05	10/11/15 17:50	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/09/15 09:05	10/11/15 17:50	1
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/09/15 09:05	10/11/15 17:50	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/09/15 09:05	10/11/15 17:50	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/09/15 09:05	10/11/15 17:50	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/09/15 09:05	10/11/15 17:50	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/09/15 09:05	10/11/15 17:50	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/09/15 09:05	10/11/15 17:50	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/09/15 09:05	10/11/15 17:50	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/09/15 09:05	10/11/15 17:50	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/09/15 09:05	10/11/15 17:50	1
Phenol	0.93	U	0.93	0.14	ug/L		10/09/15 09:05	10/11/15 17:50	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/09/15 09:05	10/11/15 17:50	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/09/15 09:05	10/11/15 17:50	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/09/15 09:05	10/11/15 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*42*		*29 - 110*	*10/09/15 09:05*	*10/11/15 17:50*	*1*
2-Fluorophenol (Surr)	*48*		*15 - 110*	*10/09/15 09:05*	*10/11/15 17:50*	*1*
2,4,6-Tribromophenol (Surr)	*37*		*21 - 128*	*10/09/15 09:05*	*10/11/15 17:50*	*1*
Nitrobenzene-d5 (Surr)	*48*		*31 - 110*	*10/09/15 09:05*	*10/11/15 17:50*	*1*
Phenol-d5 (Surr)	*40*		*10 - 110*	*10/09/15 09:05*	*10/11/15 17:50*	*1*
Terphenyl-d14 (Surr)	*34*		*31 - 115*	*10/09/15 09:05*	*10/11/15 17:50*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**260**	**B**	46	3.4	ug/L		10/09/15 09:05	10/12/15 15:03	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*40*		*29 - 110*	*10/09/15 09:05*	*10/12/15 15:03*	*10*
2-Fluorophenol (Surr)	*44*		*15 - 110*	*10/09/15 09:05*	*10/12/15 15:03*	*10*
2,4,6-Tribromophenol (Surr)	*22*		*21 - 128*	*10/09/15 09:05*	*10/12/15 15:03*	*10*
Nitrobenzene-d5 (Surr)	*40*		*31 - 110*	*10/09/15 09:05*	*10/12/15 15:03*	*10*
Phenol-d5 (Surr)	*36*		*10 - 110*	*10/09/15 09:05*	*10/12/15 15:03*	*10*
Terphenyl-d14 (Surr)	*32*		*31 - 115*	*10/09/15 09:05*	*10/12/15 15:03*	*10*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**35**		10	2.9	ug/L		10/09/15 10:52	10/13/15 04:31	1
Barium	**140**	**J B**	200	1.0	ug/L		10/09/15 10:52	10/13/15 04:31	1
Cadmium	**0.26**	**J**	2.0	0.14	ug/L		10/09/15 10:52	10/13/15 04:31	1
Chromium	**40**		5.0	0.55	ug/L		10/09/15 10:52	10/13/15 04:31	1
Lead	**11**		3.0	1.9	ug/L		10/09/15 10:52	10/13/15 04:31	1
Selenium	5.0	U	5.0	4.0	ug/L		10/09/15 10:52	10/13/15 04:31	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-5-GW (20-21)
Date Collected: 10/07/15 12:28
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-32
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:52	10/13/15 04:31	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20		0.20	0.090	ug/L		10/09/15 14:00	10/13/15 10:14	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-5-GW (25-26)
Date Collected: 10/07/15 12:57
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-33
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	50	U	50	4.7	ug/L			10/15/15 14:53	5
Benzene	5.0	U	5.0	1.8	ug/L			10/15/15 14:53	5
Dichlorobromomethane	5.0	U	5.0	1.5	ug/L			10/15/15 14:53	5
Bromoform	5.0	U	5.0	2.8	ug/L			10/15/15 14:53	5
Bromomethane	5.0	U	5.0	2.2	ug/L			10/15/15 14:53	5
2-Butanone (MEK)	50	U	50	2.7	ug/L			10/15/15 14:53	5
Carbon disulfide	5.0	U	5.0	1.9	ug/L			10/15/15 14:53	5
Carbon tetrachloride	5.0	U	5.0	2.2	ug/L			10/15/15 14:53	5
Chlorobenzene	5.0	U	5.0	1.3	ug/L			10/15/15 14:53	5
Chloroethane	5.0	U	5.0	1.6	ug/L			10/15/15 14:53	5
Chloroform	5.0	U	5.0	1.3	ug/L			10/15/15 14:53	5
Chloromethane	5.0	U	5.0	2.2	ug/L			10/15/15 14:53	5
1,1-Dichloroethane	5.0	U	5.0	1.5	ug/L			10/15/15 14:53	5
1,2-Dichloroethane	5.0	U	5.0	1.2	ug/L			10/15/15 14:53	5
1,1-Dichloroethene	5.0	U	5.0	2.3	ug/L			10/15/15 14:53	5
1,2-Dichloropropane	5.0	U	5.0	1.3	ug/L			10/15/15 14:53	5
cis-1,3-Dichloropropene	5.0	U	5.0	2.3	ug/L			10/15/15 14:53	5
trans-1,3-Dichloropropene	5.0	U	5.0	2.8	ug/L			10/15/15 14:53	5
Ethylbenzene	5.0	U	5.0	1.3	ug/L			10/15/15 14:53	5
2-Hexanone	50	U	50	2.4	ug/L			10/15/15 14:53	5
Methylene Chloride	5.0	U	5.0	1.7	ug/L			10/15/15 14:53	5
4-Methyl-2-pentanone (MIBK)	50	U	50	5.0	ug/L			10/15/15 14:53	5
Styrene	5.0	U	5.0	2.3	ug/L			10/15/15 14:53	5
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1.1	ug/L			10/15/15 14:53	5
Tetrachloroethene	5.0	U	5.0	1.6	ug/L			10/15/15 14:53	5
Toluene	5.0	U	5.0	1.2	ug/L			10/15/15 14:53	5
Trichloroethene	**57**		5.0	1.1	ug/L			10/15/15 14:53	5
Vinyl chloride	5.0	U	5.0	1.5	ug/L			10/15/15 14:53	5
Xylenes, Total	10	U	10	2.6	ug/L			10/15/15 14:53	5
1,1,1-Trichloroethane	5.0	U	5.0	2.2	ug/L			10/15/15 14:53	5
1,1,2-Trichloroethane	5.0	U	5.0	1.2	ug/L			10/15/15 14:53	5
Cyclohexane	5.0	U	5.0	2.3	ug/L			10/15/15 14:53	5
1,2-Dibromo-3-Chloropropane	10	U	10	4.1	ug/L			10/15/15 14:53	5
Ethylene Dibromide	5.0	U	5.0	1.6	ug/L			10/15/15 14:53	5
Dichlorodifluoromethane	5.0	U	5.0	1.6	ug/L			10/15/15 14:53	5
cis-1,2-Dichloroethene	**130**		5.0	1.3	ug/L			10/15/15 14:53	5
trans-1,2-Dichloroethene	5.0	U	5.0	1.5	ug/L			10/15/15 14:53	5
Isopropylbenzene	5.0	U	5.0	1.8	ug/L			10/15/15 14:53	5
Methyl acetate	50	U	50	11	ug/L			10/15/15 14:53	5
Methyl tert-butyl ether	5.0	U	5.0	1.0	ug/L			10/15/15 14:53	5
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	2.3	ug/L			10/15/15 14:53	5
1,2,4-Trichlorobenzene	5.0	U	5.0	1.6	ug/L			10/15/15 14:53	5
1,2-Dichlorobenzene	5.0	U	5.0	1.3	ug/L			10/15/15 14:53	5
1,3-Dichlorobenzene	5.0	U	5.0	0.95	ug/L			10/15/15 14:53	5
1,4-Dichlorobenzene	5.0	U	5.0	1.4	ug/L			10/15/15 14:53	5
Trichlorofluoromethane	5.0	U	5.0	2.5	ug/L			10/15/15 14:53	5
Chlorodibromomethane	5.0	U	5.0	2.2	ug/L			10/15/15 14:53	5
Methylcyclohexane	5.0	U	5.0	2.2	ug/L			10/15/15 14:53	5

Client Sample ID: VAP-5-GW (25-26)

Date Collected: 10/07/15 12:57
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-33

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*78 - 125*		*10/15/15 14:53*	*5*
4-Bromofluorobenzene (Surr)	*96*		*61 - 120*		*10/15/15 14:53*	*5*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/15/15 14:53*	*5*
Dibromofluoromethane (Surr)	*97*		*79 - 120*		*10/15/15 14:53*	*5*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/09/15 09:05	10/11/15 18:13	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:05	10/11/15 18:13	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/09/15 09:05	10/11/15 18:13	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/09/15 09:05	10/11/15 18:13	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/09/15 09:05	10/11/15 18:13	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/09/15 09:05	10/11/15 18:13	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/09/15 09:05	10/11/15 18:13	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/09/15 09:05	10/11/15 18:13	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/09/15 09:05	10/11/15 18:13	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/09/15 09:05	10/11/15 18:13	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/09/15 09:05	10/11/15 18:13	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/09/15 09:05	10/11/15 18:13	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/09/15 09:05	10/11/15 18:13	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/09/15 09:05	10/11/15 18:13	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/09/15 09:05	10/11/15 18:13	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/09/15 09:05	10/11/15 18:13	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/09/15 09:05	10/11/15 18:13	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/09/15 09:05	10/11/15 18:13	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/09/15 09:05	10/11/15 18:13	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/09/15 09:05	10/11/15 18:13	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/09/15 09:05	10/11/15 18:13	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/09/15 09:05	10/11/15 18:13	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/09/15 09:05	10/11/15 18:13	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/09/15 09:05	10/11/15 18:13	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/09/15 09:05	10/11/15 18:13	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/09/15 09:05	10/11/15 18:13	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/09/15 09:05	10/11/15 18:13	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/09/15 09:05	10/11/15 18:13	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/09/15 09:05	10/11/15 18:13	1
Benzaldehyde	0.96	U	0.96	0.28	ug/L		10/09/15 09:05	10/11/15 18:13	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/09/15 09:05	10/11/15 18:13	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/09/15 09:05	10/11/15 18:13	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/09/15 09:05	10/11/15 18:13	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/09/15 09:05	10/11/15 18:13	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/09/15 09:05	10/11/15 18:13	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/09/15 09:05	10/11/15 18:13	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:05	10/11/15 18:13	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	1.5	ug/L		10/09/15 09:05	10/11/15 18:13	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/09/15 09:05	10/11/15 18:13	1
Caprolactam	**20**	**B**	4.8	0.36	ug/L		10/09/15 09:05	10/11/15 18:13	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/09/15 09:05	10/11/15 18:13	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/09/15 09:05	10/11/15 18:13	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/09/15 09:05	10/11/15 18:13	1

Client Sample ID: VAP-5-GW (25-26)
Date Collected: 10/07/15 12:57
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-33
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/09/15 09:05	10/11/15 18:13	1
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/09/15 09:05	10/11/15 18:13	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/09/15 09:05	10/11/15 18:13	1
Di-n-butyl phthalate	**0.60**	**J**	0.96	0.38	ug/L		10/09/15 09:05	10/11/15 18:13	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/09/15 09:05	10/11/15 18:13	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/09/15 09:05	10/11/15 18:13	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/09/15 09:05	10/11/15 18:13	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:05	10/11/15 18:13	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/09/15 09:05	10/11/15 18:13	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/09/15 09:05	10/11/15 18:13	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/09/15 09:05	10/11/15 18:13	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/09/15 09:05	10/11/15 18:13	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/09/15 09:05	10/11/15 18:13	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/09/15 09:05	10/11/15 18:13	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:05	10/11/15 18:13	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/09/15 09:05	10/11/15 18:13	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/09/15 09:05	10/11/15 18:13	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/09/15 09:05	10/11/15 18:13	1
Phenol	0.96	U	0.96	0.14	ug/L		10/09/15 09:05	10/11/15 18:13	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/09/15 09:05	10/11/15 18:13	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/09/15 09:05	10/11/15 18:13	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/09/15 09:05	10/11/15 18:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*48*		*29 - 110*	*10/09/15 09:05*	*10/11/15 18:13*	*1*
2-Fluorophenol (Surr)	*50*		*15 - 110*	*10/09/15 09:05*	*10/11/15 18:13*	*1*
2,4,6-Tribromophenol (Surr)	*35*		*21 - 128*	*10/09/15 09:05*	*10/11/15 18:13*	*1*
Nitrobenzene-d5 (Surr)	*52*		*31 - 110*	*10/09/15 09:05*	*10/11/15 18:13*	*1*
Phenol-d5 (Surr)	*39*		*10 - 110*	*10/09/15 09:05*	*10/11/15 18:13*	*1*
Terphenyl-d14 (Surr)	*45*		*31 - 115*	*10/09/15 09:05*	*10/11/15 18:13*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**9.2**	**J**	10	2.9	ug/L		10/09/15 10:52	10/13/15 04:36	1
Barium	**240**	**B**	200	1.0	ug/L		10/09/15 10:52	10/13/15 04:36	1
Cadmium	**0.18**	**J**	2.0	0.14	ug/L		10/09/15 10:52	10/13/15 04:36	1
Chromium	**55**		5.0	0.55	ug/L		10/09/15 10:52	10/13/15 04:36	1
Lead	**23**		3.0	1.9	ug/L		10/09/15 10:52	10/13/15 04:36	1
Selenium	5.0	U	5.0	4.0	ug/L		10/09/15 10:52	10/13/15 04:36	1
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:52	10/13/15 04:36	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.11**	**J**	0.20	0.090	ug/L		10/09/15 14:00	10/13/15 10:17	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-5-GW (30-31)
Date Collected: 10/07/15 13:31
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-34
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/15/15 14:25	1
Benzene	1.0	U	1.0	0.35	ug/L			10/15/15 14:25	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/15/15 14:25	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/15/15 14:25	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/15/15 14:25	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/15/15 14:25	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/15/15 14:25	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/15/15 14:25	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/15/15 14:25	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/15/15 14:25	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/15/15 14:25	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/15/15 14:25	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/15/15 14:25	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/15/15 14:25	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/15/15 14:25	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/15/15 14:25	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/15/15 14:25	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/15/15 14:25	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/15/15 14:25	1
2-Hexanone	10	U	10	0.48	ug/L			10/15/15 14:25	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/15/15 14:25	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/15/15 14:25	1
Styrene	1.0	U	1.0	0.45	ug/L			10/15/15 14:25	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/15/15 14:25	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/15/15 14:25	1
Toluene	1.0	U	1.0	0.23	ug/L			10/15/15 14:25	1
Trichloroethene	**1.3**		1.0	0.22	ug/L			10/15/15 14:25	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/15/15 14:25	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/15/15 14:25	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/15/15 14:25	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/15/15 14:25	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/15/15 14:25	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/15/15 14:25	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/15/15 14:25	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/15/15 14:25	1
cis-1,2-Dichloroethene	**2.8**		1.0	0.26	ug/L			10/15/15 14:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/15/15 14:25	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/15/15 14:25	1
Methyl acetate	10	U	10	2.3	ug/L			10/15/15 14:25	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/15/15 14:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/15/15 14:25	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/15/15 14:25	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/15/15 14:25	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/15/15 14:25	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/15/15 14:25	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/15/15 14:25	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/15/15 14:25	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/15/15 14:25	1

Client Sample ID: VAP-5-GW (30-31)

Date Collected: 10/07/15 13:31
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-34

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*78 - 125*		*10/15/15 14:25*	*1*
4-Bromofluorobenzene (Surr)	*86*		*61 - 120*		*10/15/15 14:25*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*10/15/15 14:25*	*1*
Dibromofluoromethane (Surr)	*98*		*79 - 120*		*10/15/15 14:25*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/09/15 09:05	10/11/15 18:36	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:05	10/11/15 18:36	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/09/15 09:05	10/11/15 18:36	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/09/15 09:05	10/11/15 18:36	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/09/15 09:05	10/11/15 18:36	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/09/15 09:05	10/11/15 18:36	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/09/15 09:05	10/11/15 18:36	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/09/15 09:05	10/11/15 18:36	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/09/15 09:05	10/11/15 18:36	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/09/15 09:05	10/11/15 18:36	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/09/15 09:05	10/11/15 18:36	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/09/15 09:05	10/11/15 18:36	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/09/15 09:05	10/11/15 18:36	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/09/15 09:05	10/11/15 18:36	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/09/15 09:05	10/11/15 18:36	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/09/15 09:05	10/11/15 18:36	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/09/15 09:05	10/11/15 18:36	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/09/15 09:05	10/11/15 18:36	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/09/15 09:05	10/11/15 18:36	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/09/15 09:05	10/11/15 18:36	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/09/15 09:05	10/11/15 18:36	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/09/15 09:05	10/11/15 18:36	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/09/15 09:05	10/11/15 18:36	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/09/15 09:05	10/11/15 18:36	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/09/15 09:05	10/11/15 18:36	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/09/15 09:05	10/11/15 18:36	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/09/15 09:05	10/11/15 18:36	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/09/15 09:05	10/11/15 18:36	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/09/15 09:05	10/11/15 18:36	1
Benzaldehyde	0.96	U	0.96	0.28	ug/L		10/09/15 09:05	10/11/15 18:36	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/09/15 09:05	10/11/15 18:36	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/09/15 09:05	10/11/15 18:36	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/09/15 09:05	10/11/15 18:36	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/09/15 09:05	10/11/15 18:36	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/09/15 09:05	10/11/15 18:36	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/09/15 09:05	10/11/15 18:36	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/09/15 09:05	10/11/15 18:36	1
Bis(2-ethylhexyl) phthalate	**1.7**	**J B**	1.9	1.5	ug/L		10/09/15 09:05	10/11/15 18:36	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/09/15 09:05	10/11/15 18:36	1
Caprolactam	**52**	**B**	4.8	0.36	ug/L		10/09/15 09:05	10/11/15 18:36	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/09/15 09:05	10/11/15 18:36	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/09/15 09:05	10/11/15 18:36	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/09/15 09:05	10/11/15 18:36	1

Client Sample ID: VAP-5-GW (30-31)
Date Collected: 10/07/15 13:31
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-34
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/09/15 09:05	10/11/15 18:36	1
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/09/15 09:05	10/11/15 18:36	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/09/15 09:05	10/11/15 18:36	1
Di-n-butyl phthalate	**0.53**	**J**	0.96	0.38	ug/L		10/09/15 09:05	10/11/15 18:36	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/09/15 09:05	10/11/15 18:36	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/09/15 09:05	10/11/15 18:36	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/09/15 09:05	10/11/15 18:36	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:05	10/11/15 18:36	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/09/15 09:05	10/11/15 18:36	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/09/15 09:05	10/11/15 18:36	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/09/15 09:05	10/11/15 18:36	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/09/15 09:05	10/11/15 18:36	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/09/15 09:05	10/11/15 18:36	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/09/15 09:05	10/11/15 18:36	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/09/15 09:05	10/11/15 18:36	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/09/15 09:05	10/11/15 18:36	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/09/15 09:05	10/11/15 18:36	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/09/15 09:05	10/11/15 18:36	1
Phenol	0.96	U	0.96	0.14	ug/L		10/09/15 09:05	10/11/15 18:36	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/09/15 09:05	10/11/15 18:36	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/09/15 09:05	10/11/15 18:36	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/09/15 09:05	10/11/15 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*41*		*29 - 110*	*10/09/15 09:05*	*10/11/15 18:36*	*1*
2-Fluorophenol (Surr)	*44*		*15 - 110*	*10/09/15 09:05*	*10/11/15 18:36*	*1*
2,4,6-Tribromophenol (Surr)	*33*		*21 - 128*	*10/09/15 09:05*	*10/11/15 18:36*	*1*
Nitrobenzene-d5 (Surr)	*46*		*31 - 110*	*10/09/15 09:05*	*10/11/15 18:36*	*1*
Phenol-d5 (Surr)	*36*		*10 - 110*	*10/09/15 09:05*	*10/11/15 18:36*	*1*
Terphenyl-d14 (Surr)	*34*		*31 - 115*	*10/09/15 09:05*	*10/11/15 18:36*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.8**	**J**	10	2.9	ug/L		10/09/15 10:52	10/13/15 04:48	1
Barium	**380**	**B**	200	1.0	ug/L		10/09/15 10:52	10/13/15 04:48	1
Cadmium	**3.6**		2.0	0.14	ug/L		10/09/15 10:52	10/13/15 04:48	1
Chromium	**210**		5.0	0.55	ug/L		10/09/15 10:52	10/13/15 04:48	1
Lead	**96**		3.0	1.9	ug/L		10/09/15 10:52	10/13/15 04:48	1
Selenium	**29**		5.0	4.0	ug/L		10/09/15 10:52	10/13/15 04:48	1
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:52	10/13/15 04:48	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.28**		0.20	0.090	ug/L		10/09/15 14:00	10/13/15 10:19	1

Client Sample ID: VAP-5-GW (35-36)
Date Collected: 10/07/15 13:57
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-35
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/15/15 14:47	1
Benzene	1.0	U	1.0	0.35	ug/L			10/15/15 14:47	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/15/15 14:47	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/15/15 14:47	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/15/15 14:47	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/15/15 14:47	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/15/15 14:47	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/15/15 14:47	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/15/15 14:47	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/15/15 14:47	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/15/15 14:47	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/15/15 14:47	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/15/15 14:47	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/15/15 14:47	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/15/15 14:47	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/15/15 14:47	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/15/15 14:47	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/15/15 14:47	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/15/15 14:47	1
2-Hexanone	10	U	10	0.48	ug/L			10/15/15 14:47	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/15/15 14:47	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/15/15 14:47	1
Styrene	1.0	U	1.0	0.45	ug/L			10/15/15 14:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/15/15 14:47	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/15/15 14:47	1
Toluene	1.0	U	1.0	0.23	ug/L			10/15/15 14:47	1
Trichloroethene	**0.27**	**J**	1.0	0.22	ug/L			10/15/15 14:47	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/15/15 14:47	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/15/15 14:47	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/15/15 14:47	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/15/15 14:47	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/15/15 14:47	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/15/15 14:47	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/15/15 14:47	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/15/15 14:47	1
cis-1,2-Dichloroethene	**0.46**	**J**	1.0	0.26	ug/L			10/15/15 14:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/15/15 14:47	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/15/15 14:47	1
Methyl acetate	10	U	10	2.3	ug/L			10/15/15 14:47	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/15/15 14:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/15/15 14:47	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/15/15 14:47	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/15/15 14:47	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/15/15 14:47	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/15/15 14:47	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/15/15 14:47	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/15/15 14:47	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/15/15 14:47	1

Client Sample ID: VAP-5-GW (35-36)

Date Collected: 10/07/15 13:57
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-35

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*78 - 125*		*10/15/15 14:47*	*1*
4-Bromofluorobenzene (Surr)	*90*		*61 - 120*		*10/15/15 14:47*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*10/15/15 14:47*	*1*
Dibromofluoromethane (Surr)	*99*		*79 - 120*		*10/15/15 14:47*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 19:00	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/09/15 09:05	10/11/15 19:00	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/09/15 09:05	10/11/15 19:00	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/09/15 09:05	10/11/15 19:00	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/09/15 09:05	10/11/15 19:00	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/09/15 09:05	10/11/15 19:00	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/09/15 09:05	10/11/15 19:00	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/09/15 09:05	10/11/15 19:00	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/09/15 09:05	10/11/15 19:00	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 19:00	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/09/15 09:05	10/11/15 19:00	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/09/15 09:05	10/11/15 19:00	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/09/15 09:05	10/11/15 19:00	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/09/15 09:05	10/11/15 19:00	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/09/15 09:05	10/11/15 19:00	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/09/15 09:05	10/11/15 19:00	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/09/15 09:05	10/11/15 19:00	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/09/15 09:05	10/11/15 19:00	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/09/15 09:05	10/11/15 19:00	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/09/15 09:05	10/11/15 19:00	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/09/15 09:05	10/11/15 19:00	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/09/15 09:05	10/11/15 19:00	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/09/15 09:05	10/11/15 19:00	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/09/15 09:05	10/11/15 19:00	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/09/15 09:05	10/11/15 19:00	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/09/15 09:05	10/11/15 19:00	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/09/15 09:05	10/11/15 19:00	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/09/15 09:05	10/11/15 19:00	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 19:00	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/09/15 09:05	10/11/15 19:00	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/09/15 09:05	10/11/15 19:00	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/09/15 09:05	10/11/15 19:00	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/09/15 09:05	10/11/15 19:00	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/09/15 09:05	10/11/15 19:00	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/09/15 09:05	10/11/15 19:00	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/09/15 09:05	10/11/15 19:00	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/09/15 09:05	10/11/15 19:00	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	1.5	ug/L		10/09/15 09:05	10/11/15 19:00	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/09/15 09:05	10/11/15 19:00	1
Caprolactam	**30**	**B**	5.0	0.37	ug/L		10/09/15 09:05	10/11/15 19:00	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/09/15 09:05	10/11/15 19:00	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/09/15 09:05	10/11/15 19:00	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/09/15 09:05	10/11/15 19:00	1

Client Sample ID: VAP-5-GW (35-36)

Date Collected: 10/07/15 13:57
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-35

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/09/15 09:05	10/11/15 19:00	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/09/15 09:05	10/11/15 19:00	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/09/15 09:05	10/11/15 19:00	1
Di-n-butyl phthalate	**0.57**	**J**	1.0	0.40	ug/L		10/09/15 09:05	10/11/15 19:00	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/09/15 09:05	10/11/15 19:00	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/09/15 09:05	10/11/15 19:00	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/09/15 09:05	10/11/15 19:00	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 19:00	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/09/15 09:05	10/11/15 19:00	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/09/15 09:05	10/11/15 19:00	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/09/15 09:05	10/11/15 19:00	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/09/15 09:05	10/11/15 19:00	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/09/15 09:05	10/11/15 19:00	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/09/15 09:05	10/11/15 19:00	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 19:00	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/09/15 09:05	10/11/15 19:00	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/09/15 09:05	10/11/15 19:00	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/09/15 09:05	10/11/15 19:00	1
Phenol	1.0	U	1.0	0.15	ug/L		10/09/15 09:05	10/11/15 19:00	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/09/15 09:05	10/11/15 19:00	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/09/15 09:05	10/11/15 19:00	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/09/15 09:05	10/11/15 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*31*		*29 - 110*	*10/09/15 09:05*	*10/11/15 19:00*	*1*
2-Fluorophenol (Surr)	*37*		*15 - 110*	*10/09/15 09:05*	*10/11/15 19:00*	*1*
2,4,6-Tribromophenol (Surr)	*21*		*21 - 128*	*10/09/15 09:05*	*10/11/15 19:00*	*1*
Nitrobenzene-d5 (Surr)	*33*		*31 - 110*	*10/09/15 09:05*	*10/11/15 19:00*	*1*
Phenol-d5 (Surr)	*31*		*10 - 110*	*10/09/15 09:05*	*10/11/15 19:00*	*1*
Terphenyl-d14 (Surr)	*33*		*31 - 115*	*10/09/15 09:05*	*10/11/15 19:00*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**12**		10	2.9	ug/L		10/09/15 10:52	10/13/15 04:52	1
Barium	**280**	**B**	200	1.0	ug/L		10/09/15 10:52	10/13/15 04:52	1
Cadmium	**0.48**	**J**	2.0	0.14	ug/L		10/09/15 10:52	10/13/15 04:52	1
Chromium	**48**		5.0	0.55	ug/L		10/09/15 10:52	10/13/15 04:52	1
Lead	**30**		3.0	1.9	ug/L		10/09/15 10:52	10/13/15 04:52	1
Selenium	5.0	U	5.0	4.0	ug/L		10/09/15 10:52	10/13/15 04:52	1
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:52	10/13/15 04:52	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.15**	**J**	0.20	0.090	ug/L		10/09/15 14:00	10/13/15 10:22	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-5-GW (40-41)
Date Collected: 10/07/15 14:43
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-36
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/15/15 16:07	1
Benzene	1.0	U	1.0	0.35	ug/L			10/15/15 16:07	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/15/15 16:07	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/15/15 16:07	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/15/15 16:07	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/15/15 16:07	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/15/15 16:07	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/15/15 16:07	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/15/15 16:07	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/15/15 16:07	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/15/15 16:07	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/15/15 16:07	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/15/15 16:07	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/15/15 16:07	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/15/15 16:07	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/15/15 16:07	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/15/15 16:07	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/15/15 16:07	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/15/15 16:07	1
2-Hexanone	10	U	10	0.48	ug/L			10/15/15 16:07	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/15/15 16:07	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/15/15 16:07	1
Styrene	1.0	U	1.0	0.45	ug/L			10/15/15 16:07	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/15/15 16:07	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/15/15 16:07	1
Toluene	1.0	U	1.0	0.23	ug/L			10/15/15 16:07	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/15/15 16:07	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/15/15 16:07	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/15/15 16:07	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/15/15 16:07	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/15/15 16:07	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/15/15 16:07	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/15/15 16:07	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/15/15 16:07	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/15/15 16:07	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/15/15 16:07	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/15/15 16:07	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/15/15 16:07	1
Methyl acetate	10	U	10	2.3	ug/L			10/15/15 16:07	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/15/15 16:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/15/15 16:07	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/15/15 16:07	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/15/15 16:07	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/15/15 16:07	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/15/15 16:07	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/15/15 16:07	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/15/15 16:07	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/15/15 16:07	1

Client Sample ID: VAP-5-GW (40-41)

Date Collected: 10/07/15 14:43
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-36

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*78 - 125*		*10/15/15 16:07*	*1*
4-Bromofluorobenzene (Surr)	*85*		*61 - 120*		*10/15/15 16:07*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*10/15/15 16:07*	*1*
Dibromofluoromethane (Surr)	*97*		*79 - 120*		*10/15/15 16:07*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 19:23	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/09/15 09:05	10/11/15 19:23	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/09/15 09:05	10/11/15 19:23	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/09/15 09:05	10/11/15 19:23	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/09/15 09:05	10/11/15 19:23	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/09/15 09:05	10/11/15 19:23	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/09/15 09:05	10/11/15 19:23	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/09/15 09:05	10/11/15 19:23	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/09/15 09:05	10/11/15 19:23	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 19:23	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/09/15 09:05	10/11/15 19:23	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/09/15 09:05	10/11/15 19:23	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/09/15 09:05	10/11/15 19:23	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/09/15 09:05	10/11/15 19:23	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/09/15 09:05	10/11/15 19:23	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/09/15 09:05	10/11/15 19:23	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/09/15 09:05	10/11/15 19:23	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/09/15 09:05	10/11/15 19:23	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/09/15 09:05	10/11/15 19:23	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/09/15 09:05	10/11/15 19:23	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/09/15 09:05	10/11/15 19:23	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/09/15 09:05	10/11/15 19:23	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/09/15 09:05	10/11/15 19:23	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/09/15 09:05	10/11/15 19:23	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/09/15 09:05	10/11/15 19:23	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/09/15 09:05	10/11/15 19:23	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/09/15 09:05	10/11/15 19:23	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/09/15 09:05	10/11/15 19:23	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 19:23	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/09/15 09:05	10/11/15 19:23	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/09/15 09:05	10/11/15 19:23	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/09/15 09:05	10/11/15 19:23	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/09/15 09:05	10/11/15 19:23	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/09/15 09:05	10/11/15 19:23	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/09/15 09:05	10/11/15 19:23	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/09/15 09:05	10/11/15 19:23	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/09/15 09:05	10/11/15 19:23	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	1.5	ug/L		10/09/15 09:05	10/11/15 19:23	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/09/15 09:05	10/11/15 19:23	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/09/15 09:05	10/11/15 19:23	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/09/15 09:05	10/11/15 19:23	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/09/15 09:05	10/11/15 19:23	1
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/09/15 09:05	10/11/15 19:23	1

Client Sample ID: VAP-5-GW (40-41)
Date Collected: 10/07/15 14:43
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-36
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/09/15 09:05	10/11/15 19:23	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/09/15 09:05	10/11/15 19:23	1
Di-n-butyl phthalate	**0.71**	**J**	1.0	0.40	ug/L		10/09/15 09:05	10/11/15 19:23	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/09/15 09:05	10/11/15 19:23	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/09/15 09:05	10/11/15 19:23	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/09/15 09:05	10/11/15 19:23	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 19:23	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/09/15 09:05	10/11/15 19:23	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/09/15 09:05	10/11/15 19:23	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/09/15 09:05	10/11/15 19:23	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/09/15 09:05	10/11/15 19:23	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/09/15 09:05	10/11/15 19:23	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/09/15 09:05	10/11/15 19:23	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 19:23	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/09/15 09:05	10/11/15 19:23	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/09/15 09:05	10/11/15 19:23	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/09/15 09:05	10/11/15 19:23	1
Phenol	1.0	U	1.0	0.15	ug/L		10/09/15 09:05	10/11/15 19:23	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/09/15 09:05	10/11/15 19:23	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/09/15 09:05	10/11/15 19:23	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/09/15 09:05	10/11/15 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*31*		*29 - 110*	*10/09/15 09:05*	*10/11/15 19:23*	*1*
2-Fluorophenol (Surr)	*38*		*15 - 110*	*10/09/15 09:05*	*10/11/15 19:23*	*1*
2,4,6-Tribromophenol (Surr)	*24*		*21 - 128*	*10/09/15 09:05*	*10/11/15 19:23*	*1*
Nitrobenzene-d5 (Surr)	*34*		*31 - 110*	*10/09/15 09:05*	*10/11/15 19:23*	*1*
Phenol-d5 (Surr)	*32*		*10 - 110*	*10/09/15 09:05*	*10/11/15 19:23*	*1*
Terphenyl-d14 (Surr)	*24*	*X*	*31 - 115*	*10/09/15 09:05*	*10/11/15 19:23*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**320**	**B**	50	3.7	ug/L		10/09/15 09:05	10/12/15 14:16	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*30*		*29 - 110*	*10/09/15 09:05*	*10/12/15 14:16*	*10*
2-Fluorophenol (Surr)	*34*		*15 - 110*	*10/09/15 09:05*	*10/12/15 14:16*	*10*
2,4,6-Tribromophenol (Surr)	*13*	*X*	*21 - 128*	*10/09/15 09:05*	*10/12/15 14:16*	*10*
Nitrobenzene-d5 (Surr)	*30*	*X*	*31 - 110*	*10/09/15 09:05*	*10/12/15 14:16*	*10*
Phenol-d5 (Surr)	*29*		*10 - 110*	*10/09/15 09:05*	*10/12/15 14:16*	*10*
Terphenyl-d14 (Surr)	*24*	*X*	*31 - 115*	*10/09/15 09:05*	*10/12/15 14:16*	*10*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**14**		10	2.9	ug/L		10/09/15 10:52	10/13/15 04:56	1
Barium	**190**	**J B**	200	1.0	ug/L		10/09/15 10:52	10/13/15 04:56	1
Cadmium	**0.66**	**J**	2.0	0.14	ug/L		10/09/15 10:52	10/13/15 04:56	1
Chromium	**33**		5.0	0.55	ug/L		10/09/15 10:52	10/13/15 04:56	1
Lead	**18**		3.0	1.9	ug/L		10/09/15 10:52	10/13/15 04:56	1
Selenium	5.0	U	5.0	4.0	ug/L		10/09/15 10:52	10/13/15 04:56	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-5-GW (40-41)
Date Collected: 10/07/15 14:43
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-36
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:52	10/13/15 04:56	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/09/15 14:00	10/13/15 10:24	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-5-GW (45-46)
Date Collected: 10/07/15 15:15
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-37
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/15/15 16:32	1
Benzene	1.0	U	1.0	0.35	ug/L			10/15/15 16:32	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/15/15 16:32	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/15/15 16:32	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/15/15 16:32	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/15/15 16:32	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/15/15 16:32	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/15/15 16:32	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/15/15 16:32	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/15/15 16:32	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/15/15 16:32	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/15/15 16:32	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/15/15 16:32	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/15/15 16:32	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/15/15 16:32	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/15/15 16:32	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/15/15 16:32	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/15/15 16:32	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/15/15 16:32	1
2-Hexanone	10	U	10	0.48	ug/L			10/15/15 16:32	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/15/15 16:32	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/15/15 16:32	1
Styrene	1.0	U	1.0	0.45	ug/L			10/15/15 16:32	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/15/15 16:32	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/15/15 16:32	1
Toluene	1.0	U	1.0	0.23	ug/L			10/15/15 16:32	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/15/15 16:32	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/15/15 16:32	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/15/15 16:32	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/15/15 16:32	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/15/15 16:32	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/15/15 16:32	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/15/15 16:32	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/15/15 16:32	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/15/15 16:32	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/15/15 16:32	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/15/15 16:32	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/15/15 16:32	1
Methyl acetate	10	U	10	2.3	ug/L			10/15/15 16:32	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/15/15 16:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/15/15 16:32	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/15/15 16:32	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/15/15 16:32	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/15/15 16:32	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/15/15 16:32	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/15/15 16:32	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/15/15 16:32	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/15/15 16:32	1

Client Sample ID: VAP-5-GW (45-46)

Date Collected: 10/07/15 15:15
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-37

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*78 - 125*		*10/15/15 16:32*	*1*
4-Bromofluorobenzene (Surr)	*82*		*61 - 120*		*10/15/15 16:32*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*10/15/15 16:32*	*1*
Dibromofluoromethane (Surr)	*97*		*79 - 120*		*10/15/15 16:32*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/12/15 15:27	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/09/15 09:05	10/12/15 15:27	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/09/15 09:05	10/12/15 15:27	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/09/15 09:05	10/12/15 15:27	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/09/15 09:05	10/12/15 15:27	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/09/15 09:05	10/12/15 15:27	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/09/15 09:05	10/12/15 15:27	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/09/15 09:05	10/12/15 15:27	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/09/15 09:05	10/12/15 15:27	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/12/15 15:27	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/09/15 09:05	10/12/15 15:27	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/09/15 09:05	10/12/15 15:27	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/09/15 09:05	10/12/15 15:27	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/09/15 09:05	10/12/15 15:27	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/09/15 09:05	10/12/15 15:27	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/09/15 09:05	10/12/15 15:27	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/09/15 09:05	10/12/15 15:27	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/09/15 09:05	10/12/15 15:27	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/09/15 09:05	10/12/15 15:27	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/09/15 09:05	10/12/15 15:27	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/09/15 09:05	10/12/15 15:27	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/09/15 09:05	10/12/15 15:27	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/09/15 09:05	10/12/15 15:27	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/09/15 09:05	10/12/15 15:27	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/09/15 09:05	10/12/15 15:27	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/09/15 09:05	10/12/15 15:27	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/09/15 09:05	10/12/15 15:27	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/09/15 09:05	10/12/15 15:27	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/12/15 15:27	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/09/15 09:05	10/12/15 15:27	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/09/15 09:05	10/12/15 15:27	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/09/15 09:05	10/12/15 15:27	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/09/15 09:05	10/12/15 15:27	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/09/15 09:05	10/12/15 15:27	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/09/15 09:05	10/12/15 15:27	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/09/15 09:05	10/12/15 15:27	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/09/15 09:05	10/12/15 15:27	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	1.5	ug/L		10/09/15 09:05	10/12/15 15:27	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/09/15 09:05	10/12/15 15:27	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/09/15 09:05	10/12/15 15:27	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/09/15 09:05	10/12/15 15:27	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/09/15 09:05	10/12/15 15:27	1
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/09/15 09:05	10/12/15 15:27	1

Client Sample ID: VAP-5-GW (45-46)

Date Collected: 10/07/15 15:15
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-37

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/09/15 09:05	10/12/15 15:27	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/09/15 09:05	10/12/15 15:27	1
Di-n-butyl phthalate	**0.83**	**J**	1.0	0.40	ug/L		10/09/15 09:05	10/12/15 15:27	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/09/15 09:05	10/12/15 15:27	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/09/15 09:05	10/12/15 15:27	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/09/15 09:05	10/12/15 15:27	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/12/15 15:27	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/09/15 09:05	10/12/15 15:27	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/09/15 09:05	10/12/15 15:27	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/09/15 09:05	10/12/15 15:27	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/09/15 09:05	10/12/15 15:27	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/09/15 09:05	10/12/15 15:27	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/09/15 09:05	10/12/15 15:27	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/12/15 15:27	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/09/15 09:05	10/12/15 15:27	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/09/15 09:05	10/12/15 15:27	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/09/15 09:05	10/12/15 15:27	1
Phenol	1.0	U	1.0	0.15	ug/L		10/09/15 09:05	10/12/15 15:27	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/09/15 09:05	10/12/15 15:27	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/09/15 09:05	10/12/15 15:27	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/09/15 09:05	10/12/15 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*37*		*29 - 110*	*10/09/15 09:05*	*10/12/15 15:27*	*1*
2-Fluorophenol (Surr)	*46*		*15 - 110*	*10/09/15 09:05*	*10/12/15 15:27*	*1*
2,4,6-Tribromophenol (Surr)	*32*		*21 - 128*	*10/09/15 09:05*	*10/12/15 15:27*	*1*
Nitrobenzene-d5 (Surr)	*43*		*31 - 110*	*10/09/15 09:05*	*10/12/15 15:27*	*1*
Phenol-d5 (Surr)	*40*		*10 - 110*	*10/09/15 09:05*	*10/12/15 15:27*	*1*
Terphenyl-d14 (Surr)	*35*		*31 - 115*	*10/09/15 09:05*	*10/12/15 15:27*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**150**	**B**	20	1.5	ug/L		10/09/15 09:05	10/12/15 15:51	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*38*		*29 - 110*	*10/09/15 09:05*	*10/12/15 15:51*	*4*
2-Fluorophenol (Surr)	*48*		*15 - 110*	*10/09/15 09:05*	*10/12/15 15:51*	*4*
2,4,6-Tribromophenol (Surr)	*24*		*21 - 128*	*10/09/15 09:05*	*10/12/15 15:51*	*4*
Nitrobenzene-d5 (Surr)	*43*		*31 - 110*	*10/09/15 09:05*	*10/12/15 15:51*	*4*
Phenol-d5 (Surr)	*42*		*10 - 110*	*10/09/15 09:05*	*10/12/15 15:51*	*4*
Terphenyl-d14 (Surr)	*36*		*31 - 115*	*10/09/15 09:05*	*10/12/15 15:51*	*4*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**16**		10	2.9	ug/L		10/09/15 10:52	10/13/15 05:00	1
Barium	**220**	**B**	200	1.0	ug/L		10/09/15 10:52	10/13/15 05:00	1
Cadmium	**0.68**	**J**	2.0	0.14	ug/L		10/09/15 10:52	10/13/15 05:00	1
Chromium	**54**		5.0	0.55	ug/L		10/09/15 10:52	10/13/15 05:00	1
Lead	**28**		3.0	1.9	ug/L		10/09/15 10:52	10/13/15 05:00	1
Selenium	5.0	U	5.0	4.0	ug/L		10/09/15 10:52	10/13/15 05:00	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-5-GW (45-46)
Date Collected: 10/07/15 15:15
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-37
Matrix: Water

Method: 6010B - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:52	10/13/15 05:00	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/09/15 14:00	10/13/15 10:30	1

Client Sample ID: VAP-5-GW (49-50)

Date Collected: 10/07/15 15:40
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-38

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/15/15 16:58	1
Benzene	1.0	U	1.0	0.35	ug/L			10/15/15 16:58	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/15/15 16:58	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/15/15 16:58	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/15/15 16:58	1
2-Butanone (MEK)	**2.3**	**J**	10	0.53	ug/L			10/15/15 16:58	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/15/15 16:58	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/15/15 16:58	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/15/15 16:58	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/15/15 16:58	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/15/15 16:58	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/15/15 16:58	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/15/15 16:58	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/15/15 16:58	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/15/15 16:58	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/15/15 16:58	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/15/15 16:58	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/15/15 16:58	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/15/15 16:58	1
2-Hexanone	10	U	10	0.48	ug/L			10/15/15 16:58	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/15/15 16:58	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/15/15 16:58	1
Styrene	1.0	U	1.0	0.45	ug/L			10/15/15 16:58	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/15/15 16:58	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/15/15 16:58	1
Toluene	1.0	U	1.0	0.23	ug/L			10/15/15 16:58	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/15/15 16:58	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/15/15 16:58	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/15/15 16:58	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/15/15 16:58	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/15/15 16:58	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/15/15 16:58	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/15/15 16:58	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/15/15 16:58	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/15/15 16:58	1
cis-1,2-Dichloroethene	**0.27**	**J**	1.0	0.26	ug/L			10/15/15 16:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/15/15 16:58	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/15/15 16:58	1
Methyl acetate	10	U	10	2.3	ug/L			10/15/15 16:58	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/15/15 16:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/15/15 16:58	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/15/15 16:58	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/15/15 16:58	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/15/15 16:58	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/15/15 16:58	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/15/15 16:58	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/15/15 16:58	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/15/15 16:58	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: VAP-5-GW (49-50)
Date Collected: 10/07/15 15:40
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-38
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		78 - 125		10/15/15 16:58	1
4-Bromofluorobenzene (Surr)	83		61 - 120		10/15/15 16:58	1
Toluene-d8 (Surr)	93		80 - 120		10/15/15 16:58	1
Dibromofluoromethane (Surr)	97		79 - 120		10/15/15 16:58	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: TB-03 (100715)
Date Collected: 10/07/15 00:00
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-39
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.2	J	10	0.94	ug/L			10/15/15 17:22	1
Benzene	1.0	U	1.0	0.35	ug/L			10/15/15 17:22	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/15/15 17:22	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/15/15 17:22	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/15/15 17:22	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/15/15 17:22	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/15/15 17:22	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/15/15 17:22	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/15/15 17:22	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/15/15 17:22	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/15/15 17:22	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/15/15 17:22	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/15/15 17:22	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/15/15 17:22	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/15/15 17:22	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/15/15 17:22	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/15/15 17:22	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/15/15 17:22	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/15/15 17:22	1
2-Hexanone	10	U	10	0.48	ug/L			10/15/15 17:22	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/15/15 17:22	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/15/15 17:22	1
Styrene	1.0	U	1.0	0.45	ug/L			10/15/15 17:22	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/15/15 17:22	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/15/15 17:22	1
Toluene	1.0	U	1.0	0.23	ug/L			10/15/15 17:22	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/15/15 17:22	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/15/15 17:22	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/15/15 17:22	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/15/15 17:22	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/15/15 17:22	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/15/15 17:22	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/15/15 17:22	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/15/15 17:22	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/15/15 17:22	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/15/15 17:22	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/15/15 17:22	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/15/15 17:22	1
Methyl acetate	10	U	10	2.3	ug/L			10/15/15 17:22	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/15/15 17:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/15/15 17:22	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/15/15 17:22	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/15/15 17:22	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/15/15 17:22	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/15/15 17:22	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/15/15 17:22	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/15/15 17:22	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/15/15 17:22	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: TB-03 (100715)
Date Collected: 10/07/15 00:00
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-39
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		78 - 125		10/15/15 17:22	1
4-Bromofluorobenzene (Surr)	82		61 - 120		10/15/15 17:22	1
Toluene-d8 (Surr)	93		80 - 120		10/15/15 17:22	1
Dibromofluoromethane (Surr)	97		79 - 120		10/15/15 17:22	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: TB-04 (100715)
Date Collected: 10/07/15 00:00
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-40
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	3.9	J	10	0.94	ug/L			10/15/15 17:47	1
Benzene	1.0	U	1.0	0.35	ug/L			10/15/15 17:47	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/15/15 17:47	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/15/15 17:47	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/15/15 17:47	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/15/15 17:47	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/15/15 17:47	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/15/15 17:47	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/15/15 17:47	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/15/15 17:47	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/15/15 17:47	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/15/15 17:47	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/15/15 17:47	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/15/15 17:47	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/15/15 17:47	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/15/15 17:47	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/15/15 17:47	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/15/15 17:47	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/15/15 17:47	1
2-Hexanone	10	U	10	0.48	ug/L			10/15/15 17:47	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/15/15 17:47	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/15/15 17:47	1
Styrene	1.0	U	1.0	0.45	ug/L			10/15/15 17:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/15/15 17:47	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/15/15 17:47	1
Toluene	1.0	U	1.0	0.23	ug/L			10/15/15 17:47	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/15/15 17:47	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/15/15 17:47	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/15/15 17:47	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/15/15 17:47	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/15/15 17:47	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/15/15 17:47	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/15/15 17:47	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/15/15 17:47	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/15/15 17:47	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/15/15 17:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/15/15 17:47	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/15/15 17:47	1
Methyl acetate	10	U	10	2.3	ug/L			10/15/15 17:47	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/15/15 17:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/15/15 17:47	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/15/15 17:47	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/15/15 17:47	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/15/15 17:47	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/15/15 17:47	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/15/15 17:47	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/15/15 17:47	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/15/15 17:47	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: TB-04 (100715)
Date Collected: 10/07/15 00:00
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-40
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		78 - 125		10/15/15 17:47	1
4-Bromofluorobenzene (Surr)	81		61 - 120		10/15/15 17:47	1
Toluene-d8 (Surr)	95		80 - 120		10/15/15 17:47	1
Dibromofluoromethane (Surr)	94		79 - 120		10/15/15 17:47	1

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(64-120)	(64-130)	(69-128)	(68-120)
240-56328-2	VAP-2 (2-4)	99	113	99	97
240-56328-12	VAP-3 (1-2)	110	117	104	105
240-56328-12 MS	VAP-3 (1-2)	110	118	103	106
240-56328-12 MSD	VAP-3 (1-2)	105	113	107	106
240-56328-21	VAP-4 (6-8)	109	117	102	108
240-56328-30	VAP-5 (4-6)	105	116	100	99
LCS 240-201750/8	Lab Control Sample	99	113	102	103
MB 240-201750/9	Method Blank	103	117	110	107

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(78-125)	(61-120)	(80-120)	(79-120)
240-56328-1	TB-02 (100515)	101	87	95	103
240-56328-3	VAP-2 GW (15-16)	103	87	92	102
240-56328-4	VAP-2 GW (20-21)	103	92	95	103
240-56328-5	VAP-2 GW (25-26)	102	90	94	102
240-56328-6	VAP-2 GW (30-31)	104	88	92	102
240-56328-7	VAP-2 GW (35-36)	101	91	94	101
240-56328-7 MS	VAP-2 GW (35-36)	98	101	101	98
240-56328-7 MSD	VAP-2 GW (35-36)	99	99	100	96
240-56328-8	VAP-2 GW (40-41)	103	89	93	105
240-56328-9	VAP-2 GW (45-46)	102	88	95	100
240-56328-10	VAP-2 GW (49-50)	105	90	93	104
240-56328-11	DUP-GW-01 (100515)	107	86	94	105
240-56328-13	VAP-3-GW (15-16)	107	87	94	105
240-56328-14	VAP-3-GW (20-21)	104	90	92	103
240-56328-15	VAP-3-GW (25-26)	106	90	91	103
240-56328-16	VAP-3-GW (30-31)	103	92	93	103
240-56328-17	VAP-3-GW (35-36)	105	96	95	105
240-56328-18	VAP-3-GW (40-41)	101	92	95	100
240-56328-19	VAP-3-GW (45-46)	103	90	94	102
240-56328-20	VAP-3-GW (49-50)	104	90	94	103
240-56328-22	VAP-4-GW (15-16)	105	87	95	102
240-56328-23	VAP-4-GW (20-21)	104	87	98	103
240-56328-24	VAP-4-GW (25-26)	100	102	95	107
240-56328-25	VAP-4-GW (30-31)	101	98	98	98
240-56328-26	VAP-4-GW (35-36)	103	96	96	99
240-56328-27	VAP-4-GW (40-41)	103	95	95	100
240-56328-28	VAP-4-GW (45-46)	103	98	96	101
240-56328-29	VAP-4-GW (48-49)	93	85	93	98

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(78-125)	(61-120)	(80-120)	(79-120)
240-56328-31	VAP-5-GW (15-16)	101	97	97	102
240-56328-32	VAP-5-GW (20-21)	101	98	95	105
240-56328-32 MS	VAP-5-GW (20-21)	94	108	103	99
240-56328-32 MSD	VAP-5-GW (20-21)	92	107	99	105
240-56328-33	VAP-5-GW (25-26)	105	96	98	97
240-56328-34	VAP-5-GW (30-31)	93	86	92	98
240-56328-35	VAP-5-GW (35-36)	94	90	93	99
240-56328-36	VAP-5-GW (40-41)	92	85	92	97
240-56328-37	VAP-5-GW (45-46)	92	82	93	97
240-56328-38	VAP-5-GW (49-50)	92	83	93	97
240-56328-39	TB-03 (100715)	97	82	93	97
240-56328-40	TB-04 (100715)	92	81	95	94
LCS 240-201613/4	Lab Control Sample	93	99	100	98
LCS 240-201682/4	Lab Control Sample	91	94	101	95
LCS 240-201796/4	Lab Control Sample	97	109	102	110
LCS 240-202014/4	Lab Control Sample	93	96	100	97
LCS 240-202028/4	Lab Control Sample	93	104	99	98
MB 240-201613/6	Method Blank	100	88	98	102
MB 240-201682/6	Method Blank	102	87	93	102
MB 240-201796/6	Method Blank	103	99	95	101
MB 240-202014/6	Method Blank	96	84	92	101
MB 240-202028/6	Method Blank	103	103	95	104

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(24-110)	(24-110)	(10-110)	(20-110)	(26-110)	(36-110)
240-56328-2	VAP-2 (2-4)	75	71	13	66	70	87
240-56328-12	VAP-3 (1-2)	67	68	46	64	68	75
240-56328-12 MS	VAP-3 (1-2)	68	68	47	67	70	86
240-56328-12 MSD	VAP-3 (1-2)	56	51	41	50	57	63
240-56328-21	VAP-4 (6-8)	74	71	23	67	70	84
240-56328-30	VAP-5 (4-6)	60	60	23	56	60	72
LCS 240-201082/23-A	Lab Control Sample	79	78	61	76	77	89
LCS 240-201836/9-A	Lab Control Sample	72	73	60	76	73	82
MB 240-201082/22-A	Method Blank	76	74	46	73	76	80
MB 240-201836/8-A	Method Blank	69	69	46	67	71	81

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(29-110)	(15-110)	(21-128)	(31-110)	(10-110)	(31-115)
240-56328-3	VAP-2 GW (15-16)	27 X	39	31	34	33	36
240-56328-3 - RA	VAP-2 GW (15-16)	34	47	29	40	41	43
240-56328-4	VAP-2 GW (20-21)	39	48	41	46	40	42
240-56328-5	VAP-2 GW (25-26)	40	48	41	49	41	34
240-56328-6	VAP-2 GW (30-31)	38	43	38	43	34	51
240-56328-7	VAP-2 GW (35-36)	30	35	29	37	30	31
240-56328-7 - RE	VAP-2 GW (35-36)	62	36	51	65	22	30 X
240-56328-7 MS	VAP-2 GW (35-36)	36	43	40	46	37	31
240-56328-7 MS - RE	VAP-2 GW (35-36)	66	36	66	70	22	21 X
240-56328-7 MSD	VAP-2 GW (35-36)	10 X	16	10 X	15 X	13	9 X
240-56328-7 MSD - RE	VAP-2 GW (35-36)	72	39	71	79	23	26 X
240-56328-8	VAP-2 GW (40-41)	10 X	13 X	7 X	12 X	11	8 X
240-56328-8 - RE	VAP-2 GW (40-41)	39	27	34	49	15	22 X
240-56328-9	VAP-2 GW (45-46)	16 X	19	10 X	17 X	16	16 X
240-56328-9 - RE	VAP-2 GW (45-46)	47	33	38	56	19	35
240-56328-10	VAP-2 GW (49-50)	44	43	41	46	37	54
240-56328-10 - RA	VAP-2 GW (49-50)	46	46	36	47	40	55
240-56328-11	DUP-GW-01 (100515)	9 X	10 X	6 X	10 X	8 X	8 X
240-56328-11 - RE	DUP-GW-01 (100515)	40	27	36	50	16	16 X
240-56328-13	VAP-3-GW (15-16)	45	42	33	48	34	52
240-56328-14	VAP-3-GW (20-21)	46	28	48	49	17	38
240-56328-15	VAP-3-GW (25-26)	17 X	17	16 X	18 X	8 X	18 X
240-56328-15 - RA	VAP-3-GW (25-26)	23 X	19	10 X	19 X	17	25 X
240-56328-16	VAP-3-GW (30-31)	53	26	49	52	17	42
240-56328-16 - RA	VAP-3-GW (30-31)	51	24	39	50	15	47
240-56328-17	VAP-3-GW (35-36)	33	36	28	34	14	32
240-56328-17 - RA	VAP-3-GW (35-36)	74	62	35	58	54	78
240-56328-18	VAP-3-GW (40-41)	49	50	36	48	40	42
240-56328-18 - RA	VAP-3-GW (40-41)	73	65	29	60	55	62
240-56328-19	VAP-3-GW (45-46)	41	42	34	43	34	36
240-56328-19 - RA	VAP-3-GW (45-46)	47	46	24	46	39	38
240-56328-20	VAP-3-GW (49-50)	41	51	30	46	21	40
240-56328-20 - RA	VAP-3-GW (49-50)	59	65	32	55	54	62
240-56328-22	VAP-4-GW (15-16)	37	40	32	40	34	34
240-56328-22 - RA	VAP-4-GW (15-16)	34	35	24	34	28	32
240-56328-23	VAP-4-GW (20-21)	42	41	36	44	35	42
240-56328-23 - RA	VAP-4-GW (20-21)	46	43	32	44	35	45
240-56328-24	VAP-4-GW (25-26)	68	64	53	67	53	79
240-56328-25	VAP-4-GW (30-31)	32	34	27	37	27	29 X
240-56328-25 - RA	VAP-4-GW (30-31)	30	31	21	33	26	26 X
240-56328-26	VAP-4-GW (35-36)	13 X	16	10 X	15 X	14	11 X
240-56328-27	VAP-4-GW (40-41)	44	44	35	49	35	44
240-56328-28	VAP-4-GW (45-46)	42	27	37	46	17	34
240-56328-29	VAP-4-GW (48-49)	38	38	33	29 X	32	34
240-56328-29 - RA	VAP-4-GW (48-49)	36	36	24	27 X	28	31

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	FBP (29-110)	2FP (15-110)	TBP (21-128)	NBZ (31-110)	PHL (10-110)	TPH (31-115)
240-56328-31	VAP-5-GW (15-16)	39	41	36	45	34	30 X
240-56328-31 - RA	VAP-5-GW (15-16)	39	40	26	42	31	30 X
240-56328-32	VAP-5-GW (20-21)	42	48	37	48	40	34
240-56328-32 - RA	VAP-5-GW (20-21)	40	44	22	40	36	32
240-56328-33	VAP-5-GW (25-26)	48	50	35	52	39	45
240-56328-34	VAP-5-GW (30-31)	41	44	33	46	36	34
240-56328-35	VAP-5-GW (35-36)	31	37	21	33	31	33
240-56328-36	VAP-5-GW (40-41)	31	38	24	34	32	24 X
240-56328-36 - RA	VAP-5-GW (40-41)	30	34	13 X	30 X	29	24 X
240-56328-37	VAP-5-GW (45-46)	37	46	32	43	40	35
240-56328-37 - RA	VAP-5-GW (45-46)	38	48	24	43	42	36
LCS 240-201121/24-A	Lab Control Sample	87	78	76	91	62	87
LCS 240-201122/14-A	Lab Control Sample	86	77	73	90	62	87
LCS 240-201574/8-A	Lab Control Sample	85	69	79	92	50	92
MB 240-201121/23-A	Method Blank	76	68	52	72	53	83
MB 240-201122/13-A	Method Blank	61	58	42	63	46	70
MB 240-201574/7-A	Method Blank	69	63	50	68	47	79

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: 240-56328-12 MS
Matrix: Solid
Analysis Batch: 201750

Client Sample ID: VAP-3 (1-2)
Prep Type: Total/NA
Prep Batch: 201261

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	7.9	J B *	45.6	67.3		ug/Kg	☼	130	10 - 194
Benzene	4.2	U	22.8	19.4		ug/Kg	☼	85	71 - 120
Dichlorobromomethane	4.2	U	22.8	19.6		ug/Kg	☼	86	73 - 120
Bromoform	4.2	U	22.8	19.1		ug/Kg	☼	84	56 - 120
Bromomethane	4.2	U	22.8	17.1		ug/Kg	☼	75	25 - 157
2-Butanone (MEK)	1.4	J B	45.6	47.2		ug/Kg	☼	100	29 - 151
Carbon disulfide	4.2	U	22.8	17.6		ug/Kg	☼	77	61 - 142
Carbon tetrachloride	4.2	U	22.8	20.6		ug/Kg	☼	90	68 - 138
Chlorobenzene	4.2	U	22.8	18.3		ug/Kg	☼	80	60 - 120
Chloroethane	4.2	U	22.8	21.5		ug/Kg	☼	94	59 - 155
Chloroform	4.2	U	22.8	19.5		ug/Kg	☼	85	75 - 120
Chloromethane	4.2	U	22.8	15.9		ug/Kg	☼	70	53 - 120
1,1-Dichloroethane	4.2	U	22.8	19.6		ug/Kg	☼	86	76 - 120
1,2-Dichloroethane	4.2	U	22.8	20.5		ug/Kg	☼	90	66 - 120
1,1-Dichloroethene	4.2	U	22.8	18.1		ug/Kg	☼	79	72 - 130
1,2-Dichloropropane	4.2	U	22.8	18.9		ug/Kg	☼	83	64 - 120
cis-1,3-Dichloropropene	4.2	U	22.8	18.6		ug/Kg	☼	81	59 - 120
trans-1,3-Dichloropropene	4.2	U	22.8	17.7		ug/Kg	☼	78	52 - 120
Ethylbenzene	4.2	U	22.8	18.7		ug/Kg	☼	82	62 - 137
2-Hexanone	17	U	45.6	44.9		ug/Kg	☼	98	18 - 165
Methylene Chloride	4.2	U	22.8	18.6		ug/Kg	☼	82	46 - 120
4-Methyl-2-pentanone (MIBK)	17	U	45.6	47.4		ug/Kg	☼	104	39 - 142
Styrene	4.2	U	22.8	17.7		ug/Kg	☼	78	62 - 120
1,1,2,2-Tetrachloroethane	4.2	U	22.8	20.7		ug/Kg	☼	91	44 - 141
Tetrachloroethene	4.2	U	22.8	18.2		ug/Kg	☼	80	57 - 149
Toluene	4.2	U	22.8	18.3		ug/Kg	☼	80	54 - 139
Trichloroethene	4.2	U	22.8	19.4		ug/Kg	☼	85	65 - 127
Vinyl chloride	4.2	U	22.8	18.8		ug/Kg	☼	83	50 - 120
Xylenes, Total	8.4	U	45.6	37.9		ug/Kg	☼	83	65 - 135
1,1,1-Trichloroethane	4.2	U	22.8	19.8		ug/Kg	☼	87	69 - 139
1,1,2-Trichloroethane	4.2	U	22.8	19.0		ug/Kg	☼	83	63 - 120
Cyclohexane	8.4	U	22.8	18.9		ug/Kg	☼	83	56 - 120
1,2-Dibromo-3-Chloropropane	8.4	U	22.8	15.5		ug/Kg	☼	68	10 - 137
Ethylene Dibromide	4.2	U	22.8	19.5		ug/Kg	☼	86	66 - 120
Dichlorodifluoromethane	4.2	U	22.8	19.7		ug/Kg	☼	87	41 - 135
cis-1,2-Dichloroethene	4.2	U	22.8	19.2		ug/Kg	☼	84	73 - 120
trans-1,2-Dichloroethene	4.2	U	22.8	19.5		ug/Kg	☼	86	77 - 123
Isopropylbenzene	4.2	U	22.8	19.0		ug/Kg	☼	83	60 - 142
Methyl acetate	8.4	U *	114	140		ug/Kg	☼	123	60 - 162
Methyl tert-butyl ether	4.2	U	22.8	18.9		ug/Kg	☼	83	34 - 127
1,1,2-Trichloro-1,2,2-trifluoroethane	4.2	U	22.8	19.9		ug/Kg	☼	87	66 - 177
1,2,4-Trichlorobenzene	4.2	U	22.8	12.6		ug/Kg	☼	55	29 - 135
1,2-Dichlorobenzene	4.2	U	22.8	16.1		ug/Kg	☼	70	49 - 132
1,3-Dichlorobenzene	4.2	U	22.8	16.1		ug/Kg	☼	71	43 - 153
1,4-Dichlorobenzene	4.2	U	22.8	15.3		ug/Kg	☼	67	41 - 145
Trichlorofluoromethane	4.2	U	22.8	20.4		ug/Kg	☼	89	68 - 155
Methylcyclohexane	8.4	U	22.8	19.3		ug/Kg	☼	84	54 - 125

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56328-12 MS
Matrix: Solid
Analysis Batch: 201750

Client Sample ID: VAP-3 (1-2)
Prep Type: Total/NA
Prep Batch: 201261

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	8.4	U	22.8	19.1		ug/Kg	☼	84	64 - 136
o-Xylene	4.2	U	22.8	18.8		ug/Kg	☼	83	68 - 134

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*110*		*64 - 120*
4-Bromofluorobenzene (Surr)	*118*		*64 - 130*
Toluene-d8 (Surr)	*103*		*69 - 128*
Dibromofluoromethane (Surr)	*106*		*68 - 120*

Lab Sample ID: 240-56328-12 MSD
Matrix: Solid
Analysis Batch: 201750

Client Sample ID: VAP-3 (1-2)
Prep Type: Total/NA
Prep Batch: 201261

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	7.9	J B *	43.5	53.3		ug/Kg	☼	104	10 - 194	23	30
Benzene	4.2	U	21.7	19.1		ug/Kg	☼	88	71 - 120	2	30
Dichlorobromomethane	4.2	U	21.7	18.6		ug/Kg	☼	85	73 - 120	5	30
Bromoform	4.2	U	21.7	16.9		ug/Kg	☼	78	56 - 120	12	30
Bromomethane	4.2	U	21.7	18.2		ug/Kg	☼	84	25 - 157	6	30
2-Butanone (MEK)	1.4	J B	43.5	36.6		ug/Kg	☼	81	29 - 151	25	30
Carbon disulfide	4.2	U	21.7	19.6		ug/Kg	☼	90	61 - 142	10	30
Carbon tetrachloride	4.2	U	21.7	21.0		ug/Kg	☼	97	68 - 138	2	30
Chlorobenzene	4.2	U	21.7	17.9		ug/Kg	☼	82	60 - 120	2	30
Chloroethane	4.2	U	21.7	21.0		ug/Kg	☼	97	59 - 155	2	30
Chloroform	4.2	U	21.7	19.5		ug/Kg	☼	90	75 - 120	0	30
Chloromethane	4.2	U	21.7	16.6		ug/Kg	☼	76	53 - 120	4	30
1,1-Dichloroethane	4.2	U	21.7	19.9		ug/Kg	☼	91	76 - 120	2	30
1,2-Dichloroethane	4.2	U	21.7	18.9		ug/Kg	☼	87	66 - 120	8	30
1,1-Dichloroethene	4.2	U	21.7	18.8		ug/Kg	☼	87	72 - 130	4	30
1,2-Dichloropropane	4.2	U	21.7	18.4		ug/Kg	☼	84	64 - 120	3	30
cis-1,3-Dichloropropene	4.2	U	21.7	17.7		ug/Kg	☼	82	59 - 120	5	30
trans-1,3-Dichloropropene	4.2	U	21.7	16.8		ug/Kg	☼	77	52 - 120	5	30
Ethylbenzene	4.2	U	21.7	18.7		ug/Kg	☼	86	62 - 137	0	30
2-Hexanone	17	U	43.5	34.1		ug/Kg	☼	78	18 - 165	27	30
Methylene Chloride	4.2	U	21.7	18.6		ug/Kg	☼	86	46 - 120	0	30
4-Methyl-2-pentanone (MIBK)	17	U	43.5	38.6		ug/Kg	☼	89	39 - 142	21	30
Styrene	4.2	U	21.7	16.6		ug/Kg	☼	76	62 - 120	6	30
1,1,2,2-Tetrachloroethane	4.2	U	21.7	19.0		ug/Kg	☼	88	44 - 141	8	30
Tetrachloroethene	4.2	U	21.7	18.4		ug/Kg	☼	85	57 - 149	1	30
Toluene	4.2	U	21.7	18.4		ug/Kg	☼	84	54 - 139	0	30
Trichloroethene	4.2	U	21.7	19.1		ug/Kg	☼	88	65 - 127	2	30
Vinyl chloride	4.2	U	21.7	19.1		ug/Kg	☼	88	50 - 120	1	30
Xylenes, Total	8.4	U	43.5	37.7		ug/Kg	☼	87	65 - 135	1	30
1,1,1-Trichloroethane	4.2	U	21.7	20.8		ug/Kg	☼	96	69 - 139	5	30
1,1,2-Trichloroethane	4.2	U	21.7	16.8		ug/Kg	☼	77	63 - 120	12	30
Cyclohexane	8.4	U	21.7	19.8		ug/Kg	☼	91	56 - 120	5	30
1,2-Dibromo-3-Chloropropane	8.4	U	21.7	14.4		ug/Kg	☼	66	10 - 137	7	30
Ethylene Dibromide	4.2	U	21.7	17.8		ug/Kg	☼	82	66 - 120	10	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56328-12 MSD
Matrix: Solid
Analysis Batch: 201750

Client Sample ID: VAP-3 (1-2)
Prep Type: Total/NA
Prep Batch: 201261

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dichlorodifluoromethane	4.2	U	21.7	19.1		ug/Kg	☼	88	41 - 135	3	30
cis-1,2-Dichloroethene	4.2	U	21.7	19.4		ug/Kg	☼	89	73 - 120	1	30
trans-1,2-Dichloroethene	4.2	U	21.7	19.6		ug/Kg	☼	90	77 - 123	1	30
Isopropylbenzene	4.2	U	21.7	19.3		ug/Kg	☼	89	60 - 142	2	30
Methyl acetate	8.4	U *	109	110		ug/Kg	☼	101	60 - 162	24	30
Methyl tert-butyl ether	4.2	U	21.7	18.3		ug/Kg	☼	84	34 - 127	3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	4.2	U	21.7	20.1		ug/Kg	☼	92	66 - 177	1	30
1,2,4-Trichlorobenzene	4.2	U	21.7	12.0		ug/Kg	☼	55	29 - 135	5	30
1,2-Dichlorobenzene	4.2	U	21.7	16.1		ug/Kg	☼	74	49 - 132	0	30
1,3-Dichlorobenzene	4.2	U	21.7	17.1		ug/Kg	☼	79	43 - 153	6	30
1,4-Dichlorobenzene	4.2	U	21.7	15.0		ug/Kg	☼	69	41 - 145	2	30
Trichlorofluoromethane	4.2	U	21.7	19.8		ug/Kg	☼	91	68 - 155	3	30
Methylcyclohexane	8.4	U	21.7	18.9		ug/Kg	☼	87	54 - 125	2	30
m-Xylene & p-Xylene	8.4	U	21.7	18.5		ug/Kg	☼	85	64 - 136	3	30
o-Xylene	4.2	U	21.7	19.2		ug/Kg	☼	88	68 - 134	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*64 - 120*
4-Bromofluorobenzene (Surr)	*113*		*64 - 130*
Toluene-d8 (Surr)	*107*		*69 - 128*
Dibromofluoromethane (Surr)	*106*		*68 - 120*

Lab Sample ID: MB 240-201613/6
Matrix: Water
Analysis Batch: 201613

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/13/15 12:59	1
Benzene	1.0	U	1.0	0.35	ug/L			10/13/15 12:59	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/13/15 12:59	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/13/15 12:59	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/13/15 12:59	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/13/15 12:59	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/13/15 12:59	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/13/15 12:59	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/13/15 12:59	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/13/15 12:59	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/13/15 12:59	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/13/15 12:59	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/13/15 12:59	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/13/15 12:59	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/13/15 12:59	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/13/15 12:59	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/13/15 12:59	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/13/15 12:59	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/13/15 12:59	1
2-Hexanone	10	U	10	0.48	ug/L			10/13/15 12:59	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201613/6
Matrix: Water
Analysis Batch: 201613

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/13/15 12:59	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/13/15 12:59	1
Styrene	1.0	U	1.0	0.45	ug/L			10/13/15 12:59	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/13/15 12:59	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/13/15 12:59	1
Toluene	1.0	U	1.0	0.23	ug/L			10/13/15 12:59	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/13/15 12:59	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/13/15 12:59	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/13/15 12:59	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/13/15 12:59	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/13/15 12:59	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/13/15 12:59	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/13/15 12:59	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/13/15 12:59	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/13/15 12:59	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/13/15 12:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/13/15 12:59	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/13/15 12:59	1
Methyl acetate	10	U	10	2.3	ug/L			10/13/15 12:59	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/13/15 12:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/13/15 12:59	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/13/15 12:59	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/13/15 12:59	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/13/15 12:59	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/13/15 12:59	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/13/15 12:59	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/13/15 12:59	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/13/15 12:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*78 - 125*		*10/13/15 12:59*	*1*
4-Bromofluorobenzene (Surr)	*88*		*61 - 120*		*10/13/15 12:59*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/13/15 12:59*	*1*
Dibromofluoromethane (Surr)	*102*		*79 - 120*		*10/13/15 12:59*	*1*

Lab Sample ID: LCS 240-201613/4
Matrix: Water
Analysis Batch: 201613

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	20.9		ug/L		105	34 - 148
Benzene	10.0	10.7		ug/L		107	80 - 120
Dichlorobromomethane	10.0	10.3		ug/L		103	80 - 120
Bromoform	10.0	9.29		ug/L		93	56 - 122
Bromomethane	10.0	9.38		ug/L		94	38 - 132
2-Butanone (MEK)	20.0	22.2		ug/L		111	56 - 138
Carbon disulfide	10.0	11.5		ug/L		115	65 - 144
Carbon tetrachloride	10.0	9.77		ug/L		98	77 - 131

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201613/4
Matrix: Water
Analysis Batch: 201613

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobenzene	10.0	10.2		ug/L		102	80 - 120
Chloroethane	10.0	10.1		ug/L		101	36 - 126
Chloroform	10.0	10.9		ug/L		109	80 - 120
Chloromethane	10.0	10.2		ug/L		102	48 - 133
1,1-Dichloroethane	10.0	11.6		ug/L		116	79 - 125
1,2-Dichloroethane	10.0	10.8		ug/L		108	80 - 120
1,1-Dichloroethene	10.0	10.4		ug/L		104	76 - 124
1,2-Dichloropropane	10.0	11.2		ug/L		112	78 - 124
cis-1,3-Dichloropropene	10.0	10.5		ug/L		105	74 - 126
trans-1,3-Dichloropropene	10.0	11.2		ug/L		112	75 - 131
Ethylbenzene	10.0	10.7		ug/L		107	80 - 120
2-Hexanone	20.0	23.2		ug/L		116	55 - 141
Methylene Chloride	10.0	10.7		ug/L		107	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	23.6		ug/L		118	64 - 135
Styrene	10.0	10.9		ug/L		109	76 - 122
1,1,2,2-Tetrachloroethane	10.0	9.88		ug/L		99	71 - 123
Tetrachloroethene	10.0	10.8		ug/L		108	78 - 121
Toluene	10.0	10.9		ug/L		109	80 - 120
Trichloroethene	10.0	10.9		ug/L		109	80 - 121
Vinyl chloride	10.0	9.46		ug/L		95	52 - 121
Xylenes, Total	20.0	21.8		ug/L		109	80 - 120
1,1,1-Trichloroethane	10.0	10.5		ug/L		105	77 - 123
1,1,2-Trichloroethane	10.0	10.1		ug/L		101	80 - 120
Cyclohexane	10.0	11.1		ug/L		111	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	8.32		ug/L		83	50 - 132
Ethylene Dibromide	10.0	10.3		ug/L		103	80 - 120
Dichlorodifluoromethane	10.0	7.89		ug/L		79	23 - 136
cis-1,2-Dichloroethene	10.0	11.0		ug/L		110	79 - 120
trans-1,2-Dichloroethene	10.0	11.2		ug/L		112	80 - 124
Isopropylbenzene	10.0	11.1		ug/L		111	77 - 120
Methyl acetate	50.0	56.6		ug/L		113	67 - 131
Methyl tert-butyl ether	10.0	10.9		ug/L		109	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.7		ug/L		107	67 - 138
1,2,4-Trichlorobenzene	10.0	10.7		ug/L		107	61 - 120
1,2-Dichlorobenzene	10.0	10.4		ug/L		104	79 - 120
1,3-Dichlorobenzene	10.0	10.7		ug/L		107	79 - 120
1,4-Dichlorobenzene	10.0	10.4		ug/L		104	79 - 120
Trichlorofluoromethane	10.0	7.88		ug/L		79	61 - 133
Methylcyclohexane	10.0	10.0		ug/L		100	61 - 134
m-Xylene & p-Xylene	10.0	10.8		ug/L		108	80 - 120
o-Xylene	10.0	11.0		ug/L		110	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*78 - 125*
4-Bromofluorobenzene (Surr)	*99*		*61 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*79 - 120*

Lab Sample ID: MB 240-201682/6
Matrix: Water
Analysis Batch: 201682

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/14/15 00:36	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 00:36	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 00:36	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 00:36	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 00:36	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/14/15 00:36	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 00:36	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 00:36	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 00:36	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 00:36	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 00:36	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 00:36	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 00:36	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 00:36	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 00:36	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 00:36	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 00:36	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 00:36	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 00:36	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 00:36	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 00:36	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 00:36	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 00:36	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 00:36	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 00:36	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 00:36	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/14/15 00:36	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 00:36	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 00:36	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 00:36	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 00:36	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 00:36	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 00:36	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 00:36	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 00:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/14/15 00:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 00:36	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 00:36	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 00:36	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 00:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 00:36	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 00:36	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 00:36	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 00:36	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 00:36	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 00:36	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 00:36	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 00:36	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201682/6
Matrix: Water
Analysis Batch: 201682

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		78 - 125		10/14/15 00:36	1
4-Bromofluorobenzene (Surr)	87		61 - 120		10/14/15 00:36	1
Toluene-d8 (Surr)	93		80 - 120		10/14/15 00:36	1
Dibromofluoromethane (Surr)	102		79 - 120		10/14/15 00:36	1

Lab Sample ID: LCS 240-201682/4
Matrix: Water
Analysis Batch: 201682

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	19.8		ug/L		99	34 - 148
Benzene	10.0	10.3		ug/L		103	80 - 120
Dichlorobromomethane	10.0	10.3		ug/L		103	80 - 120
Bromoform	10.0	9.24		ug/L		92	56 - 122
Bromomethane	10.0	7.66		ug/L		77	38 - 132
2-Butanone (MEK)	20.0	20.6		ug/L		103	56 - 138
Carbon disulfide	10.0	10.0		ug/L		100	65 - 144
Carbon tetrachloride	10.0	9.02		ug/L		90	77 - 131
Chlorobenzene	10.0	9.81		ug/L		98	80 - 120
Chloroethane	10.0	7.74		ug/L		77	36 - 126
Chloroform	10.0	10.6		ug/L		106	80 - 120
Chloromethane	10.0	10.2		ug/L		102	48 - 133
1,1-Dichloroethane	10.0	11.1		ug/L		111	79 - 125
1,2-Dichloroethane	10.0	10.7		ug/L		107	80 - 120
1,1-Dichloroethene	10.0	9.44		ug/L		94	76 - 124
1,2-Dichloropropane	10.0	11.2		ug/L		112	78 - 124
cis-1,3-Dichloropropene	10.0	9.83		ug/L		98	74 - 126
trans-1,3-Dichloropropene	10.0	10.3		ug/L		103	75 - 131
Ethylbenzene	10.0	9.34		ug/L		93	80 - 120
2-Hexanone	20.0	23.5		ug/L		117	55 - 141
Methylene Chloride	10.0	10.3		ug/L		103	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	22.5		ug/L		113	64 - 135
Styrene	10.0	9.97		ug/L		100	76 - 122
1,1,2,2-Tetrachloroethane	10.0	9.02		ug/L		90	71 - 123
Tetrachloroethene	10.0	9.96		ug/L		100	78 - 121
Toluene	10.0	10.2		ug/L		102	80 - 120
Trichloroethene	10.0	10.4		ug/L		104	80 - 121
Vinyl chloride	10.0	8.41		ug/L		84	52 - 121
Xylenes, Total	20.0	19.6		ug/L		98	80 - 120
1,1,1-Trichloroethane	10.0	9.67		ug/L		97	77 - 123
1,1,2-Trichloroethane	10.0	10.4		ug/L		104	80 - 120
Cyclohexane	10.0	8.91		ug/L		89	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	8.48		ug/L		85	50 - 132
Ethylene Dibromide	10.0	10.4		ug/L		104	80 - 120
Dichlorodifluoromethane	10.0	6.14		ug/L		61	23 - 136
cis-1,2-Dichloroethene	10.0	10.5		ug/L		105	79 - 120
trans-1,2-Dichloroethene	10.0	10.3		ug/L		103	80 - 124
Isopropylbenzene	10.0	9.64		ug/L		96	77 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201682/4
Matrix: Water
Analysis Batch: 201682

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	50.0	55.1		ug/L		110	67 - 131
Methyl tert-butyl ether	10.0	10.6		ug/L		106	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	8.43		ug/L		84	67 - 138
1,2,4-Trichlorobenzene	10.0	9.08		ug/L		91	61 - 120
1,2-Dichlorobenzene	10.0	9.62		ug/L		96	79 - 120
1,3-Dichlorobenzene	10.0	9.50		ug/L		95	79 - 120
1,4-Dichlorobenzene	10.0	9.45		ug/L		94	79 - 120
Trichlorofluoromethane	10.0	8.40		ug/L		84	61 - 133
Methylcyclohexane	10.0	7.83		ug/L		78	61 - 134
m-Xylene & p-Xylene	10.0	9.63		ug/L		96	80 - 120
o-Xylene	10.0	10.0		ug/L		100	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*78 - 125*
4-Bromofluorobenzene (Surr)	*94*		*61 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*95*		*79 - 120*

Lab Sample ID: 240-56328-7 MS
Matrix: Water
Analysis Batch: 201682

Client Sample ID: VAP-2 GW (35-36)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	6.5	J	20.0	25.1		ug/L		93	32 - 126
Benzene	1.0	U	10.0	9.55		ug/L		95	73 - 121
Dichlorobromomethane	1.0	U	10.0	9.09		ug/L		91	72 - 120
Bromoform	1.0	U	10.0	8.76		ug/L		88	45 - 121
Bromomethane	1.0	U	10.0	7.34		ug/L		73	26 - 136
2-Butanone (MEK)	10	U	20.0	20.9		ug/L		105	49 - 132
Carbon disulfide	1.0	U	10.0	9.32		ug/L		93	54 - 144
Carbon tetrachloride	1.0	U	10.0	8.57		ug/L		86	65 - 129
Chlorobenzene	1.0	U	10.0	8.99		ug/L		90	72 - 120
Chloroethane	1.0	U	10.0	7.52		ug/L		75	27 - 131
Chloroform	1.0	U	10.0	9.96		ug/L		100	73 - 121
Chloromethane	1.0	U	10.0	10.5		ug/L		105	39 - 134
1,1-Dichloroethane	1.0	U	10.0	10.5		ug/L		105	73 - 124
1,2-Dichloroethane	1.0	U	10.0	10.5		ug/L		105	74 - 125
1,1-Dichloroethene	1.0	U	10.0	9.19		ug/L		92	67 - 124
1,2-Dichloropropane	1.0	U	10.0	10.2		ug/L		102	73 - 122
cis-1,3-Dichloropropene	1.0	U	10.0	8.27		ug/L		83	60 - 120
trans-1,3-Dichloropropene	1.0	U	10.0	9.30		ug/L		93	58 - 132
Ethylbenzene	1.0	U	10.0	8.30		ug/L		83	68 - 121
2-Hexanone	10	U	20.0	23.4		ug/L		117	49 - 142
Methylene Chloride	1.0	U	10.0	8.87		ug/L		89	70 - 124
4-Methyl-2-pentanone (MIBK)	10	U	20.0	22.7		ug/L		113	58 - 136
Styrene	1.0	U	10.0	9.05		ug/L		91	64 - 126
1,1,2,2-Tetrachloroethane	1.0	U	10.0	8.90		ug/L		89	61 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56328-7 MS
Matrix: Water
Analysis Batch: 201682

Client Sample ID: VAP-2 GW (35-36)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	1.0	U	10.0	8.80		ug/L		88	59 - 125
Toluene	1.0	U	10.0	9.12		ug/L		91	72 - 122
Trichloroethene	1.0	U	10.0	8.92		ug/L		89	61 - 129
Vinyl chloride	1.0	U	10.0	8.53		ug/L		85	44 - 122
Xylenes, Total	2.0	U	20.0	17.6		ug/L		88	67 - 122
1,1,1-Trichloroethane	1.0	U	10.0	9.21		ug/L		92	69 - 122
1,1,2-Trichloroethane	1.0	U	10.0	9.75		ug/L		97	72 - 125
Cyclohexane	1.0	U	10.0	9.05		ug/L		90	41 - 137
1,2-Dibromo-3-Chloropropane	2.0	U	10.0	7.73		ug/L		77	42 - 130
Ethylene Dibromide	1.0	U	10.0	9.74		ug/L		97	69 - 125
Dichlorodifluoromethane	1.0	U	10.0	7.92		ug/L		79	14 - 137
cis-1,2-Dichloroethene	1.0	U	10.0	9.51		ug/L		95	66 - 124
trans-1,2-Dichloroethene	1.0	U	10.0	9.71		ug/L		97	72 - 125
Isopropylbenzene	1.0	U	10.0	8.53		ug/L		85	61 - 122
Methyl acetate	10	U	50.0	50.0		ug/L		100	64 - 124
Methyl tert-butyl ether	1.0	U	10.0	9.96		ug/L		100	61 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	10.0	9.32		ug/L		93	44 - 140
1,2,4-Trichlorobenzene	1.0	U	10.0	7.58		ug/L		76	48 - 120
1,2-Dichlorobenzene	1.0	U	10.0	8.36		ug/L		84	67 - 118
1,3-Dichlorobenzene	1.0	U	10.0	8.18		ug/L		82	65 - 120
1,4-Dichlorobenzene	1.0	U	10.0	8.31		ug/L		83	66 - 120
Trichlorofluoromethane	1.0	U	10.0	8.19		ug/L		82	49 - 133
Methylcyclohexane	1.0	U	10.0	8.07		ug/L		81	39 - 135
m-Xylene & p-Xylene	2.0	U	10.0	8.61		ug/L		86	66 - 123
o-Xylene	1.0	U	10.0	9.01		ug/L		90	68 - 121

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*78 - 125*
4-Bromofluorobenzene (Surr)	*101*		*61 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*79 - 120*

Lab Sample ID: 240-56328-7 MSD
Matrix: Water
Analysis Batch: 201682

Client Sample ID: VAP-2 GW (35-36)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	6.5	J	20.0	24.6		ug/L		90	32 - 126	2	28
Benzene	1.0	U	10.0	9.21		ug/L		92	73 - 121	4	13
Dichlorobromomethane	1.0	U	10.0	9.20		ug/L		92	72 - 120	1	19
Bromoform	1.0	U	10.0	8.44		ug/L		84	45 - 121	4	19
Bromomethane	1.0	U	10.0	8.48		ug/L		85	26 - 136	14	35
2-Butanone (MEK)	10	U	20.0	24.9		ug/L		124	49 - 132	17	19
Carbon disulfide	1.0	U	10.0	9.47		ug/L		95	54 - 144	2	34
Carbon tetrachloride	1.0	U	10.0	8.89		ug/L		89	65 - 129	4	20
Chlorobenzene	1.0	U	10.0	8.70		ug/L		87	72 - 120	3	15
Chloroethane	1.0	U	10.0	8.28		ug/L		83	27 - 131	10	35

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56328-7 MSD
Matrix: Water
Analysis Batch: 201682

Client Sample ID: VAP-2 GW (35-36)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloroform	1.0	U	10.0	9.75		ug/L		98	73 - 121	2	17
Chloromethane	1.0	U	10.0	10.1		ug/L		101	39 - 134	4	20
1,1-Dichloroethane	1.0	U	10.0	10.2		ug/L		102	73 - 124	2	14
1,2-Dichloroethane	1.0	U	10.0	10.2		ug/L		102	74 - 125	3	24
1,1-Dichloroethene	1.0	U	10.0	9.23		ug/L		92	67 - 124	0	24
1,2-Dichloropropane	1.0	U	10.0	10.0		ug/L		100	73 - 122	2	15
cis-1,3-Dichloropropene	1.0	U	10.0	8.34		ug/L		83	60 - 120	1	21
trans-1,3-Dichloropropene	1.0	U	10.0	9.26		ug/L		93	58 - 132	0	22
Ethylbenzene	1.0	U	10.0	8.14		ug/L		81	68 - 121	2	16
2-Hexanone	10	U	20.0	24.5		ug/L		122	49 - 142	4	27
Methylene Chloride	1.0	U	10.0	8.65		ug/L		86	70 - 124	3	14
4-Methyl-2-pentanone (MIBK)	10	U	20.0	22.5		ug/L		113	58 - 136	1	32
Styrene	1.0	U	10.0	8.80		ug/L		88	64 - 126	3	15
1,1,2,2-Tetrachloroethane	1.0	U	10.0	9.24		ug/L		92	61 - 130	4	18
Tetrachloroethene	1.0	U	10.0	8.65		ug/L		86	59 - 125	2	20
Toluene	1.0	U	10.0	9.05		ug/L		91	72 - 122	1	15
Trichloroethene	1.0	U	10.0	9.03		ug/L		90	61 - 129	1	14
Vinyl chloride	1.0	U	10.0	8.77		ug/L		88	44 - 122	3	35
Xylenes, Total	2.0	U	20.0	17.2		ug/L		86	67 - 122	2	14
1,1,1-Trichloroethane	1.0	U	10.0	9.42		ug/L		94	69 - 122	2	14
1,1,2-Trichloroethane	1.0	U	10.0	9.51		ug/L		95	72 - 125	2	19
Cyclohexane	1.0	U	10.0	9.92		ug/L		99	41 - 137	9	35
1,2-Dibromo-3-Chloropropane	2.0	U	10.0	8.91		ug/L		89	42 - 130	14	24
Ethylene Dibromide	1.0	U	10.0	9.80		ug/L		98	69 - 125	1	24
Dichlorodifluoromethane	1.0	U	10.0	8.42		ug/L		84	14 - 137	6	34
cis-1,2-Dichloroethene	1.0	U	10.0	9.46		ug/L		95	66 - 124	0	22
trans-1,2-Dichloroethene	1.0	U	10.0	9.57		ug/L		96	72 - 125	1	25
Isopropylbenzene	1.0	U	10.0	8.43		ug/L		84	61 - 122	1	20
Methyl acetate	10	U	50.0	52.0		ug/L		104	64 - 124	4	12
Methyl tert-butyl ether	1.0	U	10.0	10.2		ug/L		102	61 - 121	2	12
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	10.0	9.92		ug/L		99	44 - 140	6	35
1,2,4-Trichlorobenzene	1.0	U	10.0	8.22		ug/L		82	48 - 120	8	28
1,2-Dichlorobenzene	1.0	U	10.0	8.51		ug/L		85	67 - 118	2	15
1,3-Dichlorobenzene	1.0	U	10.0	8.32		ug/L		83	65 - 120	2	15
1,4-Dichlorobenzene	1.0	U	10.0	8.24		ug/L		82	66 - 120	1	16
Trichlorofluoromethane	1.0	U	10.0	9.83		ug/L		98	49 - 133	18	25
Methylcyclohexane	1.0	U	10.0	8.86		ug/L		89	39 - 135	9	35
m-Xylene & p-Xylene	2.0	U	10.0	8.46		ug/L		85	66 - 123	2	15
o-Xylene	1.0	U	10.0	8.74		ug/L		87	68 - 121	3	14

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*78 - 125*
4-Bromofluorobenzene (Surr)	*99*		*61 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*79 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201750/9
Matrix: Solid
Analysis Batch: 201750

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.62	J	20	1.6	ug/Kg			10/14/15 03:25	1
Benzene	5.0	U	5.0	0.24	ug/Kg			10/14/15 03:25	1
Dichlorobromomethane	5.0	U	5.0	0.21	ug/Kg			10/14/15 03:25	1
Bromoform	5.0	U	5.0	0.38	ug/Kg			10/14/15 03:25	1
Bromomethane	5.0	U	5.0	0.71	ug/Kg			10/14/15 03:25	1
2-Butanone (MEK)	0.698	J	20	0.48	ug/Kg			10/14/15 03:25	1
Carbon disulfide	5.0	U	5.0	0.34	ug/Kg			10/14/15 03:25	1
Carbon tetrachloride	5.0	U	5.0	0.33	ug/Kg			10/14/15 03:25	1
Chlorobenzene	5.0	U	5.0	0.29	ug/Kg			10/14/15 03:25	1
Chloroethane	5.0	U	5.0	0.34	ug/Kg			10/14/15 03:25	1
Chloroform	5.0	U	5.0	0.21	ug/Kg			10/14/15 03:25	1
Chloromethane	5.0	U	5.0	1.3	ug/Kg			10/14/15 03:25	1
1,1-Dichloroethane	5.0	U	5.0	1.2	ug/Kg			10/14/15 03:25	1
1,2-Dichloroethane	5.0	U	5.0	0.20	ug/Kg			10/14/15 03:25	1
1,1-Dichloroethene	5.0	U	5.0	0.49	ug/Kg			10/14/15 03:25	1
1,2-Dichloropropane	5.0	U	5.0	0.28	ug/Kg			10/14/15 03:25	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.27	ug/Kg			10/14/15 03:25	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.21	ug/Kg			10/14/15 03:25	1
Ethylbenzene	5.0	U	5.0	0.32	ug/Kg			10/14/15 03:25	1
2-Hexanone	20	U	20	0.70	ug/Kg			10/14/15 03:25	1
Methylene Chloride	2.16	J	5.0	1.1	ug/Kg			10/14/15 03:25	1
4-Methyl-2-pentanone (MIBK)	20	U	20	0.29	ug/Kg			10/14/15 03:25	1
Styrene	5.0	U	5.0	0.27	ug/Kg			10/14/15 03:25	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.16	ug/Kg			10/14/15 03:25	1
Tetrachloroethene	5.0	U	5.0	0.33	ug/Kg			10/14/15 03:25	1
Toluene	5.0	U	5.0	0.27	ug/Kg			10/14/15 03:25	1
Trichloroethene	5.0	U	5.0	0.26	ug/Kg			10/14/15 03:25	1
Vinyl chloride	5.0	U	5.0	0.39	ug/Kg			10/14/15 03:25	1
Xylenes, Total	10	U	10	0.63	ug/Kg			10/14/15 03:25	1
1,1,1-Trichloroethane	5.0	U	5.0	0.26	ug/Kg			10/14/15 03:25	1
1,1,2-Trichloroethane	5.0	U	5.0	0.49	ug/Kg			10/14/15 03:25	1
Cyclohexane	10	U	10	0.29	ug/Kg			10/14/15 03:25	1
1,2-Dibromo-3-Chloropropane	10	U	10	1.9	ug/Kg			10/14/15 03:25	1
Ethylene Dibromide	5.0	U	5.0	0.25	ug/Kg			10/14/15 03:25	1
Dichlorodifluoromethane	5.0	U	5.0	0.40	ug/Kg			10/14/15 03:25	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.28	ug/Kg			10/14/15 03:25	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.37	ug/Kg			10/14/15 03:25	1
Isopropylbenzene	5.0	U	5.0	0.30	ug/Kg			10/14/15 03:25	1
Methyl acetate	10	U	10	2.3	ug/Kg			10/14/15 03:25	1
Methyl tert-butyl ether	5.0	U	5.0	0.15	ug/Kg			10/14/15 03:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	0.39	ug/Kg			10/14/15 03:25	1
1,2,4-Trichlorobenzene	0.426	J	5.0	0.39	ug/Kg			10/14/15 03:25	1
1,2-Dichlorobenzene	5.0	U	5.0	0.38	ug/Kg			10/14/15 03:25	1
1,3-Dichlorobenzene	5.0	U	5.0	0.40	ug/Kg			10/14/15 03:25	1
1,4-Dichlorobenzene	5.0	U	5.0	0.41	ug/Kg			10/14/15 03:25	1
Trichlorofluoromethane	5.0	U	5.0	0.26	ug/Kg			10/14/15 03:25	1
Chlorodibromomethane	5.0	U	5.0	0.16	ug/Kg			10/14/15 03:25	1
Methylcyclohexane	10	U	10	0.33	ug/Kg			10/14/15 03:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*103*		*64 - 120*		*10/14/15 03:25*	*1*
4-Bromofluorobenzene (Surr)	*117*		*64 - 130*		*10/14/15 03:25*	*1*
Toluene-d8 (Surr)	*110*		*69 - 128*		*10/14/15 03:25*	*1*
Dibromofluoromethane (Surr)	*107*		*68 - 120*		*10/14/15 03:25*	*1*

Lab Sample ID: LCS 240-201750/8
Matrix: Solid
Analysis Batch: 201750

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	71.5	*	ug/Kg		143	62 - 133
Benzene	25.0	26.8		ug/Kg		107	80 - 121
Dichlorobromomethane	25.0	27.5		ug/Kg		110	80 - 136
Bromoform	25.0	28.8		ug/Kg		115	71 - 135
Bromomethane	25.0	21.1		ug/Kg		84	57 - 120
2-Butanone (MEK)	50.0	55.2		ug/Kg		110	67 - 124
Carbon disulfide	25.0	26.7		ug/Kg		107	80 - 152
Carbon tetrachloride	25.0	31.3		ug/Kg		125	80 - 141
Chlorobenzene	25.0	26.5		ug/Kg		106	80 - 120
Chloroethane	25.0	26.0		ug/Kg		104	66 - 122
Chloroform	25.0	27.5		ug/Kg		110	80 - 120
Chloromethane	25.0	22.9		ug/Kg		92	62 - 120
1,1-Dichloroethane	25.0	27.4		ug/Kg		110	80 - 126
1,2-Dichloroethane	25.0	27.4		ug/Kg		110	76 - 132
1,1-Dichloroethene	25.0	27.0		ug/Kg		108	77 - 130
1,2-Dichloropropane	25.0	25.9		ug/Kg		103	80 - 128
cis-1,3-Dichloropropene	25.0	27.0		ug/Kg		108	73 - 139
trans-1,3-Dichloropropene	25.0	25.8		ug/Kg		103	71 - 151
Ethylbenzene	25.0	27.7		ug/Kg		111	80 - 132
2-Hexanone	50.0	60.1		ug/Kg		120	72 - 143
Methylene Chloride	25.0	27.8		ug/Kg		111	74 - 127
4-Methyl-2-pentanone (MIBK)	50.0	61.2		ug/Kg		122	74 - 139
Styrene	25.0	26.4		ug/Kg		105	80 - 135
1,1,2,2-Tetrachloroethane	25.0	28.8		ug/Kg		115	80 - 123
Tetrachloroethene	25.0	26.9		ug/Kg		108	80 - 128
Toluene	25.0	26.2		ug/Kg		105	80 - 129
Trichloroethene	25.0	27.0		ug/Kg		108	59 - 124
Vinyl chloride	25.0	24.9		ug/Kg		100	65 - 127
Xylenes, Total	50.0	56.2		ug/Kg		112	80 - 131
1,1,1-Trichloroethane	25.0	29.4		ug/Kg		118	80 - 134
1,1,2-Trichloroethane	25.0	25.4		ug/Kg		102	80 - 121
Cyclohexane	25.0	27.9		ug/Kg		112	80 - 138
1,2-Dibromo-3-Chloropropane	25.0	24.9		ug/Kg		99	65 - 132
Ethylene Dibromide	25.0	26.4		ug/Kg		105	47 - 123
Dichlorodifluoromethane	25.0	26.6		ug/Kg		106	30 - 149
cis-1,2-Dichloroethene	25.0	28.2		ug/Kg		113	80 - 123
trans-1,2-Dichloroethene	25.0	28.6		ug/Kg		114	80 - 125
Isopropylbenzene	25.0	29.1		ug/Kg		116	80 - 132
Methyl acetate	125	183	*	ug/Kg		147	61 - 135
Methyl tert-butyl ether	25.0	27.7		ug/Kg		111	75 - 125
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.1		ug/Kg		108	80 - 142
1,2,4-Trichlorobenzene	25.0	25.7		ug/Kg		103	70 - 125
1,2-Dichlorobenzene	25.0	25.2		ug/Kg		101	80 - 121

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201750/8
Matrix: Solid
Analysis Batch: 201750

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	25.0	26.1		ug/Kg		104	80 - 127
1,4-Dichlorobenzene	25.0	24.8		ug/Kg		99	79 - 120
Trichlorofluoromethane	25.0	25.0		ug/Kg		100	72 - 142
Methylcyclohexane	25.0	28.2		ug/Kg		113	80 - 137
m-Xylene & p-Xylene	25.0	27.6		ug/Kg		110	80 - 133
o-Xylene	25.0	28.6		ug/Kg		115	80 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*64 - 120*
4-Bromofluorobenzene (Surr)	*113*		*64 - 130*
Toluene-d8 (Surr)	*102*		*69 - 128*
Dibromofluoromethane (Surr)	*103*		*68 - 120*

Lab Sample ID: MB 240-201796/6
Matrix: Water
Analysis Batch: 201796

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/14/15 10:23	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 10:23	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 10:23	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 10:23	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 10:23	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/14/15 10:23	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 10:23	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 10:23	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 10:23	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 10:23	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 10:23	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 10:23	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 10:23	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 10:23	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 10:23	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 10:23	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 10:23	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 10:23	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 10:23	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 10:23	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 10:23	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 10:23	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 10:23	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 10:23	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 10:23	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 10:23	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/14/15 10:23	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 10:23	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 10:23	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 10:23	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201796/6
Matrix: Water
Analysis Batch: 201796

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 10:23	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 10:23	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 10:23	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 10:23	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 10:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/14/15 10:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 10:23	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 10:23	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 10:23	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 10:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 10:23	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 10:23	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 10:23	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 10:23	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 10:23	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 10:23	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 10:23	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 10:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*78 - 125*		*10/14/15 10:23*	*1*
4-Bromofluorobenzene (Surr)	*99*		*61 - 120*		*10/14/15 10:23*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/14/15 10:23*	*1*
Dibromofluoromethane (Surr)	*101*		*79 - 120*		*10/14/15 10:23*	*1*

Lab Sample ID: LCS 240-201796/4
Matrix: Water
Analysis Batch: 201796

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	22.1		ug/L		111	34 - 148
Benzene	10.0	11.3		ug/L		113	80 - 120
Dichlorobromomethane	10.0	10.4		ug/L		104	80 - 120
Bromoform	10.0	9.35		ug/L		93	56 - 122
Bromomethane	10.0	12.7		ug/L		127	38 - 132
2-Butanone (MEK)	20.0	20.8		ug/L		104	56 - 138
Carbon disulfide	10.0	11.9		ug/L		119	65 - 144
Carbon tetrachloride	10.0	12.1		ug/L		121	77 - 131
Chlorobenzene	10.0	10.1		ug/L		101	80 - 120
Chloroethane	10.0	12.1		ug/L		121	36 - 126
Chloroform	10.0	12.0		ug/L		120	80 - 120
Chloromethane	10.0	11.1		ug/L		111	48 - 133
1,1-Dichloroethane	10.0	12.5		ug/L		125	79 - 125
1,2-Dichloroethane	10.0	10.9		ug/L		109	80 - 120
1,1-Dichloroethene	10.0	11.4		ug/L		114	76 - 124
1,2-Dichloropropane	10.0	10.8		ug/L		108	78 - 124
cis-1,3-Dichloropropene	10.0	8.22		ug/L		82	74 - 126
trans-1,3-Dichloropropene	10.0	9.01		ug/L		90	75 - 131

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201796/4
Matrix: Water
Analysis Batch: 201796

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	10.0	10.9		ug/L		109	80 - 120
2-Hexanone	20.0	18.9		ug/L		94	55 - 141
Methylene Chloride	10.0	11.8		ug/L		118	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	19.2		ug/L		96	64 - 135
Styrene	10.0	10.3		ug/L		103	76 - 122
1,1,2,2-Tetrachloroethane	10.0	9.87		ug/L		99	71 - 123
Tetrachloroethene	10.0	10.1		ug/L		101	78 - 121
Toluene	10.0	10.9		ug/L		109	80 - 120
Trichloroethene	10.0	10.9		ug/L		109	80 - 121
Vinyl chloride	10.0	11.5		ug/L		115	52 - 121
Xylenes, Total	20.0	22.8		ug/L		114	80 - 120
1,1,1-Trichloroethane	10.0	12.2		ug/L		122	77 - 123
1,1,2-Trichloroethane	10.0	9.77		ug/L		98	80 - 120
Cyclohexane	10.0	12.0		ug/L		120	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	8.70		ug/L		87	50 - 132
Ethylene Dibromide	10.0	9.11		ug/L		91	80 - 120
Dichlorodifluoromethane	10.0	10.3		ug/L		103	23 - 136
cis-1,2-Dichloroethene	10.0	12.0		ug/L		120	79 - 120
trans-1,2-Dichloroethene	10.0	12.4		ug/L		124	80 - 124
Isopropylbenzene	10.0	11.8		ug/L		118	77 - 120
Methyl acetate	50.0	57.5		ug/L		115	67 - 131
Methyl tert-butyl ether	10.0	11.4		ug/L		114	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	11.0		ug/L		110	67 - 138
1,2,4-Trichlorobenzene	10.0	10.2		ug/L		102	61 - 120
1,2-Dichlorobenzene	10.0	10.3		ug/L		103	79 - 120
1,3-Dichlorobenzene	10.0	10.2		ug/L		102	79 - 120
1,4-Dichlorobenzene	10.0	9.96		ug/L		100	79 - 120
Trichlorofluoromethane	10.0	10.5		ug/L		105	61 - 133
Methylcyclohexane	10.0	11.3		ug/L		113	61 - 134
m-Xylene & p-Xylene	10.0	11.1		ug/L		111	80 - 120
o-Xylene	10.0	11.7		ug/L		117	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*78 - 125*
4-Bromofluorobenzene (Surr)	*109*		*61 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*110*		*79 - 120*

Lab Sample ID: 240-56328-32 MS
Matrix: Water
Analysis Batch: 201796

Client Sample ID: VAP-5-GW (20-21)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	U	200	164		ug/L		82	32 - 126
Benzene	10	U F2	100	88.8		ug/L		89	73 - 121
Dichlorobromomethane	10	U	100	91.5		ug/L		91	72 - 120
Bromoform	10	U	100	78.8		ug/L		79	45 - 121

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56328-32 MS
Matrix: Water
Analysis Batch: 201796

Client Sample ID: VAP-5-GW (20-21)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromomethane	10	U	100	59.2		ug/L		59	26 - 136
2-Butanone (MEK)	100	U	200	179		ug/L		90	49 - 132
Carbon disulfide	10	U F2	100	69.7		ug/L		70	54 - 144
Carbon tetrachloride	10	U F2	100	69.0		ug/L		69	65 - 129
Chlorobenzene	10	U	100	86.2		ug/L		86	72 - 120
Chloroethane	10	U	100	66.2		ug/L		66	27 - 131
Chloroform	10	U F2	100	92.0		ug/L		92	73 - 121
Chloromethane	10	U	100	44.4		ug/L		44	39 - 134
1,1-Dichloroethane	10	U F2	100	89.0		ug/L		89	73 - 124
1,2-Dichloroethane	10	U	100	97.8		ug/L		98	74 - 125
1,1-Dichloroethene	10	U F2	100	73.0		ug/L		73	67 - 124
1,2-Dichloropropane	10	U	100	95.5		ug/L		95	73 - 122
cis-1,3-Dichloropropene	10	U	100	75.6		ug/L		76	60 - 120
trans-1,3-Dichloropropene	10	U	100	86.6		ug/L		87	58 - 132
Ethylbenzene	10	U F2	100	81.7		ug/L		82	68 - 121
2-Hexanone	100	U	200	160		ug/L		80	49 - 142
Methylene Chloride	10	U F2	100	89.3		ug/L		89	70 - 124
4-Methyl-2-pentanone (MIBK)	100	U	200	171		ug/L		85	58 - 136
Styrene	10	U	100	87.8		ug/L		88	64 - 126
1,1,2,2-Tetrachloroethane	10	U	100	91.0		ug/L		91	61 - 130
Tetrachloroethene	10	U F2	100	75.2		ug/L		75	59 - 125
Toluene	10	U F2	100	87.1		ug/L		87	72 - 122
Trichloroethene	130		100	214		ug/L		81	61 - 129
Vinyl chloride	10	U	100	49.3		ug/L		49	44 - 122
Xylenes, Total	20	U F2	200	169		ug/L		84	67 - 122
1,1,1-Trichloroethane	10	U F2	100	75.1		ug/L		75	69 - 122
1,1,2-Trichloroethane	10	U	100	97.2		ug/L		97	72 - 125
Cyclohexane	10	U F2	100	69.0		ug/L		69	41 - 137
1,2-Dibromo-3-Chloropropane	20	U	100	64.3		ug/L		64	42 - 130
Ethylene Dibromide	10	U	100	90.6		ug/L		91	69 - 125
Dichlorodifluoromethane	10	U	100	17.5		ug/L		17	14 - 137
cis-1,2-Dichloroethene	390	F1	100	428	E F1	ug/L		43	66 - 124
trans-1,2-Dichloroethene	10	U F2	100	85.8		ug/L		86	72 - 125
Isopropylbenzene	10	U F2	100	76.5		ug/L		76	61 - 122
Methyl acetate	100	U	500	469		ug/L		94	64 - 124
Methyl tert-butyl ether	10	U F2	100	86.0		ug/L		86	61 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	100	65.0		ug/L		65	44 - 140
1,2,4-Trichlorobenzene	10	U	100	72.8		ug/L		73	48 - 120
1,2-Dichlorobenzene	10	U	100	86.5		ug/L		86	67 - 118
1,3-Dichlorobenzene	10	U	100	82.5		ug/L		82	65 - 120
1,4-Dichlorobenzene	10	U	100	84.0		ug/L		84	66 - 120
Trichlorofluoromethane	10	U	100	68.4		ug/L		68	49 - 133
Methylcyclohexane	10	U F2	100	63.3		ug/L		63	39 - 135
m-Xylene & p-Xylene	20	U F2	100	83.2		ug/L		83	66 - 123
o-Xylene	10	U F2	100	85.4		ug/L		85	68 - 121

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56328-32 MS
Matrix: Water
Analysis Batch: 201796

Client Sample ID: VAP-5-GW (20-21)
Prep Type: Total/NA

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*78 - 125*
4-Bromofluorobenzene (Surr)	*108*		*61 - 120*
Toluene-d8 (Surr)	*103*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*79 - 120*

Lab Sample ID: 240-56328-32 MSD
Matrix: Water
Analysis Batch: 201796

Client Sample ID: VAP-5-GW (20-21)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	100	U	200	192		ug/L		96	32 - 126	15	28
Benzene	10	U F2	100	106	F2	ug/L		106	73 - 121	17	13
Dichlorobromomethane	10	U	100	97.9		ug/L		98	72 - 120	7	19
Bromoform	10	U	100	82.4		ug/L		82	45 - 121	5	19
Bromomethane	10	U	100	74.9		ug/L		75	26 - 136	23	35
2-Butanone (MEK)	100	U	200	188		ug/L		94	49 - 132	5	19
Carbon disulfide	10	U F2	100	101	F2	ug/L		101	54 - 144	37	34
Carbon tetrachloride	10	U F2	100	103	F2	ug/L		103	65 - 129	39	20
Chlorobenzene	10	U	100	97.1		ug/L		97	72 - 120	12	15
Chloroethane	10	U	100	82.2		ug/L		82	27 - 131	22	35
Chloroform	10	U F2	100	111	F2	ug/L		111	73 - 121	19	17
Chloromethane	10	U	100	52.0		ug/L		52	39 - 134	16	20
1,1-Dichloroethane	10	U F2	100	114	F2	ug/L		114	73 - 124	25	14
1,2-Dichloroethane	10	U	100	102		ug/L		102	74 - 125	5	24
1,1-Dichloroethene	10	U F2	100	103	F2	ug/L		103	67 - 124	34	24
1,2-Dichloropropane	10	U	100	104		ug/L		104	73 - 122	9	15
cis-1,3-Dichloropropene	10	U	100	80.5		ug/L		80	60 - 120	6	21
trans-1,3-Dichloropropene	10	U	100	88.0		ug/L		88	58 - 132	2	22
Ethylbenzene	10	U F2	100	102	F2	ug/L		102	68 - 121	22	16
2-Hexanone	100	U	200	178		ug/L		89	49 - 142	11	27
Methylene Chloride	10	U F2	100	106	F2	ug/L		106	70 - 124	17	14
4-Methyl-2-pentanone (MIBK)	100	U	200	173		ug/L		87	58 - 136	1	32
Styrene	10	U	100	99.5		ug/L		100	64 - 126	13	15
1,1,2,2-Tetrachloroethane	10	U	100	93.6		ug/L		94	61 - 130	3	18
Tetrachloroethene	10	U F2	100	94.4	F2	ug/L		94	59 - 125	23	20
Toluene	10	U F2	100	104	F2	ug/L		104	72 - 122	17	15
Trichloroethene	130		100	228		ug/L		95	61 - 129	6	14
Vinyl chloride	10	U	100	56.7		ug/L		57	44 - 122	14	35
Xylenes, Total	20	U F2	200	209	F2	ug/L		105	67 - 122	21	14
1,1,1-Trichloroethane	10	U F2	100	108	F2	ug/L		108	69 - 122	36	14
1,1,2-Trichloroethane	10	U	100	97.8		ug/L		98	72 - 125	1	19
Cyclohexane	10	U F2	100	99.1	F2	ug/L		99	41 - 137	36	35
1,2-Dibromo-3-Chloropropane	20	U	100	72.3		ug/L		72	42 - 130	12	24
Ethylene Dibromide	10	U	100	91.8		ug/L		92	69 - 125	1	24
Dichlorodifluoromethane	10	U	100	18.7		ug/L		19	14 - 137	7	34
cis-1,2-Dichloroethene	390	F1	100	474	E	ug/L		89	66 - 124	10	22
trans-1,2-Dichloroethene	10	U F2	100	113	F2	ug/L		113	72 - 125	27	25
Isopropylbenzene	10	U F2	100	104	F2	ug/L		104	61 - 122	30	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56328-32 MSD
Matrix: Water
Analysis Batch: 201796

Client Sample ID: VAP-5-GW (20-21)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl acetate	100	U	500	506		ug/L		101	64 - 124	8	12
Methyl tert-butyl ether	10	U F2	100	99.7	F2	ug/L		100	61 - 121	15	12
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	100	91.3		ug/L		91	44 - 140	34	35
1,2,4-Trichlorobenzene	10	U	100	88.0		ug/L		88	48 - 120	19	28
1,2-Dichlorobenzene	10	U	100	95.5		ug/L		95	67 - 118	10	15
1,3-Dichlorobenzene	10	U	100	93.4		ug/L		93	65 - 120	12	15
1,4-Dichlorobenzene	10	U	100	93.2		ug/L		93	66 - 120	10	16
Trichlorofluoromethane	10	U	100	75.9		ug/L		76	49 - 133	10	25
Methylcyclohexane	10	U F2	100	90.9	F2	ug/L		91	39 - 135	36	35
m-Xylene & p-Xylene	20	U F2	100	102	F2	ug/L		102	66 - 123	20	15
o-Xylene	10	U F2	100	107	F2	ug/L		107	68 - 121	22	14

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*78 - 125*
4-Bromofluorobenzene (Surr)	*107*		*61 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*105*		*79 - 120*

Lab Sample ID: MB 240-202014/6
Matrix: Water
Analysis Batch: 202014

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/15/15 10:41	1
Benzene	1.0	U	1.0	0.35	ug/L			10/15/15 10:41	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/15/15 10:41	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/15/15 10:41	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/15/15 10:41	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/15/15 10:41	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/15/15 10:41	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/15/15 10:41	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/15/15 10:41	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/15/15 10:41	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/15/15 10:41	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/15/15 10:41	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/15/15 10:41	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/15/15 10:41	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/15/15 10:41	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/15/15 10:41	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/15/15 10:41	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/15/15 10:41	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/15/15 10:41	1
2-Hexanone	10	U	10	0.48	ug/L			10/15/15 10:41	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/15/15 10:41	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/15/15 10:41	1
Styrene	1.0	U	1.0	0.45	ug/L			10/15/15 10:41	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/15/15 10:41	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-202014/6
Matrix: Water
Analysis Batch: 202014

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/15/15 10:41	1
Toluene	1.0	U	1.0	0.23	ug/L			10/15/15 10:41	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/15/15 10:41	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/15/15 10:41	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/15/15 10:41	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/15/15 10:41	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/15/15 10:41	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/15/15 10:41	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/15/15 10:41	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/15/15 10:41	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/15/15 10:41	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/15/15 10:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/15/15 10:41	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/15/15 10:41	1
Methyl acetate	10	U	10	2.3	ug/L			10/15/15 10:41	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/15/15 10:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/15/15 10:41	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/15/15 10:41	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/15/15 10:41	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/15/15 10:41	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/15/15 10:41	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/15/15 10:41	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/15/15 10:41	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/15/15 10:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*78 - 125*		*10/15/15 10:41*	*1*
4-Bromofluorobenzene (Surr)	*84*		*61 - 120*		*10/15/15 10:41*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*10/15/15 10:41*	*1*
Dibromofluoromethane (Surr)	*101*		*79 - 120*		*10/15/15 10:41*	*1*

Lab Sample ID: LCS 240-202014/4
Matrix: Water
Analysis Batch: 202014

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	19.6		ug/L		98	34 - 148
Benzene	10.0	10.1		ug/L		101	80 - 120
Dichlorobromomethane	10.0	9.71		ug/L		97	80 - 120
Bromoform	10.0	9.44		ug/L		94	56 - 122
Bromomethane	10.0	8.23		ug/L		82	38 - 132
2-Butanone (MEK)	20.0	22.0		ug/L		110	56 - 138
Carbon disulfide	10.0	10.4		ug/L		104	65 - 144
Carbon tetrachloride	10.0	10.3		ug/L		103	77 - 131
Chlorobenzene	10.0	9.73		ug/L		97	80 - 120
Chloroethane	10.0	7.93		ug/L		79	36 - 126
Chloroform	10.0	10.3		ug/L		103	80 - 120
Chloromethane	10.0	10.5		ug/L		105	48 - 133

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-202014/4
Matrix: Water
Analysis Batch: 202014

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	10.0	10.7		ug/L		107	79 - 125
1,2-Dichloroethane	10.0	10.2		ug/L		102	80 - 120
1,1-Dichloroethene	10.0	10.0		ug/L		100	76 - 124
1,2-Dichloropropane	10.0	10.4		ug/L		104	78 - 124
cis-1,3-Dichloropropene	10.0	10.1		ug/L		101	74 - 126
trans-1,3-Dichloropropene	10.0	10.7		ug/L		107	75 - 131
Ethylbenzene	10.0	10.0		ug/L		100	80 - 120
2-Hexanone	20.0	22.0		ug/L		110	55 - 141
Methylene Chloride	10.0	10.3		ug/L		103	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	21.1		ug/L		105	64 - 135
Styrene	10.0	10.2		ug/L		102	76 - 122
1,1,2,2-Tetrachloroethane	10.0	9.32		ug/L		93	71 - 123
Tetrachloroethene	10.0	10.6		ug/L		106	78 - 121
Toluene	10.0	10.4		ug/L		104	80 - 120
Trichloroethene	10.0	10.3		ug/L		103	80 - 121
Vinyl chloride	10.0	9.10		ug/L		91	52 - 121
Xylenes, Total	20.0	20.2		ug/L		101	80 - 120
1,1,1-Trichloroethane	10.0	10.2		ug/L		102	77 - 123
1,1,2-Trichloroethane	10.0	9.65		ug/L		96	80 - 120
Cyclohexane	10.0	11.5		ug/L		115	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	8.52		ug/L		85	50 - 132
Ethylene Dibromide	10.0	10.1		ug/L		101	80 - 120
Dichlorodifluoromethane	10.0	10.1		ug/L		101	23 - 136
cis-1,2-Dichloroethene	10.0	10.0		ug/L		100	79 - 120
trans-1,2-Dichloroethene	10.0	10.4		ug/L		104	80 - 124
Isopropylbenzene	10.0	10.5		ug/L		105	77 - 120
Methyl acetate	50.0	52.5		ug/L		105	67 - 131
Methyl tert-butyl ether	10.0	10.1		ug/L		101	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.8		ug/L		108	67 - 138
1,2,4-Trichlorobenzene	10.0	9.56		ug/L		96	61 - 120
1,2-Dichlorobenzene	10.0	9.61		ug/L		96	79 - 120
1,3-Dichlorobenzene	10.0	9.94		ug/L		99	79 - 120
1,4-Dichlorobenzene	10.0	9.56		ug/L		96	79 - 120
Trichlorofluoromethane	10.0	9.86		ug/L		99	61 - 133
Methylcyclohexane	10.0	10.8		ug/L		108	61 - 134
m-Xylene & p-Xylene	10.0	10.1		ug/L		101	80 - 120
o-Xylene	10.0	10.1		ug/L		101	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*78 - 125*
4-Bromofluorobenzene (Surr)	*96*		*61 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*79 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-202028/6
Matrix: Water
Analysis Batch: 202028

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/15/15 10:47	1
Benzene	1.0	U	1.0	0.35	ug/L			10/15/15 10:47	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/15/15 10:47	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/15/15 10:47	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/15/15 10:47	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/15/15 10:47	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/15/15 10:47	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/15/15 10:47	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/15/15 10:47	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/15/15 10:47	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/15/15 10:47	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/15/15 10:47	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/15/15 10:47	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/15/15 10:47	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/15/15 10:47	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/15/15 10:47	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/15/15 10:47	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/15/15 10:47	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/15/15 10:47	1
2-Hexanone	10	U	10	0.48	ug/L			10/15/15 10:47	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/15/15 10:47	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/15/15 10:47	1
Styrene	1.0	U	1.0	0.45	ug/L			10/15/15 10:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/15/15 10:47	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/15/15 10:47	1
Toluene	1.0	U	1.0	0.23	ug/L			10/15/15 10:47	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/15/15 10:47	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/15/15 10:47	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/15/15 10:47	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/15/15 10:47	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/15/15 10:47	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/15/15 10:47	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/15/15 10:47	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/15/15 10:47	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/15/15 10:47	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/15/15 10:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/15/15 10:47	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/15/15 10:47	1
Methyl acetate	10	U	10	2.3	ug/L			10/15/15 10:47	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/15/15 10:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/15/15 10:47	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/15/15 10:47	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/15/15 10:47	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/15/15 10:47	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/15/15 10:47	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/15/15 10:47	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/15/15 10:47	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/15/15 10:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*103*		*78 - 125*		*10/15/15 10:47*	*1*
4-Bromofluorobenzene (Surr)	*103*		*61 - 120*		*10/15/15 10:47*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/15/15 10:47*	*1*
Dibromofluoromethane (Surr)	*104*		*79 - 120*		*10/15/15 10:47*	*1*

Lab Sample ID: LCS 240-202028/4
Matrix: Water
Analysis Batch: 202028

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	19.9		ug/L		99	34 - 148
Benzene	10.0	10.7		ug/L		107	80 - 120
Dichlorobromomethane	10.0	10.5		ug/L		105	80 - 120
Bromoform	10.0	9.34		ug/L		93	56 - 122
Bromomethane	10.0	9.46		ug/L		95	38 - 132
2-Butanone (MEK)	20.0	21.5		ug/L		108	56 - 138
Carbon disulfide	10.0	10.4		ug/L		104	65 - 144
Carbon tetrachloride	10.0	11.3		ug/L		113	77 - 131
Chlorobenzene	10.0	10.2		ug/L		102	80 - 120
Chloroethane	10.0	8.26		ug/L		83	36 - 126
Chloroform	10.0	11.0		ug/L		110	80 - 120
Chloromethane	10.0	9.36		ug/L		94	48 - 133
1,1-Dichloroethane	10.0	11.3		ug/L		113	79 - 125
1,2-Dichloroethane	10.0	10.9		ug/L		109	80 - 120
1,1-Dichloroethene	10.0	10.4		ug/L		104	76 - 124
1,2-Dichloropropane	10.0	10.8		ug/L		108	78 - 124
cis-1,3-Dichloropropene	10.0	9.20		ug/L		92	74 - 126
trans-1,3-Dichloropropene	10.0	10.2		ug/L		102	75 - 131
Ethylbenzene	10.0	10.6		ug/L		106	80 - 120
2-Hexanone	20.0	18.5		ug/L		92	55 - 141
Methylene Chloride	10.0	10.7		ug/L		107	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	19.6		ug/L		98	64 - 135
Styrene	10.0	10.3		ug/L		103	76 - 122
1,1,2,2-Tetrachloroethane	10.0	10.2		ug/L		102	71 - 123
Tetrachloroethene	10.0	10.3		ug/L		103	78 - 121
Toluene	10.0	11.0		ug/L		110	80 - 120
Trichloroethene	10.0	10.7		ug/L		107	80 - 121
Vinyl chloride	10.0	9.23		ug/L		92	52 - 121
Xylenes, Total	20.0	21.9		ug/L		110	80 - 120
1,1,1-Trichloroethane	10.0	11.2		ug/L		112	77 - 123
1,1,2-Trichloroethane	10.0	10.3		ug/L		103	80 - 120
Cyclohexane	10.0	10.9		ug/L		109	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	8.20		ug/L		82	50 - 132
Ethylene Dibromide	10.0	9.87		ug/L		99	80 - 120
Dichlorodifluoromethane	10.0	9.08		ug/L		91	23 - 136
cis-1,2-Dichloroethene	10.0	10.7		ug/L		107	79 - 120
trans-1,2-Dichloroethene	10.0	11.1		ug/L		111	80 - 124
Isopropylbenzene	10.0	11.0		ug/L		110	77 - 120
Methyl acetate	50.0	53.2		ug/L		106	67 - 131
Methyl tert-butyl ether	10.0	10.1		ug/L		101	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.2		ug/L		102	67 - 138
1,2,4-Trichlorobenzene	10.0	9.92		ug/L		99	61 - 120
1,2-Dichlorobenzene	10.0	10.0		ug/L		100	79 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-202028/4
Matrix: Water
Analysis Batch: 202028

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	10.0	10.1		ug/L		101	79 - 120
1,4-Dichlorobenzene	10.0	9.90		ug/L		99	79 - 120
Trichlorofluoromethane	10.0	8.65		ug/L		86	61 - 133
Methylcyclohexane	10.0	10.4		ug/L		104	61 - 134
m-Xylene & p-Xylene	10.0	10.9		ug/L		109	80 - 120
o-Xylene	10.0	11.0		ug/L		110	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*78 - 125*
4-Bromofluorobenzene (Surr)	*104*		*61 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*79 - 120*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-201082/22-A
Matrix: Solid
Analysis Batch: 201593

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201082

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	50	U	50	3.5	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
bis (2-chloroisopropyl) ether	100	U	100	9.5	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
2,4,5-Trichlorophenol	150	U	150	25	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
2,4,6-Trichlorophenol	150	U	150	8.9	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
2,4-Dichlorophenol	150	U	150	20	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
2,4-Dimethylphenol	150	U	150	20	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
2,4-Dinitrophenol	330	U	330	21	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
2,4-Dinitrotoluene	200	U	200	17	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
2,6-Dinitrotoluene	200	U	200	21	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
2-Chloronaphthalene	50	U	50	0.45	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
2-Chlorophenol	50	U	50	8.2	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
2-Methylnaphthalene	6.7	U	6.7	0.50	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
2-Methylphenol	200	U	200	11	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
2-Nitroaniline	200	U	200	9.1	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
2-Nitrophenol	50	U	50	8.3	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
3,3'-Dichlorobenzidine	100	U	100	18	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
3-Nitroaniline	200	U	200	16	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
4,6-Dinitro-2-methylphenol	150	U	150	9.2	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
4-Bromophenyl phenyl ether	50	U	50	13	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
4-Chloro-3-methylphenol	150	U	150	21	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
4-Chloroaniline	150	U	150	17	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
4-Chlorophenyl phenyl ether	50	U	50	13	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
4-Nitroaniline	200	U	200	26	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
4-Nitrophenol	330	U	330	17	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Acenaphthene	6.7	U	6.7	0.76	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Acenaphthylene	6.7	U	6.7	0.35	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Acetophenone	100	U	100	9.2	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Anthracene	6.7	U	6.7	0.78	ug/Kg		10/09/15 07:30	10/13/15 10:14	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201082/22-A
Matrix: Solid
Analysis Batch: 201593

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201082

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Atrazine	200	U	200	9.1	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Benzaldehyde	100	U	100	12	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Benzo[a]anthracene	6.7	U	6.7	0.63	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Benzo[a]pyrene	6.7	U	6.7	0.64	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Benzo[b]fluoranthene	6.7	U	6.7	0.59	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Benzo[g,h,i]perylene	6.7	U	6.7	0.35	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Benzo[k]fluoranthene	6.7	U	6.7	0.68	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Bis(2-chloroethoxy)methane	100	U	100	22	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Bis(2-chloroethyl)ether	100	U	100	2.0	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Bis(2-ethylhexyl) phthalate	70	U	70	19	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Butyl benzyl phthalate	70	U	70	10	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Caprolactam	330	U	330	37	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Carbazole	50	U	50	27	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Chrysene	6.7	U	6.7	1.1	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Dibenz(a,h)anthracene	6.7	U	6.7	0.66	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Dibenzofuran	50	U	50	0.66	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Diethyl phthalate	70	U	70	16	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Dimethyl phthalate	70	U	70	17	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Di-n-butyl phthalate	21.9	J	70	15	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Di-n-octyl phthalate	70	U	70	7.9	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Fluoranthene	6.7	U	6.7	0.55	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Fluorene	6.7	U	6.7	0.53	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Hexachlorobenzene	6.7	U	6.7	2.1	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Hexachlorobutadiene	50	U	50	5.6	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Hexachlorocyclopentadiene	330	U	330	8.1	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Hexachloroethane	50	U	50	9.0	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Indeno[1,2,3-cd]pyrene	6.7	U	6.7	0.35	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Isophorone	50	U	50	13	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Naphthalene	6.7	U	6.7	0.82	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Nitrobenzene	100	U	100	2.2	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
N-Nitrosodi-n-propylamine	50	U	50	6.3	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
N-Nitrosodiphenylamine	50	U	50	21	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Pentachlorophenol	150	U	150	9.1	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Phenol	50	U	50	7.3	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Phenanthrene	6.7	U	6.7	0.73	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
Pyrene	6.7	U	6.7	0.44	ug/Kg		10/09/15 07:30	10/13/15 10:14	1
3 & 4 Methylphenol	400	U	400	20	ug/Kg		10/09/15 07:30	10/13/15 10:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*76*		*24 - 110*	*10/09/15 07:30*	*10/13/15 10:14*	*1*
2-Fluorophenol (Surr)	*74*		*24 - 110*	*10/09/15 07:30*	*10/13/15 10:14*	*1*
2,4,6-Tribromophenol (Surr)	*46*		*10 - 110*	*10/09/15 07:30*	*10/13/15 10:14*	*1*
Nitrobenzene-d5 (Surr)	*73*		*20 - 110*	*10/09/15 07:30*	*10/13/15 10:14*	*1*
Phenol-d5 (Surr)	*76*		*26 - 110*	*10/09/15 07:30*	*10/13/15 10:14*	*1*
Terphenyl-d14 (Surr)	*80*		*36 - 110*	*10/09/15 07:30*	*10/13/15 10:14*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201082/23-A
Matrix: Solid
Analysis Batch: 201593

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201082

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	667	499		ug/Kg		75	35 - 110
bis (2-chloroisopropyl) ether	667	479		ug/Kg		72	29 - 110
2,4,5-Trichlorophenol	667	510		ug/Kg		76	25 - 110
2,4,6-Trichlorophenol	667	495		ug/Kg		74	12 - 110
2,4-Dichlorophenol	667	492		ug/Kg		74	39 - 110
2,4-Dimethylphenol	667	438		ug/Kg		66	29 - 110
2,4-Dinitrophenol	1330	906		ug/Kg		68	10 - 110
2,4-Dinitrotoluene	667	534		ug/Kg		80	48 - 110
2,6-Dinitrotoluene	667	548		ug/Kg		82	45 - 110
2-Chloronaphthalene	667	493		ug/Kg		74	32 - 110
2-Chlorophenol	667	478		ug/Kg		72	37 - 110
2-Methylnaphthalene	667	488		ug/Kg		73	36 - 110
2-Methylphenol	667	474		ug/Kg		71	41 - 110
2-Nitroaniline	667	487		ug/Kg		73	45 - 110
2-Nitrophenol	667	496		ug/Kg		74	34 - 110
3,3'-Dichlorobenzidine	1330	884		ug/Kg		66	28 - 110
3-Nitroaniline	667	440		ug/Kg		66	44 - 110
4,6-Dinitro-2-methylphenol	1330	978		ug/Kg		73	10 - 110
4-Bromophenyl phenyl ether	667	576		ug/Kg		86	39 - 110
4-Chloro-3-methylphenol	667	528		ug/Kg		79	48 - 110
4-Chloroaniline	667	401		ug/Kg		60	30 - 110
4-Chlorophenyl phenyl ether	667	537		ug/Kg		80	40 - 110
4-Nitroaniline	667	550		ug/Kg		83	48 - 110
4-Nitrophenol	1330	1060		ug/Kg		80	28 - 110
Acenaphthene	667	461		ug/Kg		69	38 - 110
Acenaphthylene	667	491		ug/Kg		74	40 - 110
Acetophenone	667	471		ug/Kg		71	40 - 110
Anthracene	667	532		ug/Kg		80	48 - 110
Atrazine	1330	1320		ug/Kg		99	54 - 120
Benzaldehyde	1330	961		ug/Kg		72	32 - 110
Benzo[a]anthracene	667	527		ug/Kg		79	50 - 110
Benzo[a]pyrene	667	562		ug/Kg		84	44 - 110
Benzo[b]fluoranthene	667	541		ug/Kg		81	43 - 110
Benzo[g,h,i]perylene	667	591		ug/Kg		89	51 - 110
Benzo[k]fluoranthene	667	581		ug/Kg		87	38 - 105
Bis(2-chloroethoxy)methane	667	498		ug/Kg		75	32 - 110
Bis(2-chloroethyl)ether	667	460		ug/Kg		69	34 - 110
Bis(2-ethylhexyl) phthalate	667	562		ug/Kg		84	50 - 110
Butyl benzyl phthalate	667	568		ug/Kg		85	51 - 110
Caprolactam	1330	1170		ug/Kg		88	44 - 114
Carbazole	667	597		ug/Kg		90	50 - 110
Chrysene	667	545		ug/Kg		82	50 - 110
Dibenz(a,h)anthracene	667	609		ug/Kg		91	51 - 110
Dibenzofuran	667	460		ug/Kg		69	43 - 110
Diethyl phthalate	667	520		ug/Kg		78	52 - 110
Dimethyl phthalate	667	544		ug/Kg		82	50 - 110
Di-n-butyl phthalate	667	607		ug/Kg		91	51 - 110
Di-n-octyl phthalate	667	592		ug/Kg		89	48 - 110

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201082/23-A
Matrix: Solid
Analysis Batch: 201593

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201082

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoranthene	667	621		ug/Kg		93	51 - 110
Fluorene	667	510		ug/Kg		77	46 - 110
Hexachlorobenzene	667	553		ug/Kg		83	43 - 110
Hexachlorobutadiene	667	483		ug/Kg		73	29 - 110
Hexachlorocyclopentadiene	667	364		ug/Kg		55	12 - 110
Hexachloroethane	667	467		ug/Kg		70	30 - 110
Indeno[1,2,3-cd]pyrene	667	592		ug/Kg		89	50 - 110
Isophorone	667	504		ug/Kg		76	36 - 110
Naphthalene	667	468		ug/Kg		70	36 - 110
Nitrobenzene	667	483		ug/Kg		73	32 - 110
N-Nitrosodi-n-propylamine	667	490		ug/Kg		73	38 - 110
N-Nitrosodiphenylamine	1330	1130		ug/Kg		84	46 - 110
Pentachlorophenol	1330	556		ug/Kg		42	10 - 110
Phenol	667	481		ug/Kg		72	38 - 110
Phenanthrene	667	529		ug/Kg		79	49 - 110
Pyrene	667	589		ug/Kg		88	49 - 110
3 & 4 Methylphenol	667	483		ug/Kg		72	40 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*79*		*24 - 110*
2-Fluorophenol (Surr)	*78*		*24 - 110*
2,4,6-Tribromophenol (Surr)	*61*		*10 - 110*
Nitrobenzene-d5 (Surr)	*76*		*20 - 110*
Phenol-d5 (Surr)	*77*		*26 - 110*
Terphenyl-d14 (Surr)	*89*		*36 - 110*

Lab Sample ID: MB 240-201121/23-A
Matrix: Water
Analysis Batch: 201359

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201121

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/09/15 09:01	10/12/15 07:14	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/09/15 09:01	10/12/15 07:14	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/09/15 09:01	10/12/15 07:14	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/09/15 09:01	10/12/15 07:14	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/09/15 09:01	10/12/15 07:14	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/09/15 09:01	10/12/15 07:14	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/09/15 09:01	10/12/15 07:14	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/09/15 09:01	10/12/15 07:14	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/09/15 09:01	10/12/15 07:14	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/09/15 09:01	10/12/15 07:14	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/09/15 09:01	10/12/15 07:14	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/09/15 09:01	10/12/15 07:14	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/09/15 09:01	10/12/15 07:14	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/09/15 09:01	10/12/15 07:14	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/09/15 09:01	10/12/15 07:14	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/09/15 09:01	10/12/15 07:14	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/09/15 09:01	10/12/15 07:14	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201121/23-A
Matrix: Water
Analysis Batch: 201359

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201121

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/09/15 09:01	10/12/15 07:14	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/09/15 09:01	10/12/15 07:14	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/09/15 09:01	10/12/15 07:14	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/09/15 09:01	10/12/15 07:14	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/09/15 09:01	10/12/15 07:14	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/09/15 09:01	10/12/15 07:14	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/09/15 09:01	10/12/15 07:14	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/09/15 09:01	10/12/15 07:14	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/09/15 09:01	10/12/15 07:14	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/09/15 09:01	10/12/15 07:14	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/09/15 09:01	10/12/15 07:14	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/09/15 09:01	10/12/15 07:14	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/09/15 09:01	10/12/15 07:14	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/09/15 09:01	10/12/15 07:14	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/09/15 09:01	10/12/15 07:14	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/09/15 09:01	10/12/15 07:14	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/09/15 09:01	10/12/15 07:14	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/09/15 09:01	10/12/15 07:14	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/09/15 09:01	10/12/15 07:14	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/09/15 09:01	10/12/15 07:14	1
Bis(2-ethylhexyl) phthalate	1.87	J	2.0	1.5	ug/L		10/09/15 09:01	10/12/15 07:14	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/09/15 09:01	10/12/15 07:14	1
Caprolactam	1.62	J	5.0	0.37	ug/L		10/09/15 09:01	10/12/15 07:14	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/09/15 09:01	10/12/15 07:14	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/09/15 09:01	10/12/15 07:14	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/09/15 09:01	10/12/15 07:14	1
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/09/15 09:01	10/12/15 07:14	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/09/15 09:01	10/12/15 07:14	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/09/15 09:01	10/12/15 07:14	1
Di-n-butyl phthalate	0.564	J	1.0	0.40	ug/L		10/09/15 09:01	10/12/15 07:14	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/09/15 09:01	10/12/15 07:14	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/09/15 09:01	10/12/15 07:14	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/09/15 09:01	10/12/15 07:14	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/09/15 09:01	10/12/15 07:14	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/09/15 09:01	10/12/15 07:14	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/09/15 09:01	10/12/15 07:14	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/09/15 09:01	10/12/15 07:14	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/09/15 09:01	10/12/15 07:14	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/09/15 09:01	10/12/15 07:14	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/09/15 09:01	10/12/15 07:14	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/09/15 09:01	10/12/15 07:14	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/09/15 09:01	10/12/15 07:14	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/09/15 09:01	10/12/15 07:14	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/09/15 09:01	10/12/15 07:14	1
Phenol	1.0	U	1.0	0.15	ug/L		10/09/15 09:01	10/12/15 07:14	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/09/15 09:01	10/12/15 07:14	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/09/15 09:01	10/12/15 07:14	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/09/15 09:01	10/12/15 07:14	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201121/23-A
Matrix: Water
Analysis Batch: 201359

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201121

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	76		29 - 110	10/09/15 09:01	10/12/15 07:14	1
2-Fluorophenol (Surr)	68		15 - 110	10/09/15 09:01	10/12/15 07:14	1
2,4,6-Tribromophenol (Surr)	52		21 - 128	10/09/15 09:01	10/12/15 07:14	1
Nitrobenzene-d5 (Surr)	72		31 - 110	10/09/15 09:01	10/12/15 07:14	1
Phenol-d5 (Surr)	53		10 - 110	10/09/15 09:01	10/12/15 07:14	1
Terphenyl-d14 (Surr)	83		31 - 115	10/09/15 09:01	10/12/15 07:14	1

Lab Sample ID: LCS 240-201121/24-A
Matrix: Water
Analysis Batch: 201359

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201121

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	32.0	25.3		ug/L		79	43 - 120
bis (2-chloroisopropyl) ether	32.0	26.3		ug/L		82	45 - 112
2,4,5-Trichlorophenol	32.0	25.6		ug/L		80	49 - 120
2,4,6-Trichlorophenol	32.0	24.4		ug/L		76	50 - 120
2,4-Dichlorophenol	32.0	26.4		ug/L		83	54 - 120
2,4-Dimethylphenol	32.0	28.6		ug/L		89	40 - 125
2,4-Dinitrophenol	64.0	34.7	J	ug/L		54	30 - 120
2,4-Dinitrotoluene	32.0	27.3		ug/L		85	50 - 120
2,6-Dinitrotoluene	32.0	26.3		ug/L		82	52 - 120
2-Chloronaphthalene	32.0	25.5		ug/L		80	43 - 120
2-Chlorophenol	32.0	27.6		ug/L		86	53 - 120
2-Methylnaphthalene	32.0	26.0		ug/L		81	46 - 120
2-Methylphenol	32.0	26.8		ug/L		84	52 - 120
2-Nitroaniline	32.0	27.4		ug/L		86	47 - 120
2-Nitrophenol	32.0	28.0		ug/L		87	53 - 120
3,3'-Dichlorobenzidine	64.0	45.2		ug/L		71	30 - 120
3-Nitroaniline	32.0	27.1		ug/L		85	40 - 144
4,6-Dinitro-2-methylphenol	64.0	42.6		ug/L		67	40 - 120
4-Bromophenyl phenyl ether	32.0	25.2		ug/L		79	49 - 120
4-Chloro-3-methylphenol	32.0	25.8		ug/L		81	55 - 120
4-Chloroaniline	32.0	16.4		ug/L		51	20 - 136
4-Chlorophenyl phenyl ether	32.0	24.8		ug/L		78	48 - 120
4-Nitroaniline	32.0	24.6		ug/L		77	40 - 135
4-Nitrophenol	64.0	35.6		ug/L		56	30 - 120
Acenaphthene	32.0	25.9		ug/L		81	48 - 120
Acenaphthylene	32.0	25.7		ug/L		80	47 - 120
Acetophenone	32.0	28.8		ug/L		90	53 - 120
Anthracene	32.0	25.0		ug/L		78	50 - 120
Atrazine	64.0	52.7		ug/L		82	49 - 120
Benzaldehyde	64.0	103	E *	ug/L		161	40 - 160
Benzo[a]anthracene	32.0	23.3		ug/L		73	46 - 120
Benzo[a]pyrene	32.0	24.9		ug/L		78	49 - 120
Benzo[b]fluoranthene	32.0	23.2		ug/L		72	49 - 120
Benzo[g,h,i]perylene	32.0	28.1		ug/L		88	48 - 120
Benzo[k]fluoranthene	32.0	26.6		ug/L		83	50 - 120
Bis(2-chloroethoxy)methane	32.0	27.6		ug/L		86	54 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201121/24-A
Matrix: Water
Analysis Batch: 201359

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201121

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethyl)ether	32.0	27.6		ug/L		86	51 - 120
Bis(2-ethylhexyl) phthalate	32.0	29.6		ug/L		92	30 - 156
Butyl benzyl phthalate	32.0	27.1		ug/L		85	40 - 125
Caprolactam	64.0	18.6		ug/L		29	10 - 120
Carbazole	32.0	24.2		ug/L		76	46 - 127
Chrysene	32.0	24.9		ug/L		78	45 - 120
Dibenz(a,h)anthracene	32.0	24.6		ug/L		77	49 - 120
Dibenzofuran	32.0	25.0		ug/L		78	45 - 120
Diethyl phthalate	32.0	26.6		ug/L		83	48 - 121
Dimethyl phthalate	32.0	26.3		ug/L		82	50 - 120
Di-n-butyl phthalate	32.0	27.1		ug/L		85	40 - 160
Di-n-octyl phthalate	32.0	28.5		ug/L		89	40 - 128
Fluoranthene	32.0	24.3		ug/L		76	50 - 120
Fluorene	32.0	25.1		ug/L		79	50 - 120
Hexachlorobenzene	32.0	23.6		ug/L		74	46 - 120
Hexachlorobutadiene	32.0	25.2		ug/L		79	30 - 120
Hexachlorocyclopentadiene	32.0	21.1		ug/L		66	4 - 120
Hexachloroethane	32.0	27.3		ug/L		85	30 - 120
Indeno[1,2,3-cd]pyrene	32.0	29.1		ug/L		91	48 - 140
Isophorone	32.0	30.0		ug/L		94	52 - 120
Naphthalene	32.0	26.7		ug/L		83	45 - 120
Nitrobenzene	32.0	27.4		ug/L		86	54 - 120
N-Nitrosodi-n-propylamine	32.0	29.2		ug/L		91	52 - 117
N-Nitrosodiphenylamine	64.0	50.6		ug/L		79	47 - 109
Pentachlorophenol	64.0	36.2	J	ug/L		56	30 - 120
Phenol	32.0	18.6		ug/L		58	40 - 120
Phenanthrene	32.0	24.5		ug/L		77	50 - 120
Pyrene	32.0	25.2		ug/L		79	49 - 114
3 & 4 Methylphenol	32.0	26.0		ug/L		81	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*87*		*29 - 110*
2-Fluorophenol (Surr)	*78*		*15 - 110*
2,4,6-Tribromophenol (Surr)	*76*		*21 - 128*
Nitrobenzene-d5 (Surr)	*91*		*31 - 110*
Phenol-d5 (Surr)	*62*		*10 - 110*
Terphenyl-d14 (Surr)	*87*		*31 - 115*

Lab Sample ID: 240-56328-7 MS
Matrix: Water
Analysis Batch: 201359

Client Sample ID: VAP-2 GW (35-36)
Prep Type: Total/NA
Prep Batch: 201121

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	1.0	U F2	30.2	10.5		ug/L		35	10 - 160
bis (2-chloroisopropyl) ether	1.0	U F2	30.2	12.8		ug/L		42	10 - 160
2,4,5-Trichlorophenol	5.0	U F2	30.2	13.5		ug/L		45	10 - 160
2,4,6-Trichlorophenol	5.0	U F2	30.2	12.5		ug/L		42	10 - 160
2,4-Dichlorophenol	2.0	U F2	30.2	13.7		ug/L		46	10 - 160

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56328-7 MS
Matrix: Water
Analysis Batch: 201359

Client Sample ID: VAP-2 GW (35-36)
Prep Type: Total/NA
Prep Batch: 201121

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dimethylphenol	2.0	U F2	30.2	13.5		ug/L		45	10 - 160
2,4-Dinitrophenol	40	U F2	60.4	19.2	J	ug/L		32	10 - 160
2,4-Dinitrotoluene	5.0	U F2	30.2	14.7		ug/L		49	10 - 160
2,6-Dinitrotoluene	5.0	U F2	30.2	14.2		ug/L		47	10 - 160
2-Chloronaphthalene	1.0	U F2	30.2	10.4		ug/L		34	10 - 160
2-Chlorophenol	1.0	U F2	30.2	14.1		ug/L		47	10 - 160
2-Methylnaphthalene	0.20	U F2	30.2	10.6		ug/L		35	10 - 160
2-Methylphenol	1.0	U F2	30.2	14.1		ug/L		47	10 - 160
2-Nitroaniline	2.0	U F2	30.2	14.9		ug/L		49	10 - 160
2-Nitrophenol	2.0	U F2	30.2	14.0		ug/L		47	10 - 160
3,3'-Dichlorobenzidine	5.0	U F1 F2	60.4	9.41		ug/L		16	10 - 160
3-Nitroaniline	2.0	U F2	30.2	12.4		ug/L		41	10 - 160
4,6-Dinitro-2-methylphenol	5.0	U F2	60.4	22.2		ug/L		37	10 - 160
4-Bromophenyl phenyl ether	2.0	U F1 F2	30.2	10.4		ug/L		34	10 - 160
4-Chloro-3-methylphenol	2.0	U F2	30.2	14.5		ug/L		48	10 - 160
4-Chloroaniline	2.0	U F1 F2	30.2	3.65		ug/L		12	10 - 160
4-Chlorophenyl phenyl ether	2.0	U F1 F2	30.2	10.4		ug/L		35	10 - 160
4-Nitroaniline	2.0	U F2	30.2	12.9		ug/L		43	10 - 160
4-Nitrophenol	5.0	U F2	60.4	25.1		ug/L		42	10 - 160
Acenaphthene	0.20	U F2	30.2	10.9		ug/L		36	10 - 160
Acenaphthylene	0.20	U F2	30.2	11.0		ug/L		37	10 - 160
Acetophenone	1.0	U F2	30.2	14.7		ug/L		49	10 - 160
Anthracene	0.20	U F1 F2	30.2	11.3		ug/L		38	10 - 160
Atrazine	1.0	U F2	60.4	27.5		ug/L		45	10 - 160
Benzaldehyde	1.0	U * F2	60.4	49.3		ug/L		82	10 - 160
Benzo[a]anthracene	0.20	U F1 F2	30.2	10.3		ug/L		34	10 - 160
Benzo[a]pyrene	0.20	U F1 F2	30.2	7.74		ug/L		26	10 - 160
Benzo[b]fluoranthene	0.20	U F1 F2	30.2	7.48		ug/L		25	10 - 160
Benzo[g,h,i]perylene	0.20	U F1 F2	30.2	5.73		ug/L		19	10 - 160
Benzo[k]fluoranthene	0.20	U F1 F2	30.2	8.48		ug/L		28	10 - 160
Bis(2-chloroethoxy)methane	1.0	U F2	30.2	14.3		ug/L		47	10 - 160
Bis(2-chloroethyl)ether	1.0	U F2	30.2	14.1		ug/L		47	10 - 160
Bis(2-ethylhexyl) phthalate	2.0	U F2	30.2	6.02		ug/L		20	10 - 160
Butyl benzyl phthalate	1.0	U F2	30.2	13.1		ug/L		43	10 - 160
Caprolactam	26	B F1 F2	60.4	64.0		ug/L		62	10 - 160
Carbazole	1.0	U F2	30.2	14.1		ug/L		47	10 - 160
Chrysene	0.20	U F1 F2	30.2	11.0		ug/L		37	10 - 160
Dibenz(a,h)anthracene	0.20	U F1 F2	30.2	4.97		ug/L		16	10 - 160
Dibenzofuran	1.0	U F2	30.2	10.9		ug/L		36	10 - 160
Diethyl phthalate	1.0	U F2	30.2	14.0		ug/L		46	10 - 160
Dimethyl phthalate	1.0	U F2	30.2	14.2		ug/L		47	10 - 160
Di-n-butyl phthalate	0.62	J B F2	30.2	14.0		ug/L		44	10 - 160
Di-n-octyl phthalate	1.0	U F1 F2	30.2	3.94		ug/L		13	10 - 160
Fluoranthene	0.20	U F1 F2	30.2	11.3		ug/L		38	10 - 160
Fluorene	0.20	U F1 F2	30.2	11.1		ug/L		37	10 - 160
Hexachlorobenzene	1.0	U F1 F2	30.2	9.50		ug/L		31	10 - 160
Hexachlorobutadiene	1.0	U F1 F2	30.2	9.53		ug/L		32	10 - 160
Hexachlorocyclopentadiene	10	U F1	30.2	7.37	J	ug/L		24	10 - 160

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56328-7 MS
Matrix: Water
Analysis Batch: 201359

Client Sample ID: VAP-2 GW (35-36)
Prep Type: Total/NA
Prep Batch: 201121

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachloroethane	1.0	U F2	30.2	10.4		ug/L		35	10 - 160
Indeno[1,2,3-cd]pyrene	0.20	U F1 F2	30.2	5.26		ug/L		17	10 - 160
Isophorone	1.0	U F2	30.2	15.3		ug/L		51	10 - 160
Naphthalene	0.20	U F2	30.2	11.4		ug/L		38	10 - 160
Nitrobenzene	1.0	U F2	30.2	14.0		ug/L		47	10 - 160
N-Nitrosodi-n-propylamine	1.0	U F2	30.2	14.8		ug/L		49	10 - 160
N-Nitrosodiphenylamine	1.0	U F2	60.4	24.4		ug/L		40	10 - 160
Pentachlorophenol	40	U F1	60.4	17.9	J	ug/L		30	10 - 160
Phenol	1.0	U F2	30.2	10.8		ug/L		36	10 - 160
Phenanthrene	0.20	U F1 F2	30.2	11.5		ug/L		38	10 - 160
Pyrene	0.20	U F1 F2	30.2	12.3		ug/L		41	10 - 160
3 & 4 Methylphenol	2.0	U F2	30.2	14.1		ug/L		47	10 - 160

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*36*		*29 - 110*
2-Fluorophenol (Surr)	*43*		*15 - 110*
2,4,6-Tribromophenol (Surr)	*40*		*21 - 128*
Nitrobenzene-d5 (Surr)	*46*		*31 - 110*
Phenol-d5 (Surr)	*37*		*10 - 110*
Terphenyl-d14 (Surr)	*31*		*31 - 115*

Lab Sample ID: 240-56328-7 MSD
Matrix: Water
Analysis Batch: 201359

Client Sample ID: VAP-2 GW (35-36)
Prep Type: Total/NA
Prep Batch: 201121

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1'-Biphenyl	1.0	U F2	30.8	2.95	F2	ug/L		10	10 - 160	112	30
bis (2-chloroisopropyl) ether	1.0	U F2	30.8	4.43	F2	ug/L		14	10 - 160	97	30
2,4,5-Trichlorophenol	5.0	U F2	30.8	4.54	J F2	ug/L		15	10 - 160	99	30
2,4,6-Trichlorophenol	5.0	U F2	30.8	4.11	J F2	ug/L		13	10 - 160	101	30
2,4-Dichlorophenol	2.0	U F2	30.8	4.66	F2	ug/L		15	10 - 160	99	30
2,4-Dimethylphenol	2.0	U F2	30.8	5.51	F2	ug/L		18	10 - 160	84	30
2,4-Dinitrophenol	40	U F2	61.5	7.26	J F2	ug/L		12	10 - 160	90	30
2,4-Dinitrotoluene	5.0	U F2	30.8	4.02	J F2	ug/L		13	10 - 160	114	30
2,6-Dinitrotoluene	5.0	U F2	30.8	4.21	J F2	ug/L		14	10 - 160	109	30
2-Chloronaphthalene	1.0	U F2	30.8	3.04	F2	ug/L		10	10 - 160	109	30
2-Chlorophenol	1.0	U F2	30.8	5.17	F2	ug/L		17	10 - 160	93	30
2-Methylnaphthalene	0.20	U F2	30.8	3.09	F2	ug/L		10	10 - 160	110	30
2-Methylphenol	1.0	U F2	30.8	5.18	F2	ug/L		17	10 - 160	93	30
2-Nitroaniline	2.0	U F2	30.8	5.01	F2	ug/L		16	10 - 160	99	30
2-Nitrophenol	2.0	U F2	30.8	4.69	F2	ug/L		15	10 - 160	100	30
3,3'-Dichlorobenzidine	5.0	U F1 F2	61.5	3.40	J F1 F2	ug/L		6	10 - 160	94	30
3-Nitroaniline	2.0	U F2	30.8	3.56	F2	ug/L		12	10 - 160	111	30
4,6-Dinitro-2-methylphenol	5.0	U F2	61.5	7.06	F2	ug/L		11	10 - 160	104	30
4-Bromophenyl phenyl ether	2.0	U F1 F2	30.8	2.68	F1 F2	ug/L		9	10 - 160	118	30
4-Chloro-3-methylphenol	2.0	U F2	30.8	4.91	F2	ug/L		16	10 - 160	99	30
4-Chloroaniline	2.0	U F1 F2	30.8	1.45	J F1 F2	ug/L		5	10 - 160	87	30
4-Chlorophenyl phenyl ether	2.0	U F1 F2	30.8	2.67	F1 F2	ug/L		9	10 - 160	119	30

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56328-7 MSD
Matrix: Water
Analysis Batch: 201359

Client Sample ID: VAP-2 GW (35-36)
Prep Type: Total/NA
Prep Batch: 201121

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Nitroaniline	2.0	U F2	30.8	3.90	F2	ug/L		13	10 - 160	107	30
4-Nitrophenol	5.0	U F2	61.5	7.58	F2	ug/L		12	10 - 160	107	30
Acenaphthene	0.20	U F2	30.8	3.05	F2	ug/L		10	10 - 160	112	30
Acenaphthylene	0.20	U F2	30.8	3.09	F2	ug/L		10	10 - 160	112	30
Acetophenone	1.0	U F2	30.8	5.17	F2	ug/L		17	10 - 160	96	30
Anthracene	0.20	U F1 F2	30.8	2.74	F1 F2	ug/L		9	10 - 160	122	30
Atrazine	1.0	U F2	61.5	9.29	F2	ug/L		15	10 - 160	99	30
Benzaldehyde	1.0	U * F2	61.5	16.0	F2	ug/L		26	10 - 160	102	30
Benzo[a]anthracene	0.20	U F1 F2	30.8	2.56	F1 F2	ug/L		8	10 - 160	120	30
Benzo[a]pyrene	0.20	U F1 F2	30.8	2.31	F1 F2	ug/L		8	10 - 160	108	30
Benzo[b]fluoranthene	0.20	U F1 F2	30.8	2.20	F1 F2	ug/L		7	10 - 160	109	30
Benzo[g,h,i]perylene	0.20	U F1 F2	30.8	1.73	F1 F2	ug/L		6	10 - 160	107	30
Benzo[k]fluoranthene	0.20	U F1 F2	30.8	2.31	F1 F2	ug/L		8	10 - 160	114	30
Bis(2-chloroethoxy)methane	1.0	U F2	30.8	4.95	F2	ug/L		16	10 - 160	97	30
Bis(2-chloroethyl)ether	1.0	U F2	30.8	5.04	F2	ug/L		16	10 - 160	95	30
Bis(2-ethylhexyl) phthalate	2.0	U F2	30.8	3.10	F2	ug/L		10	10 - 160	64	30
Butyl benzyl phthalate	1.0	U F2	30.8	3.24	F2	ug/L		11	10 - 160	121	30
Caprolactam	26	B F1 F2	61.5	30.2	F1 F2	ug/L		6	10 - 160	72	30
Carbazole	1.0	U F2	30.8	4.07	F2	ug/L		13	10 - 160	110	30
Chrysene	0.20	U F1 F2	30.8	2.81	F1 F2	ug/L		9	10 - 160	119	30
Dibenz(a,h)anthracene	0.20	U F1 F2	30.8	1.62	F1 F2	ug/L		5	10 - 160	102	30
Dibenzofuran	1.0	U F2	30.8	3.01	F2	ug/L		10	10 - 160	114	30
Diethyl phthalate	1.0	U F2	30.8	4.02	F2	ug/L		13	10 - 160	111	30
Dimethyl phthalate	1.0	U F2	30.8	4.49	F2	ug/L		15	10 - 160	104	30
Di-n-butyl phthalate	0.62	J B F2	30.8	3.85	F2	ug/L		11	10 - 160	113	30
Di-n-octyl phthalate	1.0	U F1 F2	30.8	0.813	J F1 F2	ug/L		3	10 - 160	131	30
Fluoranthene	0.20	U F1 F2	30.8	2.58	F1 F2	ug/L		8	10 - 160	126	30
Fluorene	0.20	U F1 F2	30.8	2.87	F1 F2	ug/L		9	10 - 160	118	30
Hexachlorobenzene	1.0	U F1 F2	30.8	2.37	F1 F2	ug/L		8	10 - 160	120	30
Hexachlorobutadiene	1.0	U F1 F2	30.8	2.49	F1 F2	ug/L		8	10 - 160	117	30
Hexachlorocyclopentadiene	10	U F1	30.8	9.6	U F1	ug/L		0	10 - 160	NC	30
Hexachloroethane	1.0	U F2	30.8	3.15	F2	ug/L		10	10 - 160	107	30
Indeno[1,2,3-cd]pyrene	0.20	U F1 F2	30.8	1.43	F1 F2	ug/L		5	10 - 160	114	30
Isophorone	1.0	U F2	30.8	5.41	F2	ug/L		18	10 - 160	96	30
Naphthalene	0.20	U F2	30.8	3.55	F2	ug/L		12	10 - 160	105	30
Nitrobenzene	1.0	U F2	30.8	4.85	F2	ug/L		16	10 - 160	97	30
N-Nitrosodi-n-propylamine	1.0	U F2	30.8	5.18	F2	ug/L		17	10 - 160	97	30
N-Nitrosodiphenylamine	1.0	U F2	61.5	6.70	F2	ug/L		11	10 - 160	114	30
Pentachlorophenol	40	U F1	61.5	38	U F1	ug/L		0	10 - 160	NC	30
Phenol	1.0	U F2	30.8	3.88	F2	ug/L		13	10 - 160	94	30
Phenanthrene	0.20	U F1 F2	30.8	2.76	F1 F2	ug/L		9	10 - 160	122	30
Pyrene	0.20	U F1 F2	30.8	2.88	F1 F2	ug/L		9	10 - 160	124	30
3 & 4 Methylphenol	2.0	U F2	30.8	4.94	F2	ug/L		16	10 - 160	96	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*10*	*X*	*29 - 110*
2-Fluorophenol (Surr)	*16*		*15 - 110*
2,4,6-Tribromophenol (Surr)	*10*	*X*	*21 - 128*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56328-7 MSD
Matrix: Water
Analysis Batch: 201359

Client Sample ID: VAP-2 GW (35-36)
Prep Type: Total/NA
Prep Batch: 201121

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*15*	*X*	*31 - 110*
Phenol-d5 (Surr)	*13*		*10 - 110*
Terphenyl-d14 (Surr)	*9*	*X*	*31 - 115*

Lab Sample ID: MB 240-201122/13-A
Matrix: Water
Analysis Batch: 201328

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201122

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 10:22	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/09/15 09:05	10/11/15 10:22	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/09/15 09:05	10/11/15 10:22	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/09/15 09:05	10/11/15 10:22	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/09/15 09:05	10/11/15 10:22	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/09/15 09:05	10/11/15 10:22	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/09/15 09:05	10/11/15 10:22	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/09/15 09:05	10/11/15 10:22	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/09/15 09:05	10/11/15 10:22	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 10:22	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/09/15 09:05	10/11/15 10:22	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/09/15 09:05	10/11/15 10:22	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/09/15 09:05	10/11/15 10:22	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/09/15 09:05	10/11/15 10:22	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/09/15 09:05	10/11/15 10:22	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/09/15 09:05	10/11/15 10:22	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/09/15 09:05	10/11/15 10:22	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/09/15 09:05	10/11/15 10:22	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/09/15 09:05	10/11/15 10:22	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/09/15 09:05	10/11/15 10:22	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/09/15 09:05	10/11/15 10:22	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/09/15 09:05	10/11/15 10:22	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/09/15 09:05	10/11/15 10:22	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/09/15 09:05	10/11/15 10:22	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/09/15 09:05	10/11/15 10:22	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/09/15 09:05	10/11/15 10:22	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/09/15 09:05	10/11/15 10:22	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/09/15 09:05	10/11/15 10:22	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 10:22	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/09/15 09:05	10/11/15 10:22	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/09/15 09:05	10/11/15 10:22	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/09/15 09:05	10/11/15 10:22	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/09/15 09:05	10/11/15 10:22	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/09/15 09:05	10/11/15 10:22	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/09/15 09:05	10/11/15 10:22	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/09/15 09:05	10/11/15 10:22	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/09/15 09:05	10/11/15 10:22	1
Bis(2-ethylhexyl) phthalate	1.79	J	2.0	1.5	ug/L		10/09/15 09:05	10/11/15 10:22	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/09/15 09:05	10/11/15 10:22	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201122/13-A
Matrix: Water
Analysis Batch: 201328

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201122

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	1.41	J	5.0	0.37	ug/L		10/09/15 09:05	10/11/15 10:22	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/09/15 09:05	10/11/15 10:22	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/09/15 09:05	10/11/15 10:22	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/09/15 09:05	10/11/15 10:22	1
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/09/15 09:05	10/11/15 10:22	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/09/15 09:05	10/11/15 10:22	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/09/15 09:05	10/11/15 10:22	1
Di-n-butyl phthalate	1.0	U	1.0	0.40	ug/L		10/09/15 09:05	10/11/15 10:22	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/09/15 09:05	10/11/15 10:22	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/09/15 09:05	10/11/15 10:22	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/09/15 09:05	10/11/15 10:22	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 10:22	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/09/15 09:05	10/11/15 10:22	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/09/15 09:05	10/11/15 10:22	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/09/15 09:05	10/11/15 10:22	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/09/15 09:05	10/11/15 10:22	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/09/15 09:05	10/11/15 10:22	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/09/15 09:05	10/11/15 10:22	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/09/15 09:05	10/11/15 10:22	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/09/15 09:05	10/11/15 10:22	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/09/15 09:05	10/11/15 10:22	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/09/15 09:05	10/11/15 10:22	1
Phenol	1.0	U	1.0	0.15	ug/L		10/09/15 09:05	10/11/15 10:22	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/09/15 09:05	10/11/15 10:22	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/09/15 09:05	10/11/15 10:22	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/09/15 09:05	10/11/15 10:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*61*		*29 - 110*	*10/09/15 09:05*	*10/11/15 10:22*	*1*
2-Fluorophenol (Surr)	*58*		*15 - 110*	*10/09/15 09:05*	*10/11/15 10:22*	*1*
2,4,6-Tribromophenol (Surr)	*42*		*21 - 128*	*10/09/15 09:05*	*10/11/15 10:22*	*1*
Nitrobenzene-d5 (Surr)	*63*		*31 - 110*	*10/09/15 09:05*	*10/11/15 10:22*	*1*
Phenol-d5 (Surr)	*46*		*10 - 110*	*10/09/15 09:05*	*10/11/15 10:22*	*1*
Terphenyl-d14 (Surr)	*70*		*31 - 115*	*10/09/15 09:05*	*10/11/15 10:22*	*1*

Lab Sample ID: LCS 240-201122/14-A
Matrix: Water
Analysis Batch: 201328

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201122

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	32.0	26.4		ug/L		83	43 - 120
bis (2-chloroisopropyl) ether	32.0	26.5		ug/L		83	45 - 112
2,4,5-Trichlorophenol	32.0	26.2		ug/L		82	49 - 120
2,4,6-Trichlorophenol	32.0	25.4		ug/L		79	50 - 120
2,4-Dichlorophenol	32.0	26.5		ug/L		83	54 - 120
2,4-Dimethylphenol	32.0	29.1		ug/L		91	40 - 125
2,4-Dinitrophenol	64.0	30.6	J	ug/L		48	30 - 120
2,4-Dinitrotoluene	32.0	28.7		ug/L		90	50 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201122/14-A
Matrix: Water
Analysis Batch: 201328

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201122

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,6-Dinitrotoluene	32.0	27.0		ug/L		85	52 - 120
2-Chloronaphthalene	32.0	26.2		ug/L		82	43 - 120
2-Chlorophenol	32.0	27.3		ug/L		85	53 - 120
2-Methylnaphthalene	32.0	25.9		ug/L		81	46 - 120
2-Methylphenol	32.0	26.8		ug/L		84	52 - 120
2-Nitroaniline	32.0	28.4		ug/L		89	47 - 120
2-Nitrophenol	32.0	28.0		ug/L		87	53 - 120
3,3'-Dichlorobenzidine	64.0	41.3		ug/L		65	30 - 120
3-Nitroaniline	32.0	30.9		ug/L		97	40 - 144
4,6-Dinitro-2-methylphenol	64.0	37.6		ug/L		59	40 - 120
4-Bromophenyl phenyl ether	32.0	24.6		ug/L		77	49 - 120
4-Chloro-3-methylphenol	32.0	26.5		ug/L		83	55 - 120
4-Chloroaniline	32.0	16.0		ug/L		50	20 - 136
4-Chlorophenyl phenyl ether	32.0	26.0		ug/L		81	48 - 120
4-Nitroaniline	32.0	28.1		ug/L		88	40 - 135
4-Nitrophenol	64.0	37.7		ug/L		59	30 - 120
Acenaphthene	32.0	26.8		ug/L		84	48 - 120
Acenaphthylene	32.0	26.9		ug/L		84	47 - 120
Acetophenone	32.0	28.7		ug/L		90	53 - 120
Anthracene	32.0	25.5		ug/L		80	50 - 120
Atrazine	64.0	53.1		ug/L		83	49 - 120
Benzaldehyde	64.0	101	E	ug/L		157	40 - 160
Benzo[a]anthracene	32.0	24.2		ug/L		75	46 - 120
Benzo[a]pyrene	32.0	26.8		ug/L		84	49 - 120
Benzo[b]fluoranthene	32.0	26.6		ug/L		83	49 - 120
Benzo[g,h,i]perylene	32.0	24.0		ug/L		75	48 - 120
Benzo[k]fluoranthene	32.0	28.8		ug/L		90	50 - 120
Bis(2-chloroethoxy)methane	32.0	28.5		ug/L		89	54 - 120
Bis(2-chloroethyl)ether	32.0	27.8		ug/L		87	51 - 120
Bis(2-ethylhexyl) phthalate	32.0	27.9		ug/L		87	30 - 156
Butyl benzyl phthalate	32.0	27.2		ug/L		85	40 - 125
Caprolactam	64.0	19.9		ug/L		31	10 - 120
Carbazole	32.0	26.4		ug/L		82	46 - 127
Chrysene	32.0	25.5		ug/L		80	45 - 120
Dibenz(a,h)anthracene	32.0	20.8		ug/L		65	49 - 120
Dibenzofuran	32.0	26.5		ug/L		83	45 - 120
Diethyl phthalate	32.0	29.0		ug/L		91	48 - 121
Dimethyl phthalate	32.0	28.0		ug/L		87	50 - 120
Di-n-butyl phthalate	32.0	28.2		ug/L		88	40 - 160
Di-n-octyl phthalate	32.0	30.0		ug/L		94	40 - 128
Fluoranthene	32.0	25.5		ug/L		80	50 - 120
Fluorene	32.0	26.5		ug/L		83	50 - 120
Hexachlorobenzene	32.0	23.3		ug/L		73	46 - 120
Hexachlorobutadiene	32.0	23.9		ug/L		75	30 - 120
Hexachlorocyclopentadiene	32.0	17.4		ug/L		54	4 - 120
Hexachloroethane	32.0	24.7		ug/L		77	30 - 120
Indeno[1,2,3-cd]pyrene	32.0	24.7		ug/L		77	48 - 140
Isophorone	32.0	30.6		ug/L		96	52 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201122/14-A
Matrix: Water
Analysis Batch: 201328

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201122

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	32.0	26.2		ug/L		82	45 - 120
Nitrobenzene	32.0	28.1		ug/L		88	54 - 120
N-Nitrosodi-n-propylamine	32.0	29.3		ug/L		91	52 - 117
N-Nitrosodiphenylamine	64.0	50.3		ug/L		79	47 - 109
Pentachlorophenol	64.0	32.6	J	ug/L		51	30 - 120
Phenol	32.0	19.2		ug/L		60	40 - 120
Phenanthrene	32.0	24.9		ug/L		78	50 - 120
Pyrene	32.0	25.6		ug/L		80	49 - 114
3 & 4 Methylphenol	32.0	26.7		ug/L		83	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*86*		*29 - 110*
2-Fluorophenol (Surr)	*77*		*15 - 110*
2,4,6-Tribromophenol (Surr)	*73*		*21 - 128*
Nitrobenzene-d5 (Surr)	*90*		*31 - 110*
Phenol-d5 (Surr)	*62*		*10 - 110*
Terphenyl-d14 (Surr)	*87*		*31 - 115*

Lab Sample ID: MB 240-201574/7-A
Matrix: Water
Analysis Batch: 201778

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201574

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/13/15 08:39	10/14/15 08:08	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/13/15 08:39	10/14/15 08:08	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/13/15 08:39	10/14/15 08:08	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/13/15 08:39	10/14/15 08:08	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/13/15 08:39	10/14/15 08:08	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/13/15 08:39	10/14/15 08:08	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/13/15 08:39	10/14/15 08:08	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/13/15 08:39	10/14/15 08:08	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/13/15 08:39	10/14/15 08:08	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/13/15 08:39	10/14/15 08:08	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/13/15 08:39	10/14/15 08:08	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/13/15 08:39	10/14/15 08:08	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/13/15 08:39	10/14/15 08:08	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/13/15 08:39	10/14/15 08:08	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/13/15 08:39	10/14/15 08:08	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/13/15 08:39	10/14/15 08:08	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/13/15 08:39	10/14/15 08:08	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/13/15 08:39	10/14/15 08:08	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/13/15 08:39	10/14/15 08:08	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/13/15 08:39	10/14/15 08:08	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/13/15 08:39	10/14/15 08:08	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/13/15 08:39	10/14/15 08:08	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/13/15 08:39	10/14/15 08:08	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/13/15 08:39	10/14/15 08:08	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/13/15 08:39	10/14/15 08:08	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201574/7-A
Matrix: Water
Analysis Batch: 201778

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201574

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/13/15 08:39	10/14/15 08:08	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/13/15 08:39	10/14/15 08:08	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/13/15 08:39	10/14/15 08:08	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/13/15 08:39	10/14/15 08:08	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/13/15 08:39	10/14/15 08:08	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/13/15 08:39	10/14/15 08:08	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/13/15 08:39	10/14/15 08:08	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/13/15 08:39	10/14/15 08:08	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/13/15 08:39	10/14/15 08:08	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/13/15 08:39	10/14/15 08:08	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/13/15 08:39	10/14/15 08:08	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/13/15 08:39	10/14/15 08:08	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	1.5	ug/L		10/13/15 08:39	10/14/15 08:08	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/13/15 08:39	10/14/15 08:08	1
Caprolactam	0.817	J	5.0	0.37	ug/L		10/13/15 08:39	10/14/15 08:08	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/13/15 08:39	10/14/15 08:08	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/13/15 08:39	10/14/15 08:08	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/13/15 08:39	10/14/15 08:08	1
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/13/15 08:39	10/14/15 08:08	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/13/15 08:39	10/14/15 08:08	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/13/15 08:39	10/14/15 08:08	1
Di-n-butyl phthalate	1.0	U	1.0	0.40	ug/L		10/13/15 08:39	10/14/15 08:08	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/13/15 08:39	10/14/15 08:08	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/13/15 08:39	10/14/15 08:08	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/13/15 08:39	10/14/15 08:08	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/13/15 08:39	10/14/15 08:08	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/13/15 08:39	10/14/15 08:08	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/13/15 08:39	10/14/15 08:08	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/13/15 08:39	10/14/15 08:08	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/13/15 08:39	10/14/15 08:08	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/13/15 08:39	10/14/15 08:08	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/13/15 08:39	10/14/15 08:08	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/13/15 08:39	10/14/15 08:08	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/13/15 08:39	10/14/15 08:08	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/13/15 08:39	10/14/15 08:08	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/13/15 08:39	10/14/15 08:08	1
Phenol	1.0	U	1.0	0.15	ug/L		10/13/15 08:39	10/14/15 08:08	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/13/15 08:39	10/14/15 08:08	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/13/15 08:39	10/14/15 08:08	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/13/15 08:39	10/14/15 08:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*69*		*29 - 110*	*10/13/15 08:39*	*10/14/15 08:08*	*1*
2-Fluorophenol (Surr)	*63*		*15 - 110*	*10/13/15 08:39*	*10/14/15 08:08*	*1*
2,4,6-Tribromophenol (Surr)	*50*		*21 - 128*	*10/13/15 08:39*	*10/14/15 08:08*	*1*
Nitrobenzene-d5 (Surr)	*68*		*31 - 110*	*10/13/15 08:39*	*10/14/15 08:08*	*1*
Phenol-d5 (Surr)	*47*		*10 - 110*	*10/13/15 08:39*	*10/14/15 08:08*	*1*
Terphenyl-d14 (Surr)	*79*		*31 - 115*	*10/13/15 08:39*	*10/14/15 08:08*	*1*

Lab Sample ID: LCS 240-201574/8-A
Matrix: Water
Analysis Batch: 201778

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201574

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	32.0	26.2		ug/L		82	43 - 120
bis (2-chloroisopropyl) ether	32.0	28.5		ug/L		89	45 - 112
2,4,5-Trichlorophenol	32.0	26.2		ug/L		82	49 - 120
2,4,6-Trichlorophenol	32.0	27.1		ug/L		85	50 - 120
2,4-Dichlorophenol	32.0	27.6		ug/L		86	54 - 120
2,4-Dimethylphenol	32.0	29.9		ug/L		93	40 - 125
2,4-Dinitrophenol	64.0	36.8	J	ug/L		57	30 - 120
2,4-Dinitrotoluene	32.0	29.5		ug/L		92	50 - 120
2,6-Dinitrotoluene	32.0	28.2		ug/L		88	52 - 120
2-Chloronaphthalene	32.0	26.2		ug/L		82	43 - 120
2-Chlorophenol	32.0	28.0		ug/L		88	53 - 120
2-Methylnaphthalene	32.0	26.5		ug/L		83	46 - 120
2-Methylphenol	32.0	27.1		ug/L		85	52 - 120
2-Nitroaniline	32.0	28.9		ug/L		90	47 - 120
2-Nitrophenol	32.0	29.6		ug/L		92	53 - 120
3,3'-Dichlorobenzidine	64.0	32.1		ug/L		50	30 - 120
3-Nitroaniline	32.0	26.4		ug/L		83	40 - 144
4,6-Dinitro-2-methylphenol	64.0	45.1		ug/L		71	40 - 120
4-Bromophenyl phenyl ether	32.0	26.5		ug/L		83	49 - 120
4-Chloro-3-methylphenol	32.0	27.2		ug/L		85	55 - 120
4-Chloroaniline	32.0	9.36		ug/L		29	20 - 136
4-Chlorophenyl phenyl ether	32.0	26.4		ug/L		82	48 - 120
4-Nitroaniline	32.0	28.1		ug/L		88	40 - 135
4-Nitrophenol	64.0	32.5		ug/L		51	30 - 120
Acenaphthene	32.0	27.2		ug/L		85	48 - 120
Acenaphthylene	32.0	27.0		ug/L		84	47 - 120
Acetophenone	32.0	30.6		ug/L		95	53 - 120
Anthracene	32.0	27.2		ug/L		85	50 - 120
Atrazine	64.0	55.9		ug/L		87	49 - 120
Benzaldehyde	64.0	107	E *	ug/L		167	40 - 160
Benzo[a]anthracene	32.0	25.8		ug/L		81	46 - 120
Benzo[a]pyrene	32.0	28.4		ug/L		89	49 - 120
Benzo[b]fluoranthene	32.0	27.0		ug/L		84	49 - 120
Benzo[g,h,i]perylene	32.0	29.0		ug/L		91	48 - 120
Benzo[k]fluoranthene	32.0	28.7		ug/L		90	50 - 120
Bis(2-chloroethoxy)methane	32.0	29.4		ug/L		92	54 - 120
Bis(2-chloroethyl)ether	32.0	29.2		ug/L		91	51 - 120
Bis(2-ethylhexyl) phthalate	32.0	31.4		ug/L		98	30 - 156
Butyl benzyl phthalate	32.0	29.5		ug/L		92	40 - 125
Caprolactam	64.0	15.4		ug/L		24	10 - 120
Carbazole	32.0	27.9		ug/L		87	46 - 127
Chrysene	32.0	27.6		ug/L		86	45 - 120
Dibenz(a,h)anthracene	32.0	25.2		ug/L		79	49 - 120
Dibenzofuran	32.0	26.8		ug/L		84	45 - 120
Diethyl phthalate	32.0	29.4		ug/L		92	48 - 121
Dimethyl phthalate	32.0	28.1		ug/L		88	50 - 120
Di-n-butyl phthalate	32.0	30.0		ug/L		94	40 - 160
Di-n-octyl phthalate	32.0	33.6		ug/L		105	40 - 128
Fluoranthene	32.0	26.3		ug/L		82	50 - 120
Fluorene	32.0	26.9		ug/L		84	50 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201574/8-A
Matrix: Water
Analysis Batch: 201778

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201574

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorobenzene	32.0	24.4		ug/L		76	46 - 120
Hexachlorobutadiene	32.0	25.2		ug/L		79	30 - 120
Hexachlorocyclopentadiene	32.0	21.0		ug/L		66	4 - 120
Hexachloroethane	32.0	26.7		ug/L		84	30 - 120
Indeno[1,2,3-cd]pyrene	32.0	29.7		ug/L		93	48 - 140
Isophorone	32.0	31.8		ug/L		99	52 - 120
Naphthalene	32.0	27.6		ug/L		86	45 - 120
Nitrobenzene	32.0	29.0		ug/L		91	54 - 120
N-Nitrosodi-n-propylamine	32.0	31.9		ug/L		100	52 - 117
N-Nitrosodiphenylamine	64.0	53.9		ug/L		84	47 - 109
Pentachlorophenol	64.0	40.7		ug/L		64	30 - 120
Phenol	32.0	15.7		ug/L		49	40 - 120
Phenanthrene	32.0	27.2		ug/L		85	50 - 120
Pyrene	32.0	28.0		ug/L		87	49 - 114
3 & 4 Methylphenol	32.0	25.7		ug/L		80	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*85*		*29 - 110*
2-Fluorophenol (Surr)	*69*		*15 - 110*
2,4,6-Tribromophenol (Surr)	*79*		*21 - 128*
Nitrobenzene-d5 (Surr)	*92*		*31 - 110*
Phenol-d5 (Surr)	*50*		*10 - 110*
Terphenyl-d14 (Surr)	*92*		*31 - 115*

Lab Sample ID: MB 240-201836/8-A
Matrix: Solid
Analysis Batch: 202045

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201836

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	50	U	50	3.5	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
bis (2-chloroisopropyl) ether	100	U	100	9.5	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
2,4,5-Trichlorophenol	150	U	150	25	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
2,4,6-Trichlorophenol	150	U	150	8.9	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
2,4-Dichlorophenol	150	U	150	20	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
2,4-Dimethylphenol	150	U	150	20	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
2,4-Dinitrophenol	330	U	330	21	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
2,4-Dinitrotoluene	200	U	200	17	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
2,6-Dinitrotoluene	200	U	200	21	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
2-Chloronaphthalene	50	U	50	0.45	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
2-Chlorophenol	50	U	50	8.2	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
2-Methylnaphthalene	6.7	U	6.7	0.50	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
2-Methylphenol	200	U	200	11	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
2-Nitroaniline	200	U	200	9.1	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
2-Nitrophenol	50	U	50	8.3	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
3,3'-Dichlorobenzidine	100	U	100	18	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
3-Nitroaniline	200	U	200	16	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
4,6-Dinitro-2-methylphenol	150	U	150	9.2	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
4-Bromophenyl phenyl ether	50	U	50	13	ug/Kg		10/14/15 10:32	10/15/15 11:16	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201836/8-A
Matrix: Solid
Analysis Batch: 202045

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201836

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloro-3-methylphenol	150	U	150	21	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
4-Chloroaniline	150	U	150	17	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
4-Chlorophenyl phenyl ether	50	U	50	13	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
4-Nitroaniline	200	U	200	26	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
4-Nitrophenol	330	U	330	17	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Acenaphthene	6.7	U	6.7	0.76	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Acenaphthylene	6.7	U	6.7	0.35	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Acetophenone	100	U	100	9.2	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Anthracene	6.7	U	6.7	0.78	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Atrazine	200	U	200	9.1	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Benzaldehyde	100	U	100	12	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Benzo[a]anthracene	6.7	U	6.7	0.63	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Benzo[a]pyrene	6.7	U	6.7	0.64	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Benzo[b]fluoranthene	6.7	U	6.7	0.59	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Benzo[g,h,i]perylene	6.7	U	6.7	0.35	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Benzo[k]fluoranthene	6.7	U	6.7	0.68	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Bis(2-chloroethoxy)methane	100	U	100	22	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Bis(2-chloroethyl)ether	100	U	100	2.0	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Bis(2-ethylhexyl) phthalate	70	U	70	19	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Butyl benzyl phthalate	70	U	70	10	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Caprolactam	330	U	330	37	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Carbazole	50	U	50	27	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Chrysene	6.7	U	6.7	1.1	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Dibenz(a,h)anthracene	6.7	U	6.7	0.66	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Dibenzofuran	50	U	50	0.66	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Diethyl phthalate	70	U	70	16	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Dimethyl phthalate	70	U	70	17	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Di-n-butyl phthalate	70	U	70	15	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Di-n-octyl phthalate	70	U	70	7.9	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Fluoranthene	6.7	U	6.7	0.55	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Fluorene	6.7	U	6.7	0.53	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Hexachlorobenzene	6.7	U	6.7	2.1	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Hexachlorobutadiene	50	U	50	5.6	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Hexachlorocyclopentadiene	330	U	330	8.1	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Hexachloroethane	50	U	50	9.0	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Indeno[1,2,3-cd]pyrene	6.7	U	6.7	0.35	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Isophorone	50	U	50	13	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Naphthalene	6.7	U	6.7	0.82	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Nitrobenzene	100	U	100	2.2	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
N-Nitrosodi-n-propylamine	50	U	50	6.3	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
N-Nitrosodiphenylamine	50	U	50	21	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Pentachlorophenol	150	U	150	9.1	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Phenol	50	U	50	7.3	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Phenanthrene	6.7	U	6.7	0.73	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
Pyrene	6.7	U	6.7	0.44	ug/Kg		10/14/15 10:32	10/15/15 11:16	1
3 & 4 Methylphenol	400	U	400	20	ug/Kg		10/14/15 10:32	10/15/15 11:16	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201836/8-A
Matrix: Solid
Analysis Batch: 202045

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201836

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	69		24 - 110	10/14/15 10:32	10/15/15 11:16	1
2-Fluorophenol (Surr)	69		24 - 110	10/14/15 10:32	10/15/15 11:16	1
2,4,6-Tribromophenol (Surr)	46		10 - 110	10/14/15 10:32	10/15/15 11:16	1
Nitrobenzene-d5 (Surr)	67		20 - 110	10/14/15 10:32	10/15/15 11:16	1
Phenol-d5 (Surr)	71		26 - 110	10/14/15 10:32	10/15/15 11:16	1
Terphenyl-d14 (Surr)	81		36 - 110	10/14/15 10:32	10/15/15 11:16	1

Lab Sample ID: LCS 240-201836/9-A
Matrix: Solid
Analysis Batch: 202045

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201836

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	667	462		ug/Kg		69	35 - 110
bis (2-chloroisopropyl) ether	667	510		ug/Kg		77	29 - 110
2,4,5-Trichlorophenol	667	484		ug/Kg		73	25 - 110
2,4,6-Trichlorophenol	667	418		ug/Kg		63	12 - 110
2,4-Dichlorophenol	667	481		ug/Kg		72	39 - 110
2,4-Dimethylphenol	667	477		ug/Kg		72	29 - 110
2,4-Dinitrophenol	1330	399		ug/Kg		30	10 - 110
2,4-Dinitrotoluene	667	550		ug/Kg		82	48 - 110
2,6-Dinitrotoluene	667	531		ug/Kg		80	45 - 110
2-Chloronaphthalene	667	461		ug/Kg		69	32 - 110
2-Chlorophenol	667	469		ug/Kg		70	37 - 110
2-Methylnaphthalene	667	492		ug/Kg		74	36 - 110
2-Methylphenol	667	464		ug/Kg		70	41 - 110
2-Nitroaniline	667	535		ug/Kg		80	45 - 110
2-Nitrophenol	667	550		ug/Kg		82	34 - 110
3,3'-Dichlorobenzidine	1330	753		ug/Kg		57	28 - 110
3-Nitroaniline	667	457		ug/Kg		69	44 - 110
4,6-Dinitro-2-methylphenol	1330	649		ug/Kg		49	10 - 110
4-Bromophenyl phenyl ether	667	504		ug/Kg		76	39 - 110
4-Chloro-3-methylphenol	667	513		ug/Kg		77	48 - 110
4-Chloroaniline	667	354		ug/Kg		53	30 - 110
4-Chlorophenyl phenyl ether	667	490		ug/Kg		74	40 - 110
4-Nitroaniline	667	564		ug/Kg		85	48 - 110
4-Nitrophenol	1330	989		ug/Kg		74	28 - 110
Acenaphthene	667	482		ug/Kg		72	38 - 110
Acenaphthylene	667	462		ug/Kg		69	40 - 110
Acetophenone	667	469		ug/Kg		70	40 - 110
Anthracene	667	492		ug/Kg		74	48 - 110
Atrazine	1330	1050		ug/Kg		79	54 - 120
Benzaldehyde	1330	983		ug/Kg		74	32 - 110
Benzo[a]anthracene	667	490		ug/Kg		74	50 - 110
Benzo[a]pyrene	667	509		ug/Kg		76	44 - 110
Benzo[b]fluoranthene	667	530		ug/Kg		80	43 - 110
Benzo[g,h,i]perylene	667	526		ug/Kg		79	51 - 110
Benzo[k]fluoranthene	667	498		ug/Kg		75	38 - 105
Bis(2-chloroethoxy)methane	667	499		ug/Kg		75	32 - 110

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201836/9-A
Matrix: Solid
Analysis Batch: 202045

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201836

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethyl)ether	667	467		ug/Kg		70	34 - 110
Bis(2-ethylhexyl) phthalate	667	563		ug/Kg		84	50 - 110
Butyl benzyl phthalate	667	515		ug/Kg		77	51 - 110
Caprolactam	1330	1040		ug/Kg		78	44 - 114
Carbazole	667	503		ug/Kg		75	50 - 110
Chrysene	667	501		ug/Kg		75	50 - 110
Dibenz(a,h)anthracene	667	546		ug/Kg		82	51 - 110
Dibenzofuran	667	477		ug/Kg		72	43 - 110
Diethyl phthalate	667	532		ug/Kg		80	52 - 110
Dimethyl phthalate	667	510		ug/Kg		76	50 - 110
Di-n-butyl phthalate	667	528		ug/Kg		79	51 - 110
Di-n-octyl phthalate	667	534		ug/Kg		80	48 - 110
Fluoranthene	667	493		ug/Kg		74	51 - 110
Fluorene	667	487		ug/Kg		73	46 - 110
Hexachlorobenzene	667	492		ug/Kg		74	43 - 110
Hexachlorobutadiene	667	471		ug/Kg		71	29 - 110
Hexachlorocyclopentadiene	667	426		ug/Kg		64	12 - 110
Hexachloroethane	667	453		ug/Kg		68	30 - 110
Indeno[1,2,3-cd]pyrene	667	541		ug/Kg		81	50 - 110
Isophorone	667	484		ug/Kg		73	36 - 110
Naphthalene	667	474		ug/Kg		71	36 - 110
Nitrobenzene	667	480		ug/Kg		72	32 - 110
N-Nitrosodi-n-propylamine	667	477		ug/Kg		72	38 - 110
N-Nitrosodiphenylamine	1330	1000		ug/Kg		75	46 - 110
Pentachlorophenol	1330	744		ug/Kg		56	10 - 110
Phenol	667	463		ug/Kg		69	38 - 110
Phenanthrene	667	496		ug/Kg		74	49 - 110
Pyrene	667	480		ug/Kg		72	49 - 110
3 & 4 Methylphenol	667	459		ug/Kg		69	40 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*72*		*24 - 110*
2-Fluorophenol (Surr)	*73*		*24 - 110*
2,4,6-Tribromophenol (Surr)	*60*		*10 - 110*
Nitrobenzene-d5 (Surr)	*76*		*20 - 110*
Phenol-d5 (Surr)	*73*		*26 - 110*
Terphenyl-d14 (Surr)	*82*		*36 - 110*

Lab Sample ID: 240-56328-12 MS
Matrix: Solid
Analysis Batch: 202221

Client Sample ID: VAP-3 (1-2)
Prep Type: Total/NA
Prep Batch: 201836

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	61	U	816	537		ug/Kg	☼	66	32 - 110
bis (2-chloroisopropyl) ether	120	U	816	579		ug/Kg	☼	71	11 - 110
2,4,5-Trichlorophenol	180	U	816	608		ug/Kg	☼	74	10 - 117
2,4,6-Trichlorophenol	180	U	816	399		ug/Kg	☼	49	10 - 110
2,4-Dichlorophenol	180	U	816	562		ug/Kg	☼	69	10 - 110

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56328-12 MS
Matrix: Solid
Analysis Batch: 202221

Client Sample ID: VAP-3 (1-2)
Prep Type: Total/NA
Prep Batch: 201836

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dimethylphenol	180	U	816	583		ug/Kg	☼	71	10 - 110
2,4-Dinitrophenol	400	U	1630	323	J	ug/Kg	☼	20	10 - 110
2,4-Dinitrotoluene	240	U F2	816	588		ug/Kg	☼	72	32 - 110
2,6-Dinitrotoluene	240	U	816	591		ug/Kg	☼	72	35 - 110
2-Chloronaphthalene	61	U	816	533		ug/Kg	☼	65	28 - 110
2-Chlorophenol	61	U	816	551		ug/Kg	☼	68	10 - 110
2-Methylnaphthalene	8.1	U	816	548		ug/Kg	☼	67	10 - 133
2-Methylphenol	240	U	816	626		ug/Kg	☼	77	24 - 110
2-Nitroaniline	240	U	816	603		ug/Kg	☼	74	39 - 110
2-Nitrophenol	61	U F2	816	587		ug/Kg	☼	72	10 - 110
3,3'-Dichlorobenzidine	120	U	1630	679		ug/Kg	☼	42	10 - 110
3-Nitroaniline	240	U	816	354		ug/Kg	☼	43	10 - 110
4,6-Dinitro-2-methylphenol	180	U F1 F2	1630	405		ug/Kg	☼	25	10 - 110
4-Bromophenyl phenyl ether	61	U	816	589		ug/Kg	☼	72	33 - 110
4-Chloro-3-methylphenol	180	U	816	576		ug/Kg	☼	71	25 - 110
4-Chloroaniline	180	U	816	230		ug/Kg	☼	28	10 - 110
4-Chlorophenyl phenyl ether	61	U	816	587		ug/Kg	☼	72	32 - 110
4-Nitroaniline	240	U	816	402		ug/Kg	☼	49	10 - 110
4-Nitrophenol	400	U	1630	1010		ug/Kg	☼	62	10 - 113
Acenaphthene	8.1	U	816	569		ug/Kg	☼	70	22 - 110
Acenaphthylene	8.1	U	816	542		ug/Kg	☼	66	24 - 110
Acetophenone	120	U	816	517		ug/Kg	☼	63	31 - 110
Anthracene	8.1	U	816	555		ug/Kg	☼	68	20 - 110
Atrazine	240	U	1630	1140		ug/Kg	☼	70	45 - 118
Benzaldehyde	120	U	1630	1070		ug/Kg	☼	66	23 - 110
Benzo[a]anthracene	8.1	U	816	556		ug/Kg	☼	68	10 - 122
Benzo[a]pyrene	8.1	U	816	587		ug/Kg	☼	72	10 - 110
Benzo[b]fluoranthene	8.1	U	816	692		ug/Kg	☼	85	12 - 118
Benzo[g,h,i]perylene	8.1	U	816	280		ug/Kg	☼	34	10 - 117
Benzo[k]fluoranthene	8.1	U	816	649		ug/Kg	☼	80	10 - 121
Bis(2-chloroethoxy)methane	120	U	816	536		ug/Kg	☼	66	26 - 110
Bis(2-chloroethyl)ether	120	U	816	554		ug/Kg	☼	68	21 - 110
Bis(2-ethylhexyl) phthalate	25	J	816	764		ug/Kg	☼	91	40 - 110
Butyl benzyl phthalate	85	U	816	679		ug/Kg	☼	83	44 - 110
Caprolactam	400	U	1630	1170		ug/Kg	☼	72	10 - 134
Carbazole	61	U	816	542		ug/Kg	☼	66	34 - 110
Chrysene	8.1	U	816	558		ug/Kg	☼	68	10 - 125
Dibenz(a,h)anthracene	8.1	U	816	359		ug/Kg	☼	44	14 - 113
Dibenzofuran	61	U	816	562		ug/Kg	☼	69	29 - 110
Diethyl phthalate	85	U	816	604		ug/Kg	☼	74	42 - 110
Dimethyl phthalate	85	U	816	583		ug/Kg	☼	71	41 - 110
Di-n-butyl phthalate	85	U	816	618		ug/Kg	☼	76	43 - 110
Di-n-octyl phthalate	85	U F1 F2	816	1140	F1	ug/Kg	☼	140	24 - 119
Fluoranthene	8.1	U	816	559		ug/Kg	☼	68	10 - 110
Fluorene	8.1	U	816	573		ug/Kg	☼	70	23 - 110
Hexachlorobenzene	8.1	U	816	536		ug/Kg	☼	66	34 - 110
Hexachlorobutadiene	61	U	816	522		ug/Kg	☼	64	25 - 110
Hexachlorocyclopentadiene	400	U F1	816	400	U F1	ug/Kg	☼	0	10 - 110

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56328-12 MS
Matrix: Solid
Analysis Batch: 202221

Client Sample ID: VAP-3 (1-2)
Prep Type: Total/NA
Prep Batch: 201836

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachloroethane	61	U	816	444		ug/Kg	☼	54	12 - 110
Indeno[1,2,3-cd]pyrene	8.1	U	816	339		ug/Kg	☼	42	10 - 114
Isophorone	61	U	816	536		ug/Kg	☼	66	29 - 110
Naphthalene	8.1	U	816	513		ug/Kg	☼	63	10 - 111
Nitrobenzene	120	U	816	512		ug/Kg	☼	63	23 - 110
N-Nitrosodi-n-propylamine	61	U	816	541		ug/Kg	☼	66	26 - 110
N-Nitrosodiphenylamine	61	U	1630	1160		ug/Kg	☼	71	22 - 110
Pentachlorophenol	180	U	1630	404		ug/Kg	☼	25	10 - 110
Phenol	61	U	816	523		ug/Kg	☼	64	17 - 110
Phenanthrene	8.1	U	816	562		ug/Kg	☼	69	10 - 166
Pyrene	8.1	U	816	616		ug/Kg	☼	76	10 - 147
3 & 4 Methylphenol	490	U	816	565		ug/Kg	☼	69	25 - 110

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*68*		*24 - 110*
2-Fluorophenol (Surr)	*68*		*24 - 110*
2,4,6-Tribromophenol (Surr)	*47*		*10 - 110*
Nitrobenzene-d5 (Surr)	*67*		*20 - 110*
Phenol-d5 (Surr)	*70*		*26 - 110*
Terphenyl-d14 (Surr)	*86*		*36 - 110*

Lab Sample ID: 240-56328-12 MSD
Matrix: Solid
Analysis Batch: 202367

Client Sample ID: VAP-3 (1-2)
Prep Type: Total/NA
Prep Batch: 201836

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1'-Biphenyl	61	U	813	452		ug/Kg	☼	56	32 - 110	17	32
bis (2-chloroisopropyl) ether	120	U	813	433		ug/Kg	☼	53	11 - 110	29	42
2,4,5-Trichlorophenol	180	U	813	474		ug/Kg	☼	58	10 - 117	25	99
2,4,6-Trichlorophenol	180	U	813	402		ug/Kg	☼	49	10 - 110	1	38
2,4-Dichlorophenol	180	U	813	491		ug/Kg	☼	60	10 - 110	13	34
2,4-Dimethylphenol	180	U	813	486		ug/Kg	☼	60	10 - 110	18	31
2,4-Dinitrophenol	400	U	1630	180	J	ug/Kg	☼	11	10 - 110	57	99
2,4-Dinitrotoluene	240	U F2	813	407	F2	ug/Kg	☼	50	32 - 110	36	30
2,6-Dinitrotoluene	240	U	813	443		ug/Kg	☼	55	35 - 110	28	30
2-Chloronaphthalene	61	U	813	440		ug/Kg	☼	54	28 - 110	19	30
2-Chlorophenol	61	U	813	429		ug/Kg	☼	53	10 - 110	25	47
2-Methylnaphthalene	8.1	U	813	455		ug/Kg	☼	56	10 - 133	18	42
2-Methylphenol	240	U	813	495		ug/Kg	☼	61	24 - 110	23	51
2-Nitroaniline	240	U	813	495		ug/Kg	☼	61	39 - 110	20	31
2-Nitrophenol	61	U F2	813	268	F2	ug/Kg	☼	33	10 - 110	75	49
3,3'-Dichlorobenzidine	120	U	1630	605		ug/Kg	☼	37	10 - 110	11	56
3-Nitroaniline	240	U	813	432		ug/Kg	☼	53	10 - 110	20	30
4,6-Dinitro-2-methylphenol	180	U F1 F2	1630	147	J F1 F2	ug/Kg	☼	9	10 - 110	93	55
4-Bromophenyl phenyl ether	61	U	813	492		ug/Kg	☼	61	33 - 110	18	30
4-Chloro-3-methylphenol	180	U	813	514		ug/Kg	☼	63	25 - 110	11	54
4-Chloroaniline	180	U	813	243		ug/Kg	☼	30	10 - 110	5	36
4-Chlorophenyl phenyl ether	61	U	813	489		ug/Kg	☼	60	32 - 110	18	30

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56328-12 MSD
Matrix: Solid
Analysis Batch: 202367

Client Sample ID: VAP-3 (1-2)
Prep Type: Total/NA
Prep Batch: 201836

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Nitroaniline	240	U	813	368		ug/Kg	☼	45	10 - 110	9	48
4-Nitrophenol	400	U	1630	941		ug/Kg	☼	58	10 - 113	7	49
Acenaphthene	8.1	U	813	472		ug/Kg	☼	58	22 - 110	19	99
Acenaphthylene	8.1	U	813	457		ug/Kg	☼	56	24 - 110	17	99
Acetophenone	120	U	813	394		ug/Kg	☼	48	31 - 110	27	43
Anthracene	8.1	U	813	461		ug/Kg	☼	57	20 - 110	19	99
Atrazine	240	U	1630	968		ug/Kg	☼	60	45 - 118	16	30
Benzaldehyde	120	U	1630	828		ug/Kg	☼	51	23 - 110	26	42
Benzo[a]anthracene	8.1	U	813	462		ug/Kg	☼	57	10 - 122	18	99
Benzo[a]pyrene	8.1	U	813	489		ug/Kg	☼	60	10 - 110	18	99
Benzo[b]fluoranthene	8.1	U	813	579		ug/Kg	☼	71	12 - 118	18	99
Benzo[g,h,i]perylene	8.1	U	813	258		ug/Kg	☼	32	10 - 117	8	99
Benzo[k]fluoranthene	8.1	U	813	503		ug/Kg	☼	62	10 - 121	25	99
Bis(2-chloroethoxy)methane	120	U	813	426		ug/Kg	☼	52	26 - 110	23	37
Bis(2-chloroethyl)ether	120	U	813	423		ug/Kg	☼	52	21 - 110	27	55
Bis(2-ethylhexyl) phthalate	25	J	813	579		ug/Kg	☼	68	40 - 110	28	30
Butyl benzyl phthalate	85	U	813	528		ug/Kg	☼	65	44 - 110	25	30
Caprolactam	400	U	1630	1030		ug/Kg	☼	63	10 - 134	13	32
Carbazole	61	U	813	452		ug/Kg	☼	56	34 - 110	18	30
Chrysene	8.1	U	813	469		ug/Kg	☼	58	10 - 125	17	99
Dibenz(a,h)anthracene	8.1	U	813	322		ug/Kg	☼	40	14 - 113	11	99
Dibenzofuran	61	U	813	474		ug/Kg	☼	58	29 - 110	17	30
Diethyl phthalate	85	U	813	515		ug/Kg	☼	63	42 - 110	16	30
Dimethyl phthalate	85	U	813	491		ug/Kg	☼	60	41 - 110	17	30
Di-n-butyl phthalate	85	U	813	509		ug/Kg	☼	63	43 - 110	19	30
Di-n-octyl phthalate	85	U F1 F2	813	772	F2	ug/Kg	☼	95	24 - 119	39	30
Fluoranthene	8.1	U	813	465		ug/Kg	☼	57	10 - 110	18	99
Fluorene	8.1	U	813	475		ug/Kg	☼	58	23 - 110	19	99
Hexachlorobenzene	8.1	U	813	442		ug/Kg	☼	54	34 - 110	19	30
Hexachlorobutadiene	61	U	813	401		ug/Kg	☼	49	25 - 110	26	34
Hexachlorocyclopentadiene	400	U F1	813	400	U F1	ug/Kg	☼	0	10 - 110	NC	79
Hexachloroethane	61	U	813	278		ug/Kg	☼	34	12 - 110	46	50
Indeno[1,2,3-cd]pyrene	8.1	U	813	310		ug/Kg	☼	38	10 - 114	9	99
Isophorone	61	U	813	429		ug/Kg	☼	53	29 - 110	22	38
Naphthalene	8.1	U	813	415		ug/Kg	☼	51	10 - 111	21	99
Nitrobenzene	120	U	813	399		ug/Kg	☼	49	23 - 110	25	41
N-Nitrosodi-n-propylamine	61	U	813	425		ug/Kg	☼	52	26 - 110	24	42
N-Nitrosodiphenylamine	61	U	1630	969		ug/Kg	☼	60	22 - 110	18	30
Pentachlorophenol	180	U	1630	410		ug/Kg	☼	25	10 - 110	1	50
Phenol	61	U	813	444		ug/Kg	☼	55	17 - 110	16	53
Phenanthrene	8.1	U	813	468		ug/Kg	☼	58	10 - 166	18	99
Pyrene	8.1	U	813	476		ug/Kg	☼	58	10 - 147	26	99
3 & 4 Methylphenol	490	U	813	470	J	ug/Kg	☼	58	25 - 110	18	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*56*		*24 - 110*
2-Fluorophenol (Surr)	*51*		*24 - 110*
2,4,6-Tribromophenol (Surr)	*41*		*10 - 110*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56328-12 MSD
Matrix: Solid
Analysis Batch: 202367

Client Sample ID: VAP-3 (1-2)
Prep Type: Total/NA
Prep Batch: 201836

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Nitrobenzene-d5 (Surr)	*50*		*20 - 110*
Phenol-d5 (Surr)	*57*		*26 - 110*
Terphenyl-d14 (Surr)	*63*		*36 - 110*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE

Lab Sample ID: 240-56328-7 MS
Matrix: Water
Analysis Batch: 201778

Client Sample ID: VAP-2 GW (35-36)
Prep Type: Total/NA
Prep Batch: 201574

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl - RE	0.96	U H	30.8	19.5	H	ug/L		63	10 - 160
bis (2-chloroisopropyl) ether - RE	0.96	U H	30.8	20.2	H	ug/L		66	10 - 160
2,4,5-Trichlorophenol - RE	4.8	U H	30.8	21.6	H	ug/L		70	10 - 160
2,4,6-Trichlorophenol - RE	4.8	U H	30.8	20.9	H	ug/L		68	10 - 160
2,4-Dichlorophenol - RE	1.9	U H	30.8	21.2	H	ug/L		69	10 - 160
2,4-Dimethylphenol - RE	1.9	U H	30.8	22.1	H	ug/L		72	10 - 160
2,4-Dinitrophenol - RE	38	U H	61.5	29.9	J H	ug/L		49	10 - 160
2,4-Dinitrotoluene - RE	4.8	U H	30.8	23.9	H	ug/L		78	10 - 160
2,6-Dinitrotoluene - RE	4.8	U H	30.8	22.9	H	ug/L		75	10 - 160
2-Chloronaphthalene - RE	0.96	U H	30.8	19.2	H	ug/L		62	10 - 160
2-Chlorophenol - RE	0.96	U H	30.8	19.7	H	ug/L		64	10 - 160
2-Methylnaphthalene - RE	0.19	U H	30.8	18.8	H	ug/L		61	10 - 160
2-Methylphenol - RE	0.96	U H	30.8	17.0	H	ug/L		55	10 - 160
2-Nitroaniline - RE	1.9	U H	30.8	23.4	H	ug/L		76	10 - 160
2-Nitrophenol - RE	1.9	U H	30.8	21.9	H	ug/L		71	10 - 160
3,3'-Dichlorobenzidine - RE	4.8	U H F2	61.5	6.00	H	ug/L		10	10 - 160
3-Nitroaniline - RE	1.9	U H	30.8	16.0	H	ug/L		52	10 - 160
4,6-Dinitro-2-methylphenol - RE	4.8	U H	61.5	35.6	H	ug/L		58	10 - 160
4-Bromophenyl phenyl ether - RE	1.9	U H	30.8	19.7	H	ug/L		64	10 - 160
4-Chloro-3-methylphenol - RE	1.9	U H	30.8	21.3	H	ug/L		69	10 - 160
4-Chloroaniline - RE	1.9	U H	30.8	5.52	H	ug/L		18	10 - 160
4-Chlorophenyl phenyl ether - RE	1.9	U H	30.8	19.8	H	ug/L		64	10 - 160
4-Nitroaniline - RE	1.9	U H	30.8	18.6	H	ug/L		60	10 - 160
4-Nitrophenol - RE	4.8	U H	61.5	15.4	H	ug/L		25	10 - 160
Acenaphthene - RE	0.19	U H	30.8	20.5	H	ug/L		66	10 - 160
Acenaphthylene - RE	0.19	U H	30.8	20.6	H	ug/L		67	10 - 160
Acetophenone - RE	0.96	U H	30.8	22.2	H	ug/L		72	10 - 160
Anthracene - RE	0.19	U H	30.8	19.8	H	ug/L		64	10 - 160
Atrazine - RE	0.96	U H	61.5	43.8	H	ug/L		71	10 - 160
Benzaldehyde - RE	0.96	U H *	61.5	78.5	H E	ug/L		128	10 - 160
Benzo[a]anthracene - RE	0.19	U H	30.8	8.84	H	ug/L		29	10 - 160
Benzo[a]pyrene - RE	0.19	U H	30.8	4.87	H	ug/L		16	10 - 160
Benzo[b]fluoranthene - RE	0.19	U H	30.8	4.36	H	ug/L		14	10 - 160
Benzo[g,h,i]perylene - RE	0.19	U H	30.8	5.25	H	ug/L		17	10 - 160
Benzo[k]fluoranthene - RE	0.19	U H	30.8	4.76	H	ug/L		15	10 - 160
Bis(2-chloroethoxy)methane - RE	0.96	U H	30.8	22.2	H	ug/L		72	10 - 160
Bis(2-chloroethyl)ether - RE	0.96	U H	30.8	21.1	H	ug/L		68	10 - 160

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Lab Sample ID: 240-56328-7 MS
Matrix: Water
Analysis Batch: 201778

Client Sample ID: VAP-2 GW (35-36)
Prep Type: Total/NA
Prep Batch: 201574

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-ethylhexyl) phthalate - RE	1.9	U H	30.8	5.54	H	ug/L		18	10 - 160
Butyl benzyl phthalate - RE	0.96	U H	30.8	21.5	H	ug/L		70	10 - 160
Caprolactam - RE	4.7	J H F2 B	61.5	12.1	H	ug/L		12	10 - 160
Carbazole - RE	0.96	U H	30.8	22.9	H	ug/L		75	10 - 160
Chrysene - RE	0.19	U H	30.8	9.75	H	ug/L		32	10 - 160
Dibenz(a,h)anthracene - RE	0.19	U H	30.8	4.08	H	ug/L		13	10 - 160
Dibenzofuran - RE	0.96	U H	30.8	20.0	H	ug/L		65	10 - 160
Diethyl phthalate - RE	0.96	U H	30.8	23.0	H	ug/L		75	10 - 160
Dimethyl phthalate - RE	0.96	U H	30.8	22.3	H	ug/L		73	10 - 160
Di-n-butyl phthalate - RE	0.72	J H	30.8	22.4	H	ug/L		70	10 - 160
Di-n-octyl phthalate - RE	0.96	U H	30.8	4.29	H	ug/L		14	10 - 160
Fluoranthene - RE	0.19	U H	30.8	10.1	H	ug/L		33	10 - 160
Fluorene - RE	0.19	U H	30.8	20.4	H	ug/L		66	10 - 160
Hexachlorobenzene - RE	0.96	U H	30.8	16.8	H	ug/L		55	10 - 160
Hexachlorobutadiene - RE	0.96	U H	30.8	16.8	H	ug/L		55	10 - 160
Hexachlorocyclopentadiene - RE	9.6	U H	30.8	14.4	H	ug/L		47	10 - 160
Hexachloroethane - RE	0.96	U H	30.8	18.0	H	ug/L		58	10 - 160
Indeno[1,2,3-cd]pyrene - RE	0.19	U H	30.8	4.00	H	ug/L		13	10 - 160
Isophorone - RE	0.96	U H	30.8	24.0	H	ug/L		78	10 - 160
Naphthalene - RE	0.19	U H	30.8	19.5	H	ug/L		63	10 - 160
Nitrobenzene - RE	0.96	U H	30.8	21.9	H	ug/L		71	10 - 160
N-Nitrosodi-n-propylamine - RE	0.96	U H	30.8	23.0	H	ug/L		75	10 - 160
N-Nitrosodiphenylamine - RE	0.96	U H	61.5	42.3	H	ug/L		69	10 - 160
Pentachlorophenol - RE	38	U H	61.5	32.8	J H	ug/L		53	10 - 160
Phenol - RE	0.96	U H	30.8	7.01	H	ug/L		23	10 - 160
Phenanthrene - RE	0.19	U H	30.8	19.3	H	ug/L		63	10 - 160
Pyrene - RE	0.19	U H	30.8	13.1	H	ug/L		43	10 - 160
3 & 4 Methylphenol - RE	1.9	U H	30.8	15.1	H	ug/L		49	10 - 160

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr) - RE	*66*		*29 - 110*
2-Fluorophenol (Surr) - RE	*36*		*15 - 110*
2,4,6-Tribromophenol (Surr) - RE	*66*		*21 - 128*
Nitrobenzene-d5 (Surr) - RE	*70*		*31 - 110*
Phenol-d5 (Surr) - RE	*22*		*10 - 110*
Terphenyl-d14 (Surr) - RE	*21*	*X*	*31 - 115*

Lab Sample ID: 240-56328-7 MSD
Matrix: Water
Analysis Batch: 201778

Client Sample ID: VAP-2 GW (35-36)
Prep Type: Total/NA
Prep Batch: 201574

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1'-Biphenyl - RE	0.96	U H	29.6	20.0	H	ug/L		68	10 - 160	3	30
bis (2-chloroisopropyl) ether - RE	0.96	U H	29.6	21.9	H	ug/L		74	10 - 160	8	30
2,4,5-Trichlorophenol - RE	4.8	U H	29.6	22.1	H	ug/L		75	10 - 160	2	30
2,4,6-Trichlorophenol - RE	4.8	U H	29.6	21.0	H	ug/L		71	10 - 160	0	30
2,4-Dichlorophenol - RE	1.9	U H	29.6	21.8	H	ug/L		74	10 - 160	3	30

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Lab Sample ID: 240-56328-7 MSD
Matrix: Water
Analysis Batch: 201778

Client Sample ID: VAP-2 GW (35-36)
Prep Type: Total/NA
Prep Batch: 201574

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dimethylphenol - RE	1.9	U H	29.6	22.4	H	ug/L		76	10 - 160	1	30
2,4-Dinitrophenol - RE	38	U H	59.3	29.7	J H	ug/L		50	10 - 160	1	30
2,4-Dinitrotoluene - RE	4.8	U H	29.6	23.9	H	ug/L		81	10 - 160	0	30
2,6-Dinitrotoluene - RE	4.8	U H	29.6	23.3	H	ug/L		79	10 - 160	2	30
2-Chloronaphthalene - RE	0.96	U H	29.6	19.6	H	ug/L		66	10 - 160	2	30
2-Chlorophenol - RE	0.96	U H	29.6	21.2	H	ug/L		71	10 - 160	7	30
2-Methylnaphthalene - RE	0.19	U H	29.6	19.3	H	ug/L		65	10 - 160	3	30
2-Methylphenol - RE	0.96	U H	29.6	17.5	H	ug/L		59	10 - 160	3	30
2-Nitroaniline - RE	1.9	U H	29.6	24.0	H	ug/L		81	10 - 160	3	30
2-Nitrophenol - RE	1.9	U H	29.6	22.9	H	ug/L		77	10 - 160	5	30
3,3'-Dichlorobenzidine - RE	4.8	U H F2	59.3	8.95	H F2	ug/L		15	10 - 160	40	30
3-Nitroaniline - RE	1.9	U H	29.6	17.1	H	ug/L		58	10 - 160	7	30
4,6-Dinitro-2-methylphenol - RE	4.8	U H	59.3	36.9	H	ug/L		62	10 - 160	4	30
4-Bromophenyl phenyl ether - RE	1.9	U H	29.6	19.8	H	ug/L		67	10 - 160	1	30
4-Chloro-3-methylphenol - RE	1.9	U H	29.6	21.0	H	ug/L		71	10 - 160	2	30
4-Chloroaniline - RE	1.9	U H	29.6	6.97	H	ug/L		24	10 - 160	23	30
4-Chlorophenyl phenyl ether - RE	1.9	U H	29.6	20.0	H	ug/L		68	10 - 160	1	30
4-Nitroaniline - RE	1.9	U H	29.6	18.7	H	ug/L		63	10 - 160	0	30
4-Nitrophenol - RE	4.8	U H	59.3	14.2	H	ug/L		24	10 - 160	8	30
Acenaphthene - RE	0.19	U H	29.6	20.7	H	ug/L		70	10 - 160	1	30
Acenaphthylene - RE	0.19	U H	29.6	21.3	H	ug/L		72	10 - 160	3	30
Acetophenone - RE	0.96	U H	29.6	23.8	H	ug/L		80	10 - 160	7	30
Anthracene - RE	0.19	U H	29.6	20.2	H	ug/L		68	10 - 160	2	30
Atrazine - RE	0.96	U H	59.3	45.6	H	ug/L		77	10 - 160	4	30
Benzaldehyde - RE	0.96	U H *	59.3	88.0	H E	ug/L		148	10 - 160	11	30
Benzo[a]anthracene - RE	0.19	U H	29.6	9.99	H	ug/L		34	10 - 160	12	30
Benzo[a]pyrene - RE	0.19	U H	29.6	5.93	H	ug/L		20	10 - 160	20	30
Benzo[b]fluoranthene - RE	0.19	U H	29.6	5.36	H	ug/L		18	10 - 160	21	30
Benzo[g,h,i]perylene - RE	0.19	U H	29.6	5.85	H	ug/L		20	10 - 160	11	30
Benzo[k]fluoranthene - RE	0.19	U H	29.6	5.57	H	ug/L		19	10 - 160	16	30
Bis(2-chloroethoxy)methane - RE	0.96	U H	29.6	23.1	H	ug/L		78	10 - 160	4	30
Bis(2-chloroethyl)ether - RE	0.96	U H	29.6	22.9	H	ug/L		77	10 - 160	8	30
Bis(2-ethylhexyl) phthalate - RE	1.9	U H	29.6	6.17	H	ug/L		21	10 - 160	11	30
Butyl benzyl phthalate - RE	0.96	U H	29.6	21.0	H	ug/L		71	10 - 160	2	30
Caprolactam - RE	4.7	J H F2 B	59.3	32.9	H F2	ug/L		48	10 - 160	93	30
Carbazole - RE	0.96	U H	29.6	23.1	H	ug/L		78	10 - 160	1	30
Chrysene - RE	0.19	U H	29.6	10.8	H	ug/L		36	10 - 160	10	30
Dibenz(a,h)anthracene - RE	0.19	U H	29.6	4.87	H	ug/L		16	10 - 160	18	30
Dibenzofuran - RE	0.96	U H	29.6	20.8	H	ug/L		70	10 - 160	4	30
Diethyl phthalate - RE	0.96	U H	29.6	23.1	H	ug/L		78	10 - 160	0	30
Dimethyl phthalate - RE	0.96	U H	29.6	22.6	H	ug/L		76	10 - 160	1	30
Di-n-butyl phthalate - RE	0.72	J H	29.6	21.7	H	ug/L		71	10 - 160	3	30
Di-n-octyl phthalate - RE	0.96	U H	29.6	4.88	H	ug/L		16	10 - 160	13	30
Fluoranthene - RE	0.19	U H	29.6	12.0	H	ug/L		40	10 - 160	17	30
Fluorene - RE	0.19	U H	29.6	20.9	H	ug/L		71	10 - 160	2	30
Hexachlorobenzene - RE	0.96	U H	29.6	17.5	H	ug/L		59	10 - 160	4	30
Hexachlorobutadiene - RE	0.96	U H	29.6	16.6	H	ug/L		56	10 - 160	1	30
Hexachlorocyclopentadiene - RE	9.6	U H	29.6	14.7	H	ug/L		49	10 - 160	2	30

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Lab Sample ID: 240-56328-7 MSD
Matrix: Water
Analysis Batch: 201778

Client Sample ID: VAP-2 GW (35-36)
Prep Type: Total/NA
Prep Batch: 201574

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachloroethane - RE	0.96	U H	29.6	18.2	H	ug/L		61	10 - 160	1	30
Indeno[1,2,3-cd]pyrene - RE	0.19	U H	29.6	4.81	H	ug/L		16	10 - 160	18	30
Isophorone - RE	0.96	U H	29.6	24.9	H	ug/L		84	10 - 160	4	30
Naphthalene - RE	0.19	U H	29.6	20.1	H	ug/L		68	10 - 160	3	30
Nitrobenzene - RE	0.96	U H	29.6	22.7	H	ug/L		77	10 - 160	4	30
N-Nitrosodi-n-propylamine - RE	0.96	U H	29.6	24.3	H	ug/L		82	10 - 160	6	30
N-Nitrosodiphenylamine - RE	0.96	U H	59.3	43.1	H	ug/L		73	10 - 160	2	30
Pentachlorophenol - RE	38	U H	59.3	31.2	J H	ug/L		53	10 - 160	5	30
Phenol - RE	0.96	U H	29.6	6.90	H	ug/L		23	10 - 160	1	30
Phenanthrene - RE	0.19	U H	29.6	19.8	H	ug/L		67	10 - 160	3	30
Pyrene - RE	0.19	U H	29.6	14.7	H	ug/L		49	10 - 160	11	30
3 & 4 Methylphenol - RE	1.9	U H	29.6	15.7	H	ug/L		53	10 - 160	4	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr) - RE	*72*		*29 - 110*
2-Fluorophenol (Surr) - RE	*39*		*15 - 110*
2,4,6-Tribromophenol (Surr) - RE	*71*		*21 - 128*
Nitrobenzene-d5 (Surr) - RE	*79*		*31 - 110*
Phenol-d5 (Surr) - RE	*23*		*10 - 110*
Terphenyl-d14 (Surr) - RE	*26*	*X*	*31 - 115*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-201088/1-A
Matrix: Solid
Analysis Batch: 201601

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201088

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0	0.41	mg/Kg		10/09/15 07:38	10/13/15 05:08	1
Barium	20	U	20	0.41	mg/Kg		10/09/15 07:38	10/13/15 05:08	1
Cadmium	0.20	U	0.20	0.021	mg/Kg		10/09/15 07:38	10/13/15 05:08	1
Chromium	0.0944	J	0.50	0.075	mg/Kg		10/09/15 07:38	10/13/15 05:08	1
Lead	0.30	U	0.30	0.20	mg/Kg		10/09/15 07:38	10/13/15 05:08	1
Selenium	0.50	U	0.50	0.34	mg/Kg		10/09/15 07:38	10/13/15 05:08	1
Silver	0.50	U	0.50	0.063	mg/Kg		10/09/15 07:38	10/13/15 05:08	1

Lab Sample ID: LCS 240-201088/2-A
Matrix: Solid
Analysis Batch: 201601

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201088

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	172		mg/Kg		86	80 - 120
Barium	200	171		mg/Kg		86	80 - 120
Cadmium	5.00	4.27		mg/Kg		85	80 - 120
Chromium	20.0	17.1		mg/Kg		86	80 - 120
Lead	50.0	44.1		mg/Kg		88	80 - 120
Selenium	200	171		mg/Kg		86	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 240-201088/2-A
Matrix: Solid
Analysis Batch: 201601

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201088

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	5.00	4.51		mg/Kg		90	80 - 120

Lab Sample ID: 240-56328-12 MS
Matrix: Solid
Analysis Batch: 201601

Client Sample ID: VAP-3 (1-2)
Prep Type: Total/NA
Prep Batch: 201088

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	10		166	151		mg/Kg	☼	85	75 - 125
Barium	66		166	212		mg/Kg	☼	88	75 - 125
Cadmium	0.068	J	4.16	3.65		mg/Kg	☼	86	75 - 125
Chromium	14	B	16.6	29.5		mg/Kg	☼	96	75 - 125
Lead	11		41.6	48.0		mg/Kg	☼	90	75 - 125
Selenium	0.43	U	166	141		mg/Kg	☼	85	75 - 125
Silver	0.43	U	4.16	3.72		mg/Kg	☼	90	75 - 125

Lab Sample ID: 240-56328-12 MSD
Matrix: Solid
Analysis Batch: 201601

Client Sample ID: VAP-3 (1-2)
Prep Type: Total/NA
Prep Batch: 201088

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	10		166	155		mg/Kg	☼	87	75 - 125	2	20
Barium	66		166	215		mg/Kg	☼	90	75 - 125	2	20
Cadmium	0.068	J	4.16	3.71		mg/Kg	☼	88	75 - 125	2	20
Chromium	14	B	16.6	29.9		mg/Kg	☼	99	75 - 125	2	20
Lead	11		41.6	47.8		mg/Kg	☼	90	75 - 125	1	20
Selenium	0.43	U	166	142		mg/Kg	☼	86	75 - 125	1	20
Silver	0.43	U	4.16	3.76		mg/Kg	☼	91	75 - 125	1	20

Lab Sample ID: MB 240-201148/1-A
Matrix: Water
Analysis Batch: 201889

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 201148

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10	U	10	2.9	ug/L		10/09/15 10:45	10/14/15 23:19	1
Barium	200	U	200	1.0	ug/L		10/09/15 10:45	10/14/15 23:19	1
Cadmium	2.0	U	2.0	0.14	ug/L		10/09/15 10:45	10/14/15 23:19	1
Chromium	0.611	J	5.0	0.55	ug/L		10/09/15 10:45	10/14/15 23:19	1
Lead	3.0	U	3.0	1.9	ug/L		10/09/15 10:45	10/14/15 23:19	1
Selenium	5.0	U	5.0	4.0	ug/L		10/09/15 10:45	10/14/15 23:19	1
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:45	10/14/15 23:19	1

Lab Sample ID: LCS 240-201148/2-A
Matrix: Water
Analysis Batch: 201889

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 201148

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2000	1980		ug/L		99	80 - 120
Barium	2000	1840		ug/L		92	80 - 120
Cadmium	50.0	50.9		ug/L		102	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 240-201148/2-A
Matrix: Water
Analysis Batch: 201889

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 201148

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	200	191		ug/L		96	80 - 120
Lead	500	457		ug/L		91	80 - 120
Selenium	2000	2010		ug/L		100	80 - 120
Silver	50.0	48.0		ug/L		96	80 - 120

Lab Sample ID: MB 240-201151/1-A
Matrix: Water
Analysis Batch: 201601

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 201151

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10	U	10	2.9	ug/L		10/09/15 10:52	10/13/15 02:58	1
Barium	1.12	J	200	1.0	ug/L		10/09/15 10:52	10/13/15 02:58	1
Cadmium	2.0	U	2.0	0.14	ug/L		10/09/15 10:52	10/13/15 02:58	1
Chromium	5.0	U	5.0	0.55	ug/L		10/09/15 10:52	10/13/15 02:58	1
Lead	3.0	U	3.0	1.9	ug/L		10/09/15 10:52	10/13/15 02:58	1
Selenium	5.0	U	5.0	4.0	ug/L		10/09/15 10:52	10/13/15 02:58	1
Silver	5.0	U	5.0	0.92	ug/L		10/09/15 10:52	10/13/15 02:58	1

Lab Sample ID: LCS 240-201151/2-A
Matrix: Water
Analysis Batch: 201601

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 201151

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2000	1900		ug/L		95	80 - 120
Barium	2000	1870		ug/L		93	80 - 120
Cadmium	50.0	47.0		ug/L		94	80 - 120
Chromium	200	181		ug/L		90	80 - 120
Lead	500	471		ug/L		94	80 - 120
Selenium	2000	1950		ug/L		97	80 - 120
Silver	50.0	51.4		ug/L		103	80 - 120

Lab Sample ID: 240-56328-7 MS
Matrix: Water
Analysis Batch: 201889

Client Sample ID: VAP-2 GW (35-36)
Prep Type: Dissolved
Prep Batch: 201148

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	5.7	J	2000	2000		ug/L		100	75 - 125
Barium	180	J	2000	2070		ug/L		94	75 - 125
Cadmium	0.30	J	50.0	51.5		ug/L		102	75 - 125
Chromium	51	B	200	245		ug/L		97	75 - 125
Lead	15		500	477		ug/L		92	75 - 125
Selenium	5.0	U	2000	2020		ug/L		101	75 - 125
Silver	5.0	U	50.0	49.6		ug/L		99	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 240-56328-7 MSD
Matrix: Water
Analysis Batch: 201889

Client Sample ID: VAP-2 GW (35-36)
Prep Type: Dissolved
Prep Batch: 201148

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	5.7	J	2000	1990		ug/L		99	75 - 125	0	20
Barium	180	J	2000	2070		ug/L		94	75 - 125	0	20
Cadmium	0.30	J	50.0	51.3		ug/L		102	75 - 125	0	20
Chromium	51	B	200	247		ug/L		98	75 - 125	1	20
Lead	15		500	478		ug/L		93	75 - 125	0	20
Selenium	5.0	U	2000	2020		ug/L		101	75 - 125	0	20
Silver	5.0	U	50.0	49.9		ug/L		100	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-201150/1-A
Matrix: Water
Analysis Batch: 201918

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201150

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/09/15 14:00	10/14/15 09:00	1

Lab Sample ID: LCS 240-201150/2-A
Matrix: Water
Analysis Batch: 201918

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201150

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.20		ug/L		104	80 - 120

Lab Sample ID: MB 240-201153/1-A
Matrix: Water
Analysis Batch: 201694

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201153

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/09/15 14:00	10/13/15 12:45	1

Lab Sample ID: LCS 240-201153/2-A
Matrix: Water
Analysis Batch: 201659

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201153

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.80		ug/L		96	80 - 120

Lab Sample ID: 240-56328-7 MS
Matrix: Water
Analysis Batch: 201918

Client Sample ID: VAP-2 GW (35-36)
Prep Type: Dissolved
Prep Batch: 201150

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.20	U F1	1.00	1.24	F1	ug/L		124	80 - 120

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 240-56328-7 MSD — **Client Sample ID: VAP-2 GW (35-36)**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 201918 — **Prep Batch: 201150**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.20	U F1	1.00	1.23	F1	ug/L		123	80 - 120	0	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 240-201091/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 201712 — **Prep Batch: 201091**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10	U	0.10	0.014	mg/Kg		10/09/15 10:00	10/13/15 11:35	1

Lab Sample ID: LCS 240-201091/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 201712 — **Prep Batch: 201091**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.663		mg/Kg		80	80 - 120

Lab Sample ID: 240-56328-12 MS — **Client Sample ID: VAP-3 (1-2)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 201712 — **Prep Batch: 201091**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.043	J	0.204	0.282		mg/Kg	☼	117	80 - 120

Lab Sample ID: 240-56328-12 MSD — **Client Sample ID: VAP-3 (1-2)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 201712 — **Prep Batch: 201091**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.043	J	0.204	0.242		mg/Kg	☼	98	80 - 120	15	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 240-201156/9-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 201511 — **Prep Batch: 201156**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.80	U	0.80	0.26	mg/Kg		10/09/15 11:05	10/12/15 00:00	1

Lab Sample ID: LCSI 240-201156/11-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 201511 — **Prep Batch: 201156**

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	643	570		mg/Kg		89	75 - 125

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: LCSS 240-201156/10-A
Matrix: Solid
Analysis Batch: 201511

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201156

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	20.0	19.6		mg/Kg		98	90 - 110

Method: Moisture - Percent Moisture

Lab Sample ID: 240-56328-12 DU
Matrix: Solid
Analysis Batch: 201219

Client Sample ID: VAP-3 (1-2)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	82		82		%		0	20
Percent Moisture	18		18		%		0.1	20

GC/MS VOA

Prep Batch: 201261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-2	VAP-2 (2-4)	Total/NA	Solid	5035	
240-56328-12	VAP-3 (1-2)	Total/NA	Solid	5035	
240-56328-12 MS	VAP-3 (1-2)	Total/NA	Solid	5035	
240-56328-12 MSD	VAP-3 (1-2)	Total/NA	Solid	5035	
240-56328-21	VAP-4 (6-8)	Total/NA	Solid	5035	
240-56328-30	VAP-5 (4-6)	Total/NA	Solid	5035	

Analysis Batch: 201613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-29	VAP-4-GW (48-49)	Total/NA	Water	8260B	
LCS 240-201613/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-201613/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 201682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-1	TB-02 (100515)	Total/NA	Water	8260B	
240-56328-3	VAP-2 GW (15-16)	Total/NA	Water	8260B	
240-56328-4	VAP-2 GW (20-21)	Total/NA	Water	8260B	
240-56328-5	VAP-2 GW (25-26)	Total/NA	Water	8260B	
240-56328-6	VAP-2 GW (30-31)	Total/NA	Water	8260B	
240-56328-7	VAP-2 GW (35-36)	Total/NA	Water	8260B	
240-56328-7 MS	VAP-2 GW (35-36)	Total/NA	Water	8260B	
240-56328-7 MSD	VAP-2 GW (35-36)	Total/NA	Water	8260B	
240-56328-8	VAP-2 GW (40-41)	Total/NA	Water	8260B	
240-56328-9	VAP-2 GW (45-46)	Total/NA	Water	8260B	
240-56328-10	VAP-2 GW (49-50)	Total/NA	Water	8260B	
240-56328-11	DUP-GW-01 (100515)	Total/NA	Water	8260B	
240-56328-13	VAP-3-GW (15-16)	Total/NA	Water	8260B	
240-56328-14	VAP-3-GW (20-21)	Total/NA	Water	8260B	
240-56328-15	VAP-3-GW (25-26)	Total/NA	Water	8260B	
240-56328-16	VAP-3-GW (30-31)	Total/NA	Water	8260B	
240-56328-17	VAP-3-GW (35-36)	Total/NA	Water	8260B	
240-56328-18	VAP-3-GW (40-41)	Total/NA	Water	8260B	
240-56328-19	VAP-3-GW (45-46)	Total/NA	Water	8260B	
240-56328-20	VAP-3-GW (49-50)	Total/NA	Water	8260B	
240-56328-22	VAP-4-GW (15-16)	Total/NA	Water	8260B	
240-56328-23	VAP-4-GW (20-21)	Total/NA	Water	8260B	
LCS 240-201682/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-201682/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 201750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-2	VAP-2 (2-4)	Total/NA	Solid	8260B	201261
240-56328-12	VAP-3 (1-2)	Total/NA	Solid	8260B	201261
240-56328-12 MS	VAP-3 (1-2)	Total/NA	Solid	8260B	201261
240-56328-12 MSD	VAP-3 (1-2)	Total/NA	Solid	8260B	201261
240-56328-21	VAP-4 (6-8)	Total/NA	Solid	8260B	201261
240-56328-30	VAP-5 (4-6)	Total/NA	Solid	8260B	201261
LCS 240-201750/8	Lab Control Sample	Total/NA	Solid	8260B	
MB 240-201750/9	Method Blank	Total/NA	Solid	8260B	

GC/MS VOA (Continued)

Analysis Batch: 201796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-24	VAP-4-GW (25-26)	Total/NA	Water	8260B	
240-56328-25	VAP-4-GW (30-31)	Total/NA	Water	8260B	
240-56328-26	VAP-4-GW (35-36)	Total/NA	Water	8260B	
240-56328-27	VAP-4-GW (40-41)	Total/NA	Water	8260B	
240-56328-28	VAP-4-GW (45-46)	Total/NA	Water	8260B	
240-56328-31	VAP-5-GW (15-16)	Total/NA	Water	8260B	
240-56328-32	VAP-5-GW (20-21)	Total/NA	Water	8260B	
240-56328-32 MS	VAP-5-GW (20-21)	Total/NA	Water	8260B	
240-56328-32 MSD	VAP-5-GW (20-21)	Total/NA	Water	8260B	
LCS 240-201796/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-201796/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 202014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-34	VAP-5-GW (30-31)	Total/NA	Water	8260B	
240-56328-35	VAP-5-GW (35-36)	Total/NA	Water	8260B	
240-56328-36	VAP-5-GW (40-41)	Total/NA	Water	8260B	
240-56328-37	VAP-5-GW (45-46)	Total/NA	Water	8260B	
240-56328-38	VAP-5-GW (49-50)	Total/NA	Water	8260B	
240-56328-39	TB-03 (100715)	Total/NA	Water	8260B	
240-56328-40	TB-04 (100715)	Total/NA	Water	8260B	
LCS 240-202014/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-202014/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 202028

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-33	VAP-5-GW (25-26)	Total/NA	Water	8260B	
LCS 240-202028/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-202028/6	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 201082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-2	VAP-2 (2-4)	Total/NA	Solid	3540C	
240-56328-21	VAP-4 (6-8)	Total/NA	Solid	3540C	
LCS 240-201082/23-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-201082/22-A	Method Blank	Total/NA	Solid	3540C	

Prep Batch: 201121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-3	VAP-2 GW (15-16)	Total/NA	Water	3510C	
240-56328-3 - RA	VAP-2 GW (15-16)	Total/NA	Water	3510C	
240-56328-4	VAP-2 GW (20-21)	Total/NA	Water	3510C	
240-56328-5	VAP-2 GW (25-26)	Total/NA	Water	3510C	
240-56328-6	VAP-2 GW (30-31)	Total/NA	Water	3510C	
240-56328-7	VAP-2 GW (35-36)	Total/NA	Water	3510C	
240-56328-7 MS	VAP-2 GW (35-36)	Total/NA	Water	3510C	
240-56328-7 MSD	VAP-2 GW (35-36)	Total/NA	Water	3510C	
240-56328-8	VAP-2 GW (40-41)	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 201121 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-9	VAP-2 GW (45-46)	Total/NA	Water	3510C	
240-56328-10	VAP-2 GW (49-50)	Total/NA	Water	3510C	
240-56328-10 - RA	VAP-2 GW (49-50)	Total/NA	Water	3510C	
240-56328-11	DUP-GW-01 (100515)	Total/NA	Water	3510C	
240-56328-13	VAP-3-GW (15-16)	Total/NA	Water	3510C	
240-56328-15 - RA	VAP-3-GW (25-26)	Total/NA	Water	3510C	
240-56328-15	VAP-3-GW (25-26)	Total/NA	Water	3510C	
240-56328-17 - RA	VAP-3-GW (35-36)	Total/NA	Water	3510C	
240-56328-17	VAP-3-GW (35-36)	Total/NA	Water	3510C	
240-56328-18	VAP-3-GW (40-41)	Total/NA	Water	3510C	
240-56328-18 - RA	VAP-3-GW (40-41)	Total/NA	Water	3510C	
240-56328-19 - RA	VAP-3-GW (45-46)	Total/NA	Water	3510C	
240-56328-19	VAP-3-GW (45-46)	Total/NA	Water	3510C	
240-56328-20	VAP-3-GW (49-50)	Total/NA	Water	3510C	
240-56328-20 - RA	VAP-3-GW (49-50)	Total/NA	Water	3510C	
240-56328-22	VAP-4-GW (15-16)	Total/NA	Water	3510C	
240-56328-22 - RA	VAP-4-GW (15-16)	Total/NA	Water	3510C	
240-56328-23	VAP-4-GW (20-21)	Total/NA	Water	3510C	
240-56328-23 - RA	VAP-4-GW (20-21)	Total/NA	Water	3510C	
240-56328-24	VAP-4-GW (25-26)	Total/NA	Water	3510C	
LCS 240-201121/24-A	Lab Control Sample	Total/NA	Water	3510C	
MB 240-201121/23-A	Method Blank	Total/NA	Water	3510C	

Prep Batch: 201122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-25 - RA	VAP-4-GW (30-31)	Total/NA	Water	3510C	
240-56328-25	VAP-4-GW (30-31)	Total/NA	Water	3510C	
240-56328-26	VAP-4-GW (35-36)	Total/NA	Water	3510C	
240-56328-27	VAP-4-GW (40-41)	Total/NA	Water	3510C	
240-56328-29 - RA	VAP-4-GW (48-49)	Total/NA	Water	3510C	
240-56328-29	VAP-4-GW (48-49)	Total/NA	Water	3510C	
240-56328-31	VAP-5-GW (15-16)	Total/NA	Water	3510C	
240-56328-31 - RA	VAP-5-GW (15-16)	Total/NA	Water	3510C	
240-56328-32 - RA	VAP-5-GW (20-21)	Total/NA	Water	3510C	
240-56328-32	VAP-5-GW (20-21)	Total/NA	Water	3510C	
240-56328-33	VAP-5-GW (25-26)	Total/NA	Water	3510C	
240-56328-34	VAP-5-GW (30-31)	Total/NA	Water	3510C	
240-56328-35	VAP-5-GW (35-36)	Total/NA	Water	3510C	
240-56328-36	VAP-5-GW (40-41)	Total/NA	Water	3510C	
240-56328-36 - RA	VAP-5-GW (40-41)	Total/NA	Water	3510C	
240-56328-37 - RA	VAP-5-GW (45-46)	Total/NA	Water	3510C	
240-56328-37	VAP-5-GW (45-46)	Total/NA	Water	3510C	
LCS 240-201122/14-A	Lab Control Sample	Total/NA	Water	3510C	
MB 240-201122/13-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 201328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-26	VAP-4-GW (35-36)	Total/NA	Water	8270C	201122
240-56328-27	VAP-4-GW (40-41)	Total/NA	Water	8270C	201122
240-56328-29	VAP-4-GW (48-49)	Total/NA	Water	8270C	201122
240-56328-31	VAP-5-GW (15-16)	Total/NA	Water	8270C	201122

GC/MS Semi VOA (Continued)

Analysis Batch: 201328 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-32	VAP-5-GW (20-21)	Total/NA	Water	8270C	201122
240-56328-33	VAP-5-GW (25-26)	Total/NA	Water	8270C	201122
240-56328-34	VAP-5-GW (30-31)	Total/NA	Water	8270C	201122
240-56328-35	VAP-5-GW (35-36)	Total/NA	Water	8270C	201122
240-56328-36	VAP-5-GW (40-41)	Total/NA	Water	8270C	201122
LCS 240-201122/14-A	Lab Control Sample	Total/NA	Water	8270C	201122
MB 240-201122/13-A	Method Blank	Total/NA	Water	8270C	201122

Analysis Batch: 201359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-3	VAP-2 GW (15-16)	Total/NA	Water	8270C	201121
240-56328-4	VAP-2 GW (20-21)	Total/NA	Water	8270C	201121
240-56328-5	VAP-2 GW (25-26)	Total/NA	Water	8270C	201121
240-56328-6	VAP-2 GW (30-31)	Total/NA	Water	8270C	201121
240-56328-7	VAP-2 GW (35-36)	Total/NA	Water	8270C	201121
240-56328-7 MS	VAP-2 GW (35-36)	Total/NA	Water	8270C	201121
240-56328-7 MSD	VAP-2 GW (35-36)	Total/NA	Water	8270C	201121
240-56328-8	VAP-2 GW (40-41)	Total/NA	Water	8270C	201121
240-56328-9	VAP-2 GW (45-46)	Total/NA	Water	8270C	201121
240-56328-10	VAP-2 GW (49-50)	Total/NA	Water	8270C	201121
240-56328-11	DUP-GW-01 (100515)	Total/NA	Water	8270C	201121
240-56328-13	VAP-3-GW (15-16)	Total/NA	Water	8270C	201121
240-56328-15	VAP-3-GW (25-26)	Total/NA	Water	8270C	201121
240-56328-17	VAP-3-GW (35-36)	Total/NA	Water	8270C	201121
240-56328-18	VAP-3-GW (40-41)	Total/NA	Water	8270C	201121
240-56328-19	VAP-3-GW (45-46)	Total/NA	Water	8270C	201121
240-56328-25	VAP-4-GW (30-31)	Total/NA	Water	8270C	201122
240-56328-29 - RA	VAP-4-GW (48-49)	Total/NA	Water	8270C	201122
240-56328-31 - RA	VAP-5-GW (15-16)	Total/NA	Water	8270C	201122
240-56328-32 - RA	VAP-5-GW (20-21)	Total/NA	Water	8270C	201122
240-56328-36 - RA	VAP-5-GW (40-41)	Total/NA	Water	8270C	201122
240-56328-37	VAP-5-GW (45-46)	Total/NA	Water	8270C	201122
240-56328-37 - RA	VAP-5-GW (45-46)	Total/NA	Water	8270C	201122
LCS 240-201121/24-A	Lab Control Sample	Total/NA	Water	8270C	201121
MB 240-201121/23-A	Method Blank	Total/NA	Water	8270C	201121

Analysis Batch: 201553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-3 - RA	VAP-2 GW (15-16)	Total/NA	Water	8270C	201121
240-56328-10 - RA	VAP-2 GW (49-50)	Total/NA	Water	8270C	201121
240-56328-15 - RA	VAP-3-GW (25-26)	Total/NA	Water	8270C	201121
240-56328-17 - RA	VAP-3-GW (35-36)	Total/NA	Water	8270C	201121
240-56328-18 - RA	VAP-3-GW (40-41)	Total/NA	Water	8270C	201121
240-56328-19 - RA	VAP-3-GW (45-46)	Total/NA	Water	8270C	201121
240-56328-20	VAP-3-GW (49-50)	Total/NA	Water	8270C	201121
240-56328-22	VAP-4-GW (15-16)	Total/NA	Water	8270C	201121
240-56328-23	VAP-4-GW (20-21)	Total/NA	Water	8270C	201121
240-56328-24	VAP-4-GW (25-26)	Total/NA	Water	8270C	201121
240-56328-25 - RA	VAP-4-GW (30-31)	Total/NA	Water	8270C	201122

GC/MS Semi VOA (Continued)

Prep Batch: 201574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-7 - RE	VAP-2 GW (35-36)	Total/NA	Water	3510C	
240-56328-7 MS - RE	VAP-2 GW (35-36)	Total/NA	Water	3510C	
240-56328-7 MSD - RE	VAP-2 GW (35-36)	Total/NA	Water	3510C	
240-56328-8 - RE	VAP-2 GW (40-41)	Total/NA	Water	3510C	
240-56328-9 - RE	VAP-2 GW (45-46)	Total/NA	Water	3510C	
240-56328-11 - RE	DUP-GW-01 (100515)	Total/NA	Water	3510C	
240-56328-14	VAP-3-GW (20-21)	Total/NA	Water	3510C	
240-56328-16	VAP-3-GW (30-31)	Total/NA	Water	3510C	
240-56328-16 - RA	VAP-3-GW (30-31)	Total/NA	Water	3510C	
240-56328-28	VAP-4-GW (45-46)	Total/NA	Water	3510C	
LCS 240-201574/8-A	Lab Control Sample	Total/NA	Water	3510C	
MB 240-201574/7-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 201593

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-2	VAP-2 (2-4)	Total/NA	Solid	8270C	201082
240-56328-21	VAP-4 (6-8)	Total/NA	Solid	8270C	201082
LCS 240-201082/23-A	Lab Control Sample	Total/NA	Solid	8270C	201082
MB 240-201082/22-A	Method Blank	Total/NA	Solid	8270C	201082

Analysis Batch: 201778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-7 - RE	VAP-2 GW (35-36)	Total/NA	Water	8270C	201574
240-56328-7 MS - RE	VAP-2 GW (35-36)	Total/NA	Water	8270C	201574
240-56328-7 MSD - RE	VAP-2 GW (35-36)	Total/NA	Water	8270C	201574
240-56328-8 - RE	VAP-2 GW (40-41)	Total/NA	Water	8270C	201574
240-56328-9 - RE	VAP-2 GW (45-46)	Total/NA	Water	8270C	201574
240-56328-11 - RE	DUP-GW-01 (100515)	Total/NA	Water	8270C	201574
240-56328-14	VAP-3-GW (20-21)	Total/NA	Water	8270C	201574
240-56328-16	VAP-3-GW (30-31)	Total/NA	Water	8270C	201574
240-56328-16 - RA	VAP-3-GW (30-31)	Total/NA	Water	8270C	201574
240-56328-20 - RA	VAP-3-GW (49-50)	Total/NA	Water	8270C	201121
240-56328-22 - RA	VAP-4-GW (15-16)	Total/NA	Water	8270C	201121
240-56328-23 - RA	VAP-4-GW (20-21)	Total/NA	Water	8270C	201121
240-56328-28	VAP-4-GW (45-46)	Total/NA	Water	8270C	201574
LCS 240-201574/8-A	Lab Control Sample	Total/NA	Water	8270C	201574
MB 240-201574/7-A	Method Blank	Total/NA	Water	8270C	201574

Prep Batch: 201836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-12	VAP-3 (1-2)	Total/NA	Solid	3540C	
240-56328-12 MS	VAP-3 (1-2)	Total/NA	Solid	3540C	
240-56328-12 MSD	VAP-3 (1-2)	Total/NA	Solid	3540C	
240-56328-30	VAP-5 (4-6)	Total/NA	Solid	3540C	
LCS 240-201836/9-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-201836/8-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 202045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-201836/9-A	Lab Control Sample	Total/NA	Solid	8270C	201836
MB 240-201836/8-A	Method Blank	Total/NA	Solid	8270C	201836

Analysis Batch: 202221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-12	VAP-3 (1-2)	Total/NA	Solid	8270C	201836
240-56328-12 MS	VAP-3 (1-2)	Total/NA	Solid	8270C	201836
240-56328-30	VAP-5 (4-6)	Total/NA	Solid	8270C	201836

Analysis Batch: 202367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-12 MSD	VAP-3 (1-2)	Total/NA	Solid	8270C	201836

Metals

Prep Batch: 201088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-2	VAP-2 (2-4)	Total/NA	Solid	3050B	
240-56328-12	VAP-3 (1-2)	Total/NA	Solid	3050B	
240-56328-12 MS	VAP-3 (1-2)	Total/NA	Solid	3050B	
240-56328-12 MSD	VAP-3 (1-2)	Total/NA	Solid	3050B	
240-56328-21	VAP-4 (6-8)	Total/NA	Solid	3050B	
240-56328-30	VAP-5 (4-6)	Total/NA	Solid	3050B	
LCS 240-201088/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 240-201088/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 201091

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-2	VAP-2 (2-4)	Total/NA	Solid	7471A	
240-56328-12	VAP-3 (1-2)	Total/NA	Solid	7471A	
240-56328-12 MS	VAP-3 (1-2)	Total/NA	Solid	7471A	
240-56328-12 MSD	VAP-3 (1-2)	Total/NA	Solid	7471A	
240-56328-21	VAP-4 (6-8)	Total/NA	Solid	7471A	
240-56328-30	VAP-5 (4-6)	Total/NA	Solid	7471A	
LCS 240-201091/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 240-201091/1-A	Method Blank	Total/NA	Solid	7471A	

Prep Batch: 201148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-3	VAP-2 GW (15-16)	Dissolved	Water	3005A	
240-56328-4	VAP-2 GW (20-21)	Dissolved	Water	3005A	
240-56328-5	VAP-2 GW (25-26)	Dissolved	Water	3005A	
240-56328-6	VAP-2 GW (30-31)	Dissolved	Water	3005A	
240-56328-7	VAP-2 GW (35-36)	Dissolved	Water	3005A	
240-56328-7 MS	VAP-2 GW (35-36)	Dissolved	Water	3005A	
240-56328-7 MSD	VAP-2 GW (35-36)	Dissolved	Water	3005A	
240-56328-8	VAP-2 GW (40-41)	Dissolved	Water	3005A	
240-56328-9	VAP-2 GW (45-46)	Dissolved	Water	3005A	
240-56328-10	VAP-2 GW (49-50)	Dissolved	Water	3005A	
240-56328-11	DUP-GW-01 (100515)	Dissolved	Water	3005A	
240-56328-13	VAP-3-GW (15-16)	Dissolved	Water	3005A	
240-56328-14	VAP-3-GW (20-21)	Dissolved	Water	3005A	
240-56328-15	VAP-3-GW (25-26)	Dissolved	Water	3005A	
240-56328-16	VAP-3-GW (30-31)	Dissolved	Water	3005A	
240-56328-17	VAP-3-GW (35-36)	Dissolved	Water	3005A	
240-56328-18	VAP-3-GW (40-41)	Dissolved	Water	3005A	
240-56328-19	VAP-3-GW (45-46)	Dissolved	Water	3005A	
240-56328-20	VAP-3-GW (49-50)	Dissolved	Water	3005A	

Metals (Continued)

Prep Batch: 201148 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-22	VAP-4-GW (15-16)	Dissolved	Water	3005A	
240-56328-23	VAP-4-GW (20-21)	Dissolved	Water	3005A	
240-56328-24	VAP-4-GW (25-26)	Dissolved	Water	3005A	
LCS 240-201148/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-201148/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 201150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-3	VAP-2 GW (15-16)	Dissolved	Water	7470A	
240-56328-4	VAP-2 GW (20-21)	Dissolved	Water	7470A	
240-56328-5	VAP-2 GW (25-26)	Dissolved	Water	7470A	
240-56328-6	VAP-2 GW (30-31)	Dissolved	Water	7470A	
240-56328-7	VAP-2 GW (35-36)	Dissolved	Water	7470A	
240-56328-7 MS	VAP-2 GW (35-36)	Dissolved	Water	7470A	
240-56328-7 MSD	VAP-2 GW (35-36)	Dissolved	Water	7470A	
240-56328-8	VAP-2 GW (40-41)	Dissolved	Water	7470A	
240-56328-9	VAP-2 GW (45-46)	Dissolved	Water	7470A	
240-56328-10	VAP-2 GW (49-50)	Dissolved	Water	7470A	
240-56328-11	DUP-GW-01 (100515)	Dissolved	Water	7470A	
240-56328-13	VAP-3-GW (15-16)	Dissolved	Water	7470A	
240-56328-14	VAP-3-GW (20-21)	Dissolved	Water	7470A	
240-56328-15	VAP-3-GW (25-26)	Dissolved	Water	7470A	
240-56328-16	VAP-3-GW (30-31)	Dissolved	Water	7470A	
240-56328-17	VAP-3-GW (35-36)	Dissolved	Water	7470A	
240-56328-18	VAP-3-GW (40-41)	Dissolved	Water	7470A	
240-56328-19	VAP-3-GW (45-46)	Dissolved	Water	7470A	
240-56328-20	VAP-3-GW (49-50)	Dissolved	Water	7470A	
240-56328-22	VAP-4-GW (15-16)	Dissolved	Water	7470A	
240-56328-23	VAP-4-GW (20-21)	Dissolved	Water	7470A	
240-56328-24	VAP-4-GW (25-26)	Dissolved	Water	7470A	
LCS 240-201150/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 240-201150/1-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 201151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-25	VAP-4-GW (30-31)	Dissolved	Water	3005A	
240-56328-26	VAP-4-GW (35-36)	Dissolved	Water	3005A	
240-56328-27	VAP-4-GW (40-41)	Dissolved	Water	3005A	
240-56328-28	VAP-4-GW (45-46)	Dissolved	Water	3005A	
240-56328-29	VAP-4-GW (48-49)	Dissolved	Water	3005A	
240-56328-31	VAP-5-GW (15-16)	Dissolved	Water	3005A	
240-56328-32	VAP-5-GW (20-21)	Dissolved	Water	3005A	
240-56328-33	VAP-5-GW (25-26)	Dissolved	Water	3005A	
240-56328-34	VAP-5-GW (30-31)	Dissolved	Water	3005A	
240-56328-35	VAP-5-GW (35-36)	Dissolved	Water	3005A	
240-56328-36	VAP-5-GW (40-41)	Dissolved	Water	3005A	
240-56328-37	VAP-5-GW (45-46)	Dissolved	Water	3005A	
LCS 240-201151/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-201151/1-A	Method Blank	Total Recoverable	Water	3005A	

Metals (Continued)

Prep Batch: 201153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-25	VAP-4-GW (30-31)	Dissolved	Water	7470A	
240-56328-26	VAP-4-GW (35-36)	Dissolved	Water	7470A	
240-56328-27	VAP-4-GW (40-41)	Dissolved	Water	7470A	
240-56328-28	VAP-4-GW (45-46)	Dissolved	Water	7470A	
240-56328-29	VAP-4-GW (48-49)	Dissolved	Water	7470A	
240-56328-31	VAP-5-GW (15-16)	Dissolved	Water	7470A	
240-56328-32	VAP-5-GW (20-21)	Dissolved	Water	7470A	
240-56328-33	VAP-5-GW (25-26)	Dissolved	Water	7470A	
240-56328-34	VAP-5-GW (30-31)	Dissolved	Water	7470A	
240-56328-35	VAP-5-GW (35-36)	Dissolved	Water	7470A	
240-56328-36	VAP-5-GW (40-41)	Dissolved	Water	7470A	
240-56328-37	VAP-5-GW (45-46)	Dissolved	Water	7470A	
LCS 240-201153/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 240-201153/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 201601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-2	VAP-2 (2-4)	Total/NA	Solid	6010B	201088
240-56328-2	VAP-2 (2-4)	Total/NA	Solid	6010B	201088
240-56328-12	VAP-3 (1-2)	Total/NA	Solid	6010B	201088
240-56328-12 MS	VAP-3 (1-2)	Total/NA	Solid	6010B	201088
240-56328-12 MSD	VAP-3 (1-2)	Total/NA	Solid	6010B	201088
240-56328-21	VAP-4 (6-8)	Total/NA	Solid	6010B	201088
240-56328-25	VAP-4-GW (30-31)	Dissolved	Water	6010B	201151
240-56328-26	VAP-4-GW (35-36)	Dissolved	Water	6010B	201151
240-56328-27	VAP-4-GW (40-41)	Dissolved	Water	6010B	201151
240-56328-28	VAP-4-GW (45-46)	Dissolved	Water	6010B	201151
240-56328-29	VAP-4-GW (48-49)	Dissolved	Water	6010B	201151
240-56328-30	VAP-5 (4-6)	Total/NA	Solid	6010B	201088
240-56328-31	VAP-5-GW (15-16)	Dissolved	Water	6010B	201151
240-56328-32	VAP-5-GW (20-21)	Dissolved	Water	6010B	201151
240-56328-33	VAP-5-GW (25-26)	Dissolved	Water	6010B	201151
240-56328-34	VAP-5-GW (30-31)	Dissolved	Water	6010B	201151
240-56328-35	VAP-5-GW (35-36)	Dissolved	Water	6010B	201151
240-56328-36	VAP-5-GW (40-41)	Dissolved	Water	6010B	201151
240-56328-37	VAP-5-GW (45-46)	Dissolved	Water	6010B	201151
LCS 240-201088/2-A	Lab Control Sample	Total/NA	Solid	6010B	201088
LCS 240-201151/2-A	Lab Control Sample	Total Recoverable	Water	6010B	201151
MB 240-201088/1-A	Method Blank	Total/NA	Solid	6010B	201088
MB 240-201151/1-A	Method Blank	Total Recoverable	Water	6010B	201151

Analysis Batch: 201659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-25	VAP-4-GW (30-31)	Dissolved	Water	7470A	201153
240-56328-26	VAP-4-GW (35-36)	Dissolved	Water	7470A	201153
240-56328-27	VAP-4-GW (40-41)	Dissolved	Water	7470A	201153
240-56328-28	VAP-4-GW (45-46)	Dissolved	Water	7470A	201153
240-56328-29	VAP-4-GW (48-49)	Dissolved	Water	7470A	201153
240-56328-31	VAP-5-GW (15-16)	Dissolved	Water	7470A	201153
240-56328-32	VAP-5-GW (20-21)	Dissolved	Water	7470A	201153
240-56328-33	VAP-5-GW (25-26)	Dissolved	Water	7470A	201153

Metals (Continued)

Analysis Batch: 201659 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-34	VAP-5-GW (30-31)	Dissolved	Water	7470A	201153
240-56328-35	VAP-5-GW (35-36)	Dissolved	Water	7470A	201153
240-56328-36	VAP-5-GW (40-41)	Dissolved	Water	7470A	201153
240-56328-37	VAP-5-GW (45-46)	Dissolved	Water	7470A	201153
LCS 240-201153/2-A	Lab Control Sample	Total/NA	Water	7470A	201153

Analysis Batch: 201694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-201153/1-A	Method Blank	Total/NA	Water	7470A	201153

Analysis Batch: 201712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-2	VAP-2 (2-4)	Total/NA	Solid	7471A	201091
240-56328-12	VAP-3 (1-2)	Total/NA	Solid	7471A	201091
240-56328-12 MS	VAP-3 (1-2)	Total/NA	Solid	7471A	201091
240-56328-12 MSD	VAP-3 (1-2)	Total/NA	Solid	7471A	201091
240-56328-21	VAP-4 (6-8)	Total/NA	Solid	7471A	201091
240-56328-30	VAP-5 (4-6)	Total/NA	Solid	7471A	201091
LCS 240-201091/2-A	Lab Control Sample	Total/NA	Solid	7471A	201091
MB 240-201091/1-A	Method Blank	Total/NA	Solid	7471A	201091

Analysis Batch: 201889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-3	VAP-2 GW (15-16)	Dissolved	Water	6010B	201148
240-56328-4	VAP-2 GW (20-21)	Dissolved	Water	6010B	201148
240-56328-5	VAP-2 GW (25-26)	Dissolved	Water	6010B	201148
240-56328-5	VAP-2 GW (25-26)	Dissolved	Water	6010B	201148
240-56328-6	VAP-2 GW (30-31)	Dissolved	Water	6010B	201148
240-56328-7	VAP-2 GW (35-36)	Dissolved	Water	6010B	201148
240-56328-7 MS	VAP-2 GW (35-36)	Dissolved	Water	6010B	201148
240-56328-7 MSD	VAP-2 GW (35-36)	Dissolved	Water	6010B	201148
240-56328-8	VAP-2 GW (40-41)	Dissolved	Water	6010B	201148
240-56328-9	VAP-2 GW (45-46)	Dissolved	Water	6010B	201148
240-56328-10	VAP-2 GW (49-50)	Dissolved	Water	6010B	201148
240-56328-11	DUP-GW-01 (100515)	Dissolved	Water	6010B	201148
240-56328-13	VAP-3-GW (15-16)	Dissolved	Water	6010B	201148
240-56328-14	VAP-3-GW (20-21)	Dissolved	Water	6010B	201148
240-56328-15	VAP-3-GW (25-26)	Dissolved	Water	6010B	201148
240-56328-16	VAP-3-GW (30-31)	Dissolved	Water	6010B	201148
240-56328-17	VAP-3-GW (35-36)	Dissolved	Water	6010B	201148
240-56328-18	VAP-3-GW (40-41)	Dissolved	Water	6010B	201148
240-56328-19	VAP-3-GW (45-46)	Dissolved	Water	6010B	201148
240-56328-20	VAP-3-GW (49-50)	Dissolved	Water	6010B	201148
240-56328-22	VAP-4-GW (15-16)	Dissolved	Water	6010B	201148
240-56328-23	VAP-4-GW (20-21)	Dissolved	Water	6010B	201148
240-56328-24	VAP-4-GW (25-26)	Dissolved	Water	6010B	201148
LCS 240-201148/2-A	Lab Control Sample	Total Recoverable	Water	6010B	201148
MB 240-201148/1-A	Method Blank	Total Recoverable	Water	6010B	201148

Metals (Continued)

Analysis Batch: 201918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-3	VAP-2 GW (15-16)	Dissolved	Water	7470A	201150
240-56328-4	VAP-2 GW (20-21)	Dissolved	Water	7470A	201150
240-56328-5	VAP-2 GW (25-26)	Dissolved	Water	7470A	201150
240-56328-6	VAP-2 GW (30-31)	Dissolved	Water	7470A	201150
240-56328-7	VAP-2 GW (35-36)	Dissolved	Water	7470A	201150
240-56328-7 MS	VAP-2 GW (35-36)	Dissolved	Water	7470A	201150
240-56328-7 MSD	VAP-2 GW (35-36)	Dissolved	Water	7470A	201150
240-56328-8	VAP-2 GW (40-41)	Dissolved	Water	7470A	201150
240-56328-9	VAP-2 GW (45-46)	Dissolved	Water	7470A	201150
240-56328-10	VAP-2 GW (49-50)	Dissolved	Water	7470A	201150
240-56328-11	DUP-GW-01 (100515)	Dissolved	Water	7470A	201150
240-56328-13	VAP-3-GW (15-16)	Dissolved	Water	7470A	201150
240-56328-14	VAP-3-GW (20-21)	Dissolved	Water	7470A	201150
240-56328-15	VAP-3-GW (25-26)	Dissolved	Water	7470A	201150
240-56328-16	VAP-3-GW (30-31)	Dissolved	Water	7470A	201150
240-56328-17	VAP-3-GW (35-36)	Dissolved	Water	7470A	201150
240-56328-18	VAP-3-GW (40-41)	Dissolved	Water	7470A	201150
240-56328-19	VAP-3-GW (45-46)	Dissolved	Water	7470A	201150
240-56328-20	VAP-3-GW (49-50)	Dissolved	Water	7470A	201150
240-56328-22	VAP-4-GW (15-16)	Dissolved	Water	7470A	201150
240-56328-23	VAP-4-GW (20-21)	Dissolved	Water	7470A	201150
240-56328-24	VAP-4-GW (25-26)	Dissolved	Water	7470A	201150
LCS 240-201150/2-A	Lab Control Sample	Total/NA	Water	7470A	201150
MB 240-201150/1-A	Method Blank	Total/NA	Water	7470A	201150

General Chemistry

Prep Batch: 201156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-2	VAP-2 (2-4)	Total/NA	Solid	3060A	
240-56328-12	VAP-3 (1-2)	Total/NA	Solid	3060A	
240-56328-21	VAP-4 (6-8)	Total/NA	Solid	3060A	
240-56328-30	VAP-5 (4-6)	Total/NA	Solid	3060A	
LCSI 240-201156/11-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 240-201156/10-A	Lab Control Sample	Total/NA	Solid	3060A	
MB 240-201156/9-A	Method Blank	Total/NA	Solid	3060A	

Analysis Batch: 201219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-2	VAP-2 (2-4)	Total/NA	Solid	Moisture	
240-56328-12	VAP-3 (1-2)	Total/NA	Solid	Moisture	
240-56328-12 DU	VAP-3 (1-2)	Total/NA	Solid	Moisture	
240-56328-21	VAP-4 (6-8)	Total/NA	Solid	Moisture	
240-56328-30	VAP-5 (4-6)	Total/NA	Solid	Moisture	

Analysis Batch: 201511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-2	VAP-2 (2-4)	Total/NA	Solid	7196A	201156
240-56328-12	VAP-3 (1-2)	Total/NA	Solid	7196A	201156
240-56328-21	VAP-4 (6-8)	Total/NA	Solid	7196A	201156

General Chemistry (Continued)

Analysis Batch: 201511 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56328-30	VAP-5 (4-6)	Total/NA	Solid	7196A	201156
LCSI 240-201156/11-A	Lab Control Sample	Total/NA	Solid	7196A	201156
LCSS 240-201156/10-A	Lab Control Sample	Total/NA	Solid	7196A	201156
MB 240-201156/9-A	Method Blank	Total/NA	Solid	7196A	201156

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Client Sample ID: TB-02 (100515)
Date Collected: 10/05/15 00:00
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201682	10/14/15 00:59	LRW	TAL CAN

Client Sample ID: VAP-2 (2-4)
Date Collected: 10/05/15 08:35
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	201219	10/09/15 13:58	GNR	TAL CAN

Client Sample ID: VAP-2 (2-4)
Date Collected: 10/05/15 08:35
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-2
Matrix: Solid
Percent Solids: 78.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			201261	10/10/15 05:46	TJL2	TAL CAN
Total/NA	Analysis	8260B		1	201750	10/14/15 07:26	TJL2	TAL CAN
Total/NA	Prep	3540C			201082	10/09/15 07:30	SDE	TAL CAN
Total/NA	Analysis	8270C		1	201593	10/13/15 14:11	JMG	TAL CAN
Total/NA	Prep	3050B			201088	10/09/15 07:38	WAL	TAL CAN
Total/NA	Analysis	6010B		1	201601	10/13/15 06:08	KLC	TAL CAN
Total/NA	Prep	3050B			201088	10/09/15 07:38	WAL	TAL CAN
Total/NA	Analysis	6010B		1	201601	10/13/15 08:53	KLC	TAL CAN
Total/NA	Prep	7471A			201091	10/09/15 10:00	WAL	TAL CAN
Total/NA	Analysis	7471A		1	201712	10/13/15 12:01	WAL	TAL CAN
Total/NA	Prep	3060A			201156	10/09/15 11:05	GNR	TAL CAN
Total/NA	Analysis	7196A		1	201511	10/12/15 15:14	GNR	TAL CAN

Client Sample ID: VAP-2 GW (15-16)
Date Collected: 10/05/15 08:50
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201682	10/14/15 01:21	LRW	TAL CAN
Total/NA	Prep	3510C			201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201359	10/12/15 08:00	TMH	TAL CAN
Total/NA	Prep	3510C	RA		201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C	RA	4	201553	10/13/15 10:22	TMH	TAL CAN
Dissolved	Prep	3005A			201148	10/09/15 10:45	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201889	10/14/15 23:47	KLC	TAL CAN
Dissolved	Prep	7470A			201150	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201918	10/14/15 09:52	WAL	TAL CAN

Client Sample ID: VAP-2 GW (20-21)

Lab Sample ID: 240-56328-4

Date Collected: 10/05/15 10:00

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201682	10/14/15 01:44	LRW	TAL CAN
Total/NA	Prep	3510C			201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201359	10/12/15 08:24	TMH	TAL CAN
Dissolved	Prep	3005A			201148	10/09/15 10:45	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201889	10/14/15 23:59	KLC	TAL CAN
Dissolved	Prep	7470A			201150	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201918	10/14/15 09:54	WAL	TAL CAN

Client Sample ID: VAP-2 GW (25-26)

Lab Sample ID: 240-56328-5

Date Collected: 10/05/15 10:33

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201682	10/14/15 02:06	LRW	TAL CAN
Total/NA	Prep	3510C			201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201359	10/12/15 08:47	TMH	TAL CAN
Dissolved	Prep	3005A			201148	10/09/15 10:45	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201889	10/15/15 00:03	KLC	TAL CAN
Dissolved	Prep	3005A			201148	10/09/15 10:45	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201889	10/15/15 07:26	KLC	TAL CAN
Dissolved	Prep	7470A			201150	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201918	10/14/15 09:43	WAL	TAL CAN

Client Sample ID: VAP-2 GW (30-31)

Lab Sample ID: 240-56328-6

Date Collected: 10/05/15 13:12

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201682	10/14/15 02:28	LRW	TAL CAN
Total/NA	Prep	3510C			201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201359	10/12/15 09:11	TMH	TAL CAN
Dissolved	Prep	3005A			201148	10/09/15 10:45	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201889	10/15/15 00:07	KLC	TAL CAN
Dissolved	Prep	7470A			201150	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201918	10/14/15 09:45	WAL	TAL CAN

Client Sample ID: VAP-2 GW (35-36)

Lab Sample ID: 240-56328-7

Date Collected: 10/05/15 13:38

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201682	10/14/15 08:04	LRW	TAL CAN
Total/NA	Prep	3510C			201121	10/09/15 09:01	JDR	TAL CAN

Client Sample ID: VAP-2 GW (35-36)

Lab Sample ID: 240-56328-7

Date Collected: 10/05/15 13:38

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		1	201359	10/12/15 09:34	TMH	TAL CAN
Total/NA	Prep	3510C	RE		201574	10/13/15 12:16	CSC	TAL CAN
Total/NA	Analysis	8270C	RE	1	201778	10/14/15 08:55	TMH	TAL CAN
Dissolved	Prep	3005A			201148	10/09/15 10:45	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201889	10/14/15 23:27	KLC	TAL CAN
Dissolved	Prep	7470A			201150	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201918	10/14/15 09:05	WAL	TAL CAN

Client Sample ID: VAP-2 GW (40-41)

Lab Sample ID: 240-56328-8

Date Collected: 10/05/15 14:41

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201682	10/14/15 02:51	LRW	TAL CAN
Total/NA	Prep	3510C			201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201359	10/12/15 11:08	TMH	TAL CAN
Total/NA	Prep	3510C	RE		201574	10/13/15 08:39	CSC	TAL CAN
Total/NA	Analysis	8270C	RE	1	201778	10/14/15 10:28	TMH	TAL CAN
Dissolved	Prep	3005A			201148	10/09/15 10:45	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201889	10/15/15 00:27	KLC	TAL CAN
Dissolved	Prep	7470A			201150	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201918	10/14/15 09:31	WAL	TAL CAN

Client Sample ID: VAP-2 GW (45-46)

Lab Sample ID: 240-56328-9

Date Collected: 10/05/15 15:30

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201682	10/14/15 03:13	LRW	TAL CAN
Total/NA	Prep	3510C			201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201359	10/12/15 11:32	TMH	TAL CAN
Total/NA	Prep	3510C	RE		201574	10/13/15 08:39	CSC	TAL CAN
Total/NA	Analysis	8270C	RE	1	201778	10/14/15 10:51	TMH	TAL CAN
Dissolved	Prep	3005A			201148	10/09/15 10:45	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201889	10/15/15 00:11	KLC	TAL CAN
Dissolved	Prep	7470A			201150	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201918	10/14/15 09:33	WAL	TAL CAN

Client Sample ID: VAP-2 GW (49-50)

Date Collected: 10/05/15 16:00
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201682	10/14/15 03:35	LRW	TAL CAN
Total/NA	Prep	3510C			201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201359	10/12/15 11:55	TMH	TAL CAN
Total/NA	Prep	3510C	RA		201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C	RA	4	201553	10/13/15 10:46	TMH	TAL CAN
Dissolved	Prep	3005A			201148	10/09/15 10:45	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201889	10/15/15 00:15	KLC	TAL CAN
Dissolved	Prep	7470A			201150	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201918	10/14/15 09:35	WAL	TAL CAN

Client Sample ID: DUP-GW-01 (100515)

Date Collected: 10/05/15 00:00
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201682	10/14/15 03:58	LRW	TAL CAN
Total/NA	Prep	3510C			201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201359	10/12/15 12:19	TMH	TAL CAN
Total/NA	Prep	3510C	RE		201574	10/13/15 08:39	CSC	TAL CAN
Total/NA	Analysis	8270C	RE	1	201778	10/14/15 11:15	TMH	TAL CAN
Dissolved	Prep	3005A			201148	10/09/15 10:45	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201889	10/15/15 00:19	KLC	TAL CAN
Dissolved	Prep	7470A			201150	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201918	10/14/15 09:37	WAL	TAL CAN

Client Sample ID: VAP-3 (1-2)

Date Collected: 10/05/15 17:15
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	201219	10/09/15 13:58	GNR	TAL CAN

Client Sample ID: VAP-3 (1-2)

Date Collected: 10/05/15 17:15
Date Received: 10/08/15 09:30

Lab Sample ID: 240-56328-12
Matrix: Solid
Percent Solids: 81.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			201261	10/10/15 05:46	TJL2	TAL CAN
Total/NA	Analysis	8260B		1	201750	10/14/15 06:22	TJL2	TAL CAN
Total/NA	Prep	3540C			201836	10/14/15 10:32	YDN	TAL CAN
Total/NA	Analysis	8270C		1	202221	10/16/15 17:46	JMG	TAL CAN
Total/NA	Prep	3050B			201088	10/09/15 07:38	WAL	TAL CAN
Total/NA	Analysis	6010B		1	201601	10/13/15 05:45	KLC	TAL CAN

Client Sample ID: VAP-3 (1-2)

Lab Sample ID: 240-56328-12
Date Collected: 10/05/15 17:15
Matrix: Solid
Date Received: 10/08/15 09:30
Percent Solids: 81.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			201091	10/09/15 10:00	WAL	TAL CAN
Total/NA	Analysis	7471A		1	201712	10/13/15 11:44	WAL	TAL CAN
Total/NA	Prep	3060A			201156	10/09/15 11:05	GNR	TAL CAN
Total/NA	Analysis	7196A		2	201511	10/12/15 15:29	GNR	TAL CAN

Client Sample ID: VAP-3-GW (15-16)

Lab Sample ID: 240-56328-13
Date Collected: 10/06/15 08:06
Matrix: Water
Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201682	10/14/15 04:20	LRW	TAL CAN
Total/NA	Prep	3510C			201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201359	10/12/15 12:42	TMH	TAL CAN
Dissolved	Prep	3005A			201148	10/09/15 10:45	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201889	10/15/15 00:23	KLC	TAL CAN
Dissolved	Prep	7470A			201150	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201918	10/14/15 09:39	WAL	TAL CAN

Client Sample ID: VAP-3-GW (20-21)

Lab Sample ID: 240-56328-14
Date Collected: 10/06/15 09:11
Matrix: Water
Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201682	10/14/15 04:42	LRW	TAL CAN
Total/NA	Prep	3510C			201574	10/13/15 08:39	CSC	TAL CAN
Total/NA	Analysis	8270C		1	201778	10/14/15 11:38	TMH	TAL CAN
Dissolved	Prep	3005A			201148	10/09/15 10:45	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201889	10/15/15 00:31	KLC	TAL CAN
Dissolved	Prep	7470A			201150	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201918	10/14/15 09:28	WAL	TAL CAN

Client Sample ID: VAP-3-GW (25-26)

Lab Sample ID: 240-56328-15
Date Collected: 10/06/15 09:39
Matrix: Water
Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201682	10/14/15 05:05	LRW	TAL CAN
Total/NA	Prep	3510C			201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201359	10/12/15 16:38	TMH	TAL CAN
Total/NA	Prep	3510C	RA		201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C	RA	20	201553	10/13/15 13:53	TMH	TAL CAN
Dissolved	Prep	3005A			201148	10/09/15 10:45	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201889	10/15/15 00:35	KLC	TAL CAN

Client Sample ID: VAP-3-GW (25-26)

Lab Sample ID: 240-56328-15

Date Collected: 10/06/15 09:39

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	7470A			201150	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201918	10/14/15 09:26	WAL	TAL CAN

Client Sample ID: VAP-3-GW (30-31)

Lab Sample ID: 240-56328-16

Date Collected: 10/06/15 10:10

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201682	10/14/15 05:27	LRW	TAL CAN
Total/NA	Prep	3510C			201574	10/13/15 08:39	CSC	TAL CAN
Total/NA	Analysis	8270C		1	201778	10/14/15 12:25	TMH	TAL CAN
Total/NA	Prep	3510C	RA		201574	10/13/15 08:39	CSC	TAL CAN
Total/NA	Analysis	8270C	RA	5	201778	10/14/15 19:03	TMH	TAL CAN
Dissolved	Prep	3005A			201148	10/09/15 10:45	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201889	10/15/15 00:47	KLC	TAL CAN
Dissolved	Prep	7470A			201150	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201918	10/14/15 09:19	WAL	TAL CAN

Client Sample ID: VAP-3-GW (35-36)

Lab Sample ID: 240-56328-17

Date Collected: 10/06/15 10:58

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201682	10/14/15 05:49	LRW	TAL CAN
Total/NA	Prep	3510C			201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201359	10/12/15 17:25	TMH	TAL CAN
Total/NA	Prep	3510C	RA		201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C	RA	25	201553	10/13/15 12:20	TMH	TAL CAN
Dissolved	Prep	3005A			201148	10/09/15 10:45	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201889	10/15/15 00:51	KLC	TAL CAN
Dissolved	Prep	7470A			201150	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201918	10/14/15 09:17	WAL	TAL CAN

Client Sample ID: VAP-3-GW (40-41)

Lab Sample ID: 240-56328-18

Date Collected: 10/06/15 11:30

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201682	10/14/15 06:11	LRW	TAL CAN
Total/NA	Prep	3510C			201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201359	10/12/15 17:48	TMH	TAL CAN
Total/NA	Prep	3510C	RA		201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C	RA	12.5	201553	10/13/15 12:43	TMH	TAL CAN

Client Sample ID: VAP-3-GW (40-41)

Lab Sample ID: 240-56328-18

Date Collected: 10/06/15 11:30

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	3005A			201148	10/09/15 10:45	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201889	10/15/15 00:55	KLC	TAL CAN
Dissolved	Prep	7470A			201150	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201918	10/14/15 09:15	WAL	TAL CAN

Client Sample ID: VAP-3-GW (45-46)

Lab Sample ID: 240-56328-19

Date Collected: 10/06/15 12:04

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201682	10/14/15 06:34	LRW	TAL CAN
Total/NA	Prep	3510C			201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201359	10/12/15 18:12	TMH	TAL CAN
Total/NA	Prep	3510C	RA		201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C	RA	6.6666	201553	10/13/15 13:07	TMH	TAL CAN
Dissolved	Prep	3005A			201148	10/09/15 10:45	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201889	10/15/15 00:59	KLC	TAL CAN
Dissolved	Prep	7470A			201150	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201918	10/14/15 09:41	WAL	TAL CAN

Client Sample ID: VAP-3-GW (49-50)

Lab Sample ID: 240-56328-20

Date Collected: 10/06/15 12:55

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201682	10/14/15 06:56	LRW	TAL CAN
Total/NA	Prep	3510C			201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201553	10/13/15 14:40	TMH	TAL CAN
Total/NA	Prep	3510C	RA		201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C	RA	25	201778	10/14/15 12:48	TMH	TAL CAN
Dissolved	Prep	3005A			201148	10/09/15 10:45	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201889	10/15/15 01:04	KLC	TAL CAN
Dissolved	Prep	7470A			201150	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201918	10/14/15 09:56	WAL	TAL CAN

Client Sample ID: VAP-4 (6-8)

Lab Sample ID: 240-56328-21

Date Collected: 10/06/15 14:52

Matrix: Solid

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	201219	10/09/15 13:58	GNR	TAL CAN

Client Sample ID: VAP-4 (6-8)

Lab Sample ID: 240-56328-21

Date Collected: 10/06/15 14:52

Matrix: Solid

Date Received: 10/08/15 09:30

Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			201261	10/10/15 05:46	TJL2	TAL CAN
Total/NA	Analysis	8260B		1	201750	10/14/15 07:47	TJL2	TAL CAN
Total/NA	Prep	3540C			201082	10/09/15 07:30	SDE	TAL CAN
Total/NA	Analysis	8270C		1	201593	10/13/15 14:35	JMG	TAL CAN
Total/NA	Prep	3050B			201088	10/09/15 07:38	WAL	TAL CAN
Total/NA	Analysis	6010B		1	201601	10/13/15 06:13	KLC	TAL CAN
Total/NA	Prep	7471A			201091	10/09/15 10:00	WAL	TAL CAN
Total/NA	Analysis	7471A		1	201712	10/13/15 11:59	WAL	TAL CAN
Total/NA	Prep	3060A			201156	10/09/15 11:05	GNR	TAL CAN
Total/NA	Analysis	7196A		1	201511	10/12/15 15:19	GNR	TAL CAN

Client Sample ID: VAP-4-GW (15-16)

Lab Sample ID: 240-56328-22

Date Collected: 10/06/15 15:03

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201682	10/14/15 07:19	LRW	TAL CAN
Total/NA	Prep	3510C			201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201553	10/13/15 15:04	TMH	TAL CAN
Total/NA	Prep	3510C	RA		201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C	RA	5	201778	10/14/15 13:12	TMH	TAL CAN
Dissolved	Prep	3005A			201148	10/09/15 10:45	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201889	10/15/15 01:08	KLC	TAL CAN
Dissolved	Prep	7470A			201150	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201918	10/14/15 09:58	WAL	TAL CAN

Client Sample ID: VAP-4-GW (20-21)

Lab Sample ID: 240-56328-23

Date Collected: 10/06/15 15:31

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201682	10/14/15 07:42	LRW	TAL CAN
Total/NA	Prep	3510C			201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201553	10/13/15 15:27	TMH	TAL CAN
Total/NA	Prep	3510C	RA		201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C	RA	4	201778	10/14/15 13:35	TMH	TAL CAN
Dissolved	Prep	3005A			201148	10/09/15 10:45	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201889	10/15/15 01:12	KLC	TAL CAN
Dissolved	Prep	7470A			201150	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201918	10/14/15 09:11	WAL	TAL CAN

Client Sample ID: VAP-4-GW (25-26)

Lab Sample ID: 240-56328-24

Date Collected: 10/06/15 16:06

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201796	10/14/15 15:12	LEE	TAL CAN
Total/NA	Prep	3510C			201121	10/09/15 09:01	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201553	10/13/15 15:51	TMH	TAL CAN
Dissolved	Prep	3005A			201148	10/09/15 10:45	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201889	10/15/15 01:16	KLC	TAL CAN
Dissolved	Prep	7470A			201150	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201918	10/14/15 09:13	WAL	TAL CAN

Client Sample ID: VAP-4-GW (30-31)

Lab Sample ID: 240-56328-25

Date Collected: 10/06/15 16:36

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201796	10/14/15 15:35	LEE	TAL CAN
Total/NA	Prep	3510C			201122	10/09/15 09:05	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201359	10/12/15 13:29	TMH	TAL CAN
Total/NA	Prep	3510C	RA		201122	10/09/15 09:05	JDR	TAL CAN
Total/NA	Analysis	8270C	RA	4	201553	10/13/15 11:09	TMH	TAL CAN
Dissolved	Prep	3005A			201151	10/09/15 10:52	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201601	10/13/15 04:07	KLC	TAL CAN
Dissolved	Prep	7470A			201153	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201659	10/13/15 09:57	WAL	TAL CAN

Client Sample ID: VAP-4-GW (35-36)

Lab Sample ID: 240-56328-26

Date Collected: 10/07/15 08:11

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201796	10/14/15 15:57	LEE	TAL CAN
Total/NA	Prep	3510C			201122	10/09/15 09:05	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201328	10/11/15 15:53	TMH	TAL CAN
Dissolved	Prep	3005A			201151	10/09/15 10:52	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201601	10/13/15 04:11	KLC	TAL CAN
Dissolved	Prep	7470A			201153	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201659	10/13/15 10:04	WAL	TAL CAN

Client Sample ID: VAP-4-GW (40-41)

Lab Sample ID: 240-56328-27

Date Collected: 10/07/15 08:45

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201796	10/14/15 16:19	LEE	TAL CAN
Total/NA	Prep	3510C			201122	10/09/15 09:05	JDR	TAL CAN

Client Sample ID: VAP-4-GW (40-41)

Lab Sample ID: 240-56328-27

Date Collected: 10/07/15 08:45

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		1	201328	10/11/15 16:16	TMH	TAL CAN
Dissolved	Prep	3005A			201151	10/09/15 10:52	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201601	10/13/15 04:15	KLC	TAL CAN
Dissolved	Prep	7470A			201153	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201659	10/13/15 10:06	WAL	TAL CAN

Client Sample ID: VAP-4-GW (45-46)

Lab Sample ID: 240-56328-28

Date Collected: 10/07/15 09:18

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201796	10/14/15 16:41	LEE	TAL CAN
Total/NA	Prep	3510C			201574	10/13/15 13:06	CSC	TAL CAN
Total/NA	Analysis	8270C		1	201778	10/14/15 10:05	TMH	TAL CAN
Dissolved	Prep	3005A			201151	10/09/15 10:52	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201601	10/13/15 04:19	KLC	TAL CAN
Dissolved	Prep	7470A			201153	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201659	10/13/15 10:08	WAL	TAL CAN

Client Sample ID: VAP-4-GW (48-49)

Lab Sample ID: 240-56328-29

Date Collected: 10/07/15 09:55

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	201613	10/13/15 20:52	RJQ	TAL CAN
Total/NA	Prep	3510C			201122	10/09/15 09:05	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201328	10/11/15 17:03	TMH	TAL CAN
Total/NA	Prep	3510C	RA		201122	10/09/15 09:05	JDR	TAL CAN
Total/NA	Analysis	8270C	RA	4	201359	10/12/15 13:53	TMH	TAL CAN
Dissolved	Prep	3005A			201151	10/09/15 10:52	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201601	10/13/15 04:23	KLC	TAL CAN
Dissolved	Prep	7470A			201153	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201659	10/13/15 10:12	WAL	TAL CAN

Client Sample ID: VAP-5 (4-6)

Lab Sample ID: 240-56328-30

Date Collected: 10/07/15 11:37

Matrix: Solid

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	201219	10/09/15 13:58	GNR	TAL CAN

Client Sample ID: VAP-5 (4-6)

Lab Sample ID: 240-56328-30

Date Collected: 10/07/15 11:37

Matrix: Solid

Date Received: 10/08/15 09:30

Percent Solids: 80.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			201261	10/10/15 05:46	TJL2	TAL CAN
Total/NA	Analysis	8260B		1	201750	10/14/15 08:08	TJL2	TAL CAN
Total/NA	Prep	3540C			201836	10/14/15 11:39	YDN	TAL CAN
Total/NA	Analysis	8270C		1	202221	10/16/15 16:58	JMG	TAL CAN
Total/NA	Prep	3050B			201088	10/09/15 07:38	WAL	TAL CAN
Total/NA	Analysis	6010B		1	201601	10/13/15 06:25	KLC	TAL CAN
Total/NA	Prep	7471A			201091	10/09/15 10:00	WAL	TAL CAN
Total/NA	Analysis	7471A		1	201712	10/13/15 12:18	WAL	TAL CAN
Total/NA	Prep	3060A			201156	10/09/15 11:05	GNR	TAL CAN
Total/NA	Analysis	7196A		1	201511	10/12/15 15:22	GNR	TAL CAN

Client Sample ID: VAP-5-GW (15-16)

Lab Sample ID: 240-56328-31

Date Collected: 10/07/15 12:00

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		8	201796	10/14/15 17:04	LEE	TAL CAN
Total/NA	Prep	3510C			201122	10/09/15 09:05	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201328	10/11/15 17:26	TMH	TAL CAN
Total/NA	Prep	3510C	RA		201122	10/09/15 09:05	JDR	TAL CAN
Total/NA	Analysis	8270C	RA	4	201359	10/12/15 13:06	TMH	TAL CAN
Dissolved	Prep	3005A			201151	10/09/15 10:52	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201601	10/13/15 04:27	KLC	TAL CAN
Dissolved	Prep	7470A			201153	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201659	10/13/15 10:10	WAL	TAL CAN

Client Sample ID: VAP-5-GW (20-21)

Lab Sample ID: 240-56328-32

Date Collected: 10/07/15 12:28

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	201796	10/14/15 17:26	LEE	TAL CAN
Total/NA	Prep	3510C			201122	10/09/15 09:05	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201328	10/11/15 17:50	TMH	TAL CAN
Total/NA	Prep	3510C	RA		201122	10/09/15 09:05	JDR	TAL CAN
Total/NA	Analysis	8270C	RA	10	201359	10/12/15 15:03	TMH	TAL CAN
Dissolved	Prep	3005A			201151	10/09/15 10:52	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201601	10/13/15 04:31	KLC	TAL CAN
Dissolved	Prep	7470A			201153	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201659	10/13/15 10:14	WAL	TAL CAN

Client Sample ID: VAP-5-GW (25-26)

Lab Sample ID: 240-56328-33

Date Collected: 10/07/15 12:57

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	202028	10/15/15 14:53	LEE	TAL CAN
Total/NA	Prep	3510C			201122	10/09/15 09:05	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201328	10/11/15 18:13	TMH	TAL CAN
Dissolved	Prep	3005A			201151	10/09/15 10:52	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201601	10/13/15 04:36	KLC	TAL CAN
Dissolved	Prep	7470A			201153	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201659	10/13/15 10:17	WAL	TAL CAN

Client Sample ID: VAP-5-GW (30-31)

Lab Sample ID: 240-56328-34

Date Collected: 10/07/15 13:31

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	202014	10/15/15 14:25	RJQ	TAL CAN
Total/NA	Prep	3510C			201122	10/09/15 09:05	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201328	10/11/15 18:36	TMH	TAL CAN
Dissolved	Prep	3005A			201151	10/09/15 10:52	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201601	10/13/15 04:48	KLC	TAL CAN
Dissolved	Prep	7470A			201153	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201659	10/13/15 10:19	WAL	TAL CAN

Client Sample ID: VAP-5-GW (35-36)

Lab Sample ID: 240-56328-35

Date Collected: 10/07/15 13:57

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	202014	10/15/15 14:47	RJQ	TAL CAN
Total/NA	Prep	3510C			201122	10/09/15 09:05	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201328	10/11/15 19:00	TMH	TAL CAN
Dissolved	Prep	3005A			201151	10/09/15 10:52	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201601	10/13/15 04:52	KLC	TAL CAN
Dissolved	Prep	7470A			201153	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201659	10/13/15 10:22	WAL	TAL CAN

Client Sample ID: VAP-5-GW (40-41)

Lab Sample ID: 240-56328-36

Date Collected: 10/07/15 14:43

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	202014	10/15/15 16:07	RJQ	TAL CAN
Total/NA	Prep	3510C			201122	10/09/15 09:05	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201328	10/11/15 19:23	TMH	TAL CAN
Total/NA	Prep	3510C	RA		201122	10/09/15 09:05	JDR	TAL CAN

Client Sample ID: VAP-5-GW (40-41)

Lab Sample ID: 240-56328-36

Date Collected: 10/07/15 14:43

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C	RA	10	201359	10/12/15 14:16	TMH	TAL CAN
Dissolved	Prep	3005A			201151	10/09/15 10:52	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201601	10/13/15 04:56	KLC	TAL CAN
Dissolved	Prep	7470A			201153	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201659	10/13/15 10:24	WAL	TAL CAN

Client Sample ID: VAP-5-GW (45-46)

Lab Sample ID: 240-56328-37

Date Collected: 10/07/15 15:15

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	202014	10/15/15 16:32	RJQ	TAL CAN
Total/NA	Prep	3510C			201122	10/09/15 09:05	JDR	TAL CAN
Total/NA	Analysis	8270C		1	201359	10/12/15 15:27	TMH	TAL CAN
Total/NA	Prep	3510C	RA		201122	10/09/15 09:05	JDR	TAL CAN
Total/NA	Analysis	8270C	RA	4	201359	10/12/15 15:51	TMH	TAL CAN
Dissolved	Prep	3005A			201151	10/09/15 10:52	WKD	TAL CAN
Dissolved	Analysis	6010B		1	201601	10/13/15 05:00	KLC	TAL CAN
Dissolved	Prep	7470A			201153	10/09/15 14:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	201659	10/13/15 10:30	WAL	TAL CAN

Client Sample ID: VAP-5-GW (49-50)

Lab Sample ID: 240-56328-38

Date Collected: 10/07/15 15:40

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	202014	10/15/15 16:58	RJQ	TAL CAN

Client Sample ID: TB-03 (100715)

Lab Sample ID: 240-56328-39

Date Collected: 10/07/15 00:00

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	202014	10/15/15 17:22	RJQ	TAL CAN

Client Sample ID: TB-04 (100715)

Lab Sample ID: 240-56328-40

Date Collected: 10/07/15 00:00

Matrix: Water

Date Received: 10/08/15 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	202014	10/15/15 17:47	RJQ	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56328-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-15
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-26-16
Kentucky (WW)	State Program	4	98016	12-31-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-15
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	10-30-15 *
New York	NELAP	2	10975	03-31-16
Ohio VAP	State Program	5	CL0024	10-31-15 *
Oregon	NELAP	10	4062	02-23-16
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-16
West Virginia DEP	State Program	3	210	12-31-15
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

TestAmerica
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TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS



240-56328 Chain of Custody

5.2/C37 3.2/C1.7 3.6/C2.1
3.8/C23
2.6/C1.1 1.6/C0.1
2.6/C1.1 1.8/C0.3

TestAmerica Canton

4101 Shuffel Street, N. N.
North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

Chain of Custody Record

089067

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210 (0713)

Client Contact	Project Manager: John Ellis	Site Contact: George Cook	Date:	COC No:
Company Name: Arcadis	~~Tel/Fax:~~ Email: John.Ellis@Arcadis-us.com	Lab Contact:	Carrier:	1 of ____ COCs
Address: 10352 Plaza Americana Dr.	Analysis Turnaround Time			Sampler:
City/State/Zip: Baton Rouge, LA 70816	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 225-292-1004	TAT if different from Below ____			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: Grenada Manufacturing	☐ 1 week			
Site: Grenada MS.	☐ 2 days			Job / SDG No.:
PO# LA00330.0001.00004	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Moisture, 8260C, 6010B	7471A, 7196A, 8260	Tetra Core Kit 8260B	VOC-8260B-H2O 3,4.	SVOC-8270C-H2O 3,4,2	Metals RCRA - 7470A/6010C	Sample Specific Notes:
TB-02(10-05-15)	10-05-15	—	G	W	2	N	N	—	—	—	2	1	—	
VAP-2(3-4)	"	0831	G	S	3	N	N	1	1	1	1	—	—	
VAP-2-GW(15-16)	"	0850	G	W	6	N	N	—	—	—	3	2	1	
VAP-2-GW(20-21)	10-05-15	1000	G	W	6	N	N	—	—	—	3	2	1	
VAP-2-GW(25-26)	"	1033	G	W	6	N	N	—	—	—	3	2	1	
VAP-2-GW(30-31)	"	1312	G	W	6	N	N	—	—	—	3	2	1	
VAP-2-GW(35-36)	10-05-15	1338	G	W	18	N	Y	—	—	—	9	6	3	MS/MSD
VAP-2-GW(40-41)	"	1441	G	W	6	N	N	—	—	—	3	2	1	
VAP-2-GW(45-46)	"	1530	G	W	6	N	N	—	—	—	3	2	1	
VAP-2-GW(49-50)	10-05-15	1600	G	W	6	N	N	—	—	—	3	2	1	
Dup-GW-01(10-05-15)	10-05-15	—	G	W	6	N	N	—	—	—	3	2	1	
VAP-3-(1-2)	10-04-15	1715	G	S	9	N	Y	3	3	3	—	—	—	MS/MSD

Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3, 5=NaOH, 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:
RCRA Metals were filtered in the Field

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd:	Corr'd:	Therm ID No.:

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
George E Cook	Arcadis	10/07/15 1800		TA	10-8-15 930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

10/20/2015

TestAmerica Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

Chain of Custody Record

089066

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: John Ellis	Site Contact: George Field	Date:	COC No:
Company Name: Arcadis	Tel/Fax: Email: John.Ellis@Arcadis.com	Lab Contact:	Carrier:	2 of ____ COCs
Address: 10352 Plaza Americana Dr.	Analysis Turnaround Time			Sampler:
City/State/Zip: Baton Rouge, LA	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 225-292-1004	TAT if different from Below ____			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: Grenada Manufactory	☐ 1 week			
Site: Grenada MS	☐ 2 days			Job / SDG No.:
PO # LA003307, 0001-0006Y	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Mo, Sb, Se, Tl 6020, 6010B	7471A, 7196A, 9056	Test Cond. (Y/N)	8260B - TCL + MNOS, Xyl	RCRA Metals 6010B/7470A/7196A	8270C Semi-Volatiles, Naph	Sample Specific Notes:
VAP-3-6W (15-16)	10-6-15	0806	G	W	6	Y	N	—	—	—	3	2	1	
VAP-3-6W (20-21)	"	0941	G	"	6	Y	N	—	—	—	3	2	1	
VAP-3-6W (25-26)	"	0939	G	"	6	Y	N	—	—	—	3	2	1	
VAP-3-6W (30-31)	10-6-15	1010	G	"	6	Y	N	—	—	—	3	2	1	
VAP-3-6W (35-36)	"	1058	G	"	6	Y	N	—	—	—	3	2	1	
VAP-3-6W (40-41)	"	1130	G	"	6	Y	N	—	—	—	3	2	1	
VAP3-6W (45-46)	10-6-15	1204	G	"	6	Y	N	—	—	—	3	2	1	
VAP-3-6W (45-50)	"	1255	G	"	6	Y	N	—	—	—	3	2	1	
VAP-4 (6-8)	10-6-15	1452	G	S	3	N	N	1	1	1	—	—	—	
VAP-4-6W (15-16)	"	1303	G	"	6	Y	N	—	—	—	3	2	1	
VAP-4-6W (20-21)	"	1331	G	"	6	Y	N	—	—	—	3	2	1	
VAP-4-6W (25-26)	10-6-15	1606	G	"	6	Y	N	—	—	—	3	2	1	

Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3, 5=NaOH, 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

RCRA metals were filtered in the Field

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: ____ Corr'd: ____	Therm ID No.: ____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Arcadis	10/7/15 1800	[signature]	TA	10-8-15 930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

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10/20/2015

TestAmerica Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

Chain of Custody Record

089068

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.

TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: John. Ellis	Site Contact: Geo Flock	Date:	COC No:
Company Name: Anedo	Tel/Fax: John.Ellis@Aned.com	Lab Contact:	Carrier:	3 of ____ COCs
Address: 10352 Plaza American Dr	Analysis Turnaround Time			Sampler:
City/State/Zip: Baton Rouge La 70816	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 225-292-1004	TAT if different from Below ____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Grenada Manufacturing	☐ 1 week			
Site: Grenada MS,	☐ 2 days			Job / SDG No.:
PO # LA0U3077.0001.0004	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Acetone, 8260B, 6010B	Pyrene, 7196A, 8260B	Tolue, Cadmium, 8260B	Vol 8260B, Cadmium, Yr.	Sulfide, 8260C, Cadmium, Yr.	Naphthalene, 8260B, Cadmium, Yr.	Sample Specific Notes:
VAP-4-GW (30-31)	10-06-15	1636	G	W	6	Y	N	—	—	—	3	2	1	
VAP-4-GW (35-36)	10-07-15	0811	G	W	6	Y	N	—	—	—	3	2	1	
VAP-4-GW (40-41)	"	0845	G	W	6	Y	N	—	—	—	3	2	1	
VAP-4-GW (45-46)	"	0918	G	W	6	Y	N	—	—	—	3	2	1	
VAP-4-GW (~~49-50~~) (44-45)	10-07-15	0955	G	W	6	Y	N	—	—	—	3	2	1	
VAP-5 (4-6)	"	1137	G	S	3	N	N	1	1	1	—	—	—	
VAP-5-GW ~~(13-14)~~ (15-16)	"	1200	G	W	6	Y	N	—	—	—	3	2	1	
VAP-5-GW (20-21)	10-07-15	1228	G	W	6	Y	N	—	—	—	3	2	1	
VAP-5-GW (25-26)	"	1257	G	W	6	Y	N	—	—	—	3	2	1	
VAP-5-GW (30-31)	"	1331	G	W	6	Y	N	—	—	—	3	2	1	
VAP-5-GW (35-36)	10-07-15	1357	G	W	6	Y	N	—	—	—	3	2	1	
VAP-5-GW (40-41)	"	1443	G	W	6	Y	N	—	—	—	3	2	1	

Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3, 5=NaOH, 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:
* VAP-4-GW (44-45) did not reach well - did not completely fill Metal Can. ASO Cooler not sealed Zero headspace Zero headspace

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: ____ Corr'd: ____ Therm ID No.: ____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Geo Keflock	Anedo	10/8/15 1800		TA	10-8-15 930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

10/20/2015

TestAmerica Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

Chain of Custody Record

089064

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: John Ellis	Site Contact: George Cook	Date:	COC No:
Company Name: Arcadis	Tel/Fax: Fax: John.Ellis@Arcadis.us	Lab Contact:	Carrier:	3 of ____ COCs
Address: 10352 Plaza Americana Dr	Analysis Turnaround Time			Sampler:
City/State/Zip: Baton Rouge, La 70816	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 225-292-1004	TAT if different from Below ____			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: Grenada Manufacturing	☐ 1 week			
Site: Grenada MS	☐ 2 days			Job / SDG No.:
PO# 2A00 3307, 0001, 0002Y	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Mod. 8021, 8260B	2/1/15, 7196A, 8260B	Ferric Chloride Kit	Vol. 8260B/Plain 3 1/2	5 vol 8260C clear 1/2	Preservation Used (see codes)
VAP-5-GW (45-46)	10/07/15	815	G	W	6	N	N	—			3	2	1
VAP-5-GW (49-50)	"	1340	G	W	6	N	N	—			3	2	1
TB-03 (100715)	10/07/15	—	G	W	2	N	N	—			2	—	
TB-04 (100715)	10/07/15	—	G	W	2	N	N	—			2	—	

Sample Specific Notes:

Preservation Used: 1= Ice, 2= HCl, 3= H2SO4, 4=HNO3, 5=NaOH, 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:
VAP-5-GW (45-50) only analyze for called VOCs

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: ____ Corr'd: ____ Therm ID No.: ____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
1 George E Cook	Arcadis	10/8/15 1800		TA	10-8-15 930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative Login # : 56328
Canton Facility

Client Arcadis Site Name _____ Cooler unpacked by:

Cooler Received on 10-8-15 Opened on 10-8-15

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box (Other)

Packing material used: ~~Bubble Wrap~~ Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt
   - IR GUN# A (CF +1.0 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   - ~~IR GUN# 4 (CF +0.5 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C~~
   - ~~IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C~~
   - IR GUN# 8 (CF -1.5 °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

   ☑ See Multiple Cooler Form

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 4 (Yes) No
   - -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   - -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes (No)
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels be reconciled with the COC? (Yes) No
9. Were correct bottle(s) used for the test(s) indicated? (Yes) No
10. Sufficient quantity received to perform indicated analyses? (Yes) No
11. Were sample(s) at the correct pH upon receipt? (Yes) No NA pH Strip Lot# HC554612
12. Were VOAs on the COC? (Yes) No
13. Were air bubbles >6 mm in any VOA vials? Yes (No) NA
14. Was a trip blank present in the cooler(s)? Trip Blank Lot #_____ (Yes) No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other
Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

TestAmerica Multiple Cooler Receipt Form/Narrative **Login # : 563328**
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
client	8	5.2	3.7	ice
		3.8	2.3	
		2.6	1.1	
		2.6	1.1	
		3.2	1.7	
		1.6	0.1	
		1.8	0.3	
		3.6	2.1	

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
VAP-2 GW(15-16)	240-56328-D-3	Plastic 500ml - with Nitric Acid	<2		
VAP-2 GW(20-21)	240-56328-D-4	Plastic 500ml - with Nitric Acid	<2		
VAP-2 GW(25-26)	240-56328-D-5	Plastic 500ml - with Nitric Acid	<2		
VAP-2 GW(30-31)	240-56328-D-6	Plastic 500ml - with Nitric Acid	<2		
VAP-2 GW(31-36)	240-56328-J-7	Plastic 500ml - with Nitric Acid	<2		
VAP-2 GW(31-36)	240-56328-K-7	Plastic 500ml - with Nitric Acid	<2		
VAP-2 GW(31-36)	240-56328-L-7	Plastic 500ml - with Nitric Acid	<2		
VAP-2 GW(40-41)	240-56328-D-8	Plastic 500ml - with Nitric Acid	<2		
VAP-2 GW(45-46)	240-56328-D-9	Plastic 500ml - with Nitric Acid	<2		
VAP-2 GW(49-50)	240-56328-D-10	Plastic 500ml - with Nitric Acid	<2		
DUP-GW-01(100515)	240-56328-D-11	Plastic 500ml - with Nitric Acid	<2		
VAP-3-GW-(15-16)	240-56328-D-13	Plastic 500ml - with Nitric Acid	<2		
VAP-3-GW-(20-21)	240-56328-D-14	Plastic 500ml - with Nitric Acid	<2		
VAP-3-GW-(25-26)	240-56328-D-15	Plastic 500ml - with Nitric Acid	<2		
VAP-3-GW-(30-31)	240-56328-D-16	Plastic 500ml - with Nitric Acid	<2		
VAP-3-GW-(35-36)	240-56328-D-17	Plastic 500ml - with Nitric Acid	<2		
VAP-3-GW-(40-41)	240-56328-D-18	Plastic 500ml - with Nitric Acid	<2		
VAP-3-GW-(45-46)	240-56328-D-19	Plastic 500ml - with Nitric Acid	<2		
VAP-3-GW-(49-50)	240-56328-D-20	Plastic 500ml - with Nitric Acid	<2		
VAP-4-GW(15-16)	240-56328-D-22	Plastic 500ml - with Nitric Acid	<2		
VAP-4-GW(20-21)	240-56328-D-23	Plastic 500ml - with Nitric Acid	<2		
VAP-4-GW(25-26)	240-56328-D-24	Plastic 500ml - with Nitric Acid	<2		
VAP-4-GW(30-31)	240-56328-D-25	Plastic 500ml - with Nitric Acid	<2		
VAP-4-GW(35-36)	240-56328-D-26	Plastic 500ml - with Nitric Acid	<2		
VAP-4-GW(40-41)	240-56328-D-27	Plastic 500ml - with Nitric Acid	<2		
VAP-4-GW(45-46)	240-56328-D-28	Plastic 500ml - with Nitric Acid	<2		
VAP-4-GW(48-49)	240-56328-D-29	Plastic 500ml - with Nitric Acid	<2		
VAP-5-GW-(15-16)	240-56328-D-31	Plastic 500ml - with Nitric Acid	<2		
VAP-5-GW-(20-21)	240-56328-D-32	Plastic 500ml - with Nitric Acid	<2		
VAP-5-GW-(25-26)	240-56328-D-33	Plastic 500ml - with Nitric Acid	<2		
VAP-5-GW-(30-31)	240-56328-D-34	Plastic 500ml - with Nitric Acid	<2		
VAP-5-GW-(35-36)	240-56328-D-35	Plastic 500ml - with Nitric Acid	<2		
VAP-5-GW-(40-41)	240-56328-D-36	Plastic 500ml - with Nitric Acid	<2		
VAP-5-GW-(45-46)	240-56328-D-37	Plastic 500ml - with Nitric Acid	<2		

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-56464-1
Client Project/Site: Grenada Manufacturing

For:
ARCADIS U.S., Inc.
10352 Plaza Americana Dr.
Baton Rouge, Louisiana 70816

Attn: Mr. John Ellis

Denise Pohl

Authorized for release by:
10/26/2015 8:22:07 AM

Denise Pohl, Project Manager II
(330)966-9789
denise.pohl@testamericainc.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.
*	LCS or LCSD is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
F1	MS and/or MSD Recovery is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
H	Sample was prepped or analyzed beyond the specified holding time
E	Result exceeded calibration range.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
L	A negative instrument reading had an absolute value greater than the reporting limit

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 240-56464-1

Laboratory: TestAmerica Canton

Narrative

Narrate sediments in groundwater

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Grenada Manufacturing

Report Number: 240-56464-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 10/10/2015 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 7 coolers at receipt time were 0.1º C, 0.7º C, 0.9º C, 1.7º C, 1.9º C, 2.1º C and 3.7º C.

Except: Insufficient sample volume was provided for the following sample for sample: VAP-6-GW(12-13) (240-56464-3). Only received 3 x 40-ml VOA vials with HCl.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples VAP-6(2-4) (240-56464-2), VAP-8-(1-2) (240-56464-13) and VAP-7(2-4) (240-56464-23) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 10/13/2015 and analyzed on 10/14/2015.

1,2,4-Trichlorobenzene, 2-Butanone (MEK), Acetone and Methylene Chloride were detected in method blank MB 240-201750/9 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Job ID: 240-56464-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

Acetone and Methyl acetate failed the recovery criteria high for LCS 240-201750/8. Refer to the QC report for details.

Method(s) 8260B: The laboratory control sample (LCS) for preparation batch 240-201660 and analytical batch 240-201750 recovered outside control limits for the following analyte: Acetone and Methyl acetate. These compounds has been identified as poor performing analytes when analyzed using this method; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples TB-05(100815) (240-56464-1), VAP-6-GW(12-13) (240-56464-3), VAP-6-GW(15-16) (240-56464-4), VAP-6-GW(20-21) (240-56464-5), VAP-6-GW(25-26) (240-56464-6), VAP-6-GW(30-31) (240-56464-7), VAP-6-GW(30-35) (240-56464-8), VAP-6-GW(40-41) (240-56464-9), VAP-6-GW(45-46) (240-56464-10), VAP-6-GW(49-50) (240-56464-11), DUP-02(100815) (240-56464-12), VAP-8-GW(18-19) (240-56464-14), VAP-8-GW(20-21) (240-56464-15), VAP-8-GW(25-26) (240-56464-16), VAP-8-GW(30-31) (240-56464-17), VAP-8-GW(35-36) (240-56464-18), VAP-8-GW(40-41) (240-56464-19), VAP-8-GW(45-46) (240-56464-20), VAP-8-GW(49-50) (240-56464-21), TB-06(100815) (240-56464-22), VAP-7-GW(13-14) (240-56464-24), VAP-7-GW(15-16) (240-56464-25), VAP-7-GW(20-21) (240-56464-26), VAP-7-GW(25-26) (240-56464-27), VAP-7-GW(30-31) (240-56464-28), VAP-7-GW(35-36) (240-56464-29), VAP-7-GW(43-44) (240-56464-30), VAP-7-GW(48-49) (240-56464-31), TB-07(100915) (240-56464-32) and DUP-3 (240-56464-35) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 10/14/2015, 10/20/2015 and 10/21/2015.

Acetone and Methylene Chloride were detected in method blank MB 240-202626/18 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Chloromethane and Trichloroethene failed the recovery criteria low for the MS of sample VAP-7-GW(30-31)MS (240-56464-28) in batch 240-201894. 1,1,1-Trichloroethane, Bromomethane, Chloroethane and Chloromethane exceeded the RPD limit for the MSD of sample VAP-7-GW(30-31)MSD (240-56464-28) in batch 240-201894. Refer to the QC report for details.

Samples VAP-6-GW(12-13) (240-56464-3)[10X], VAP-6-GW(15-16) (240-56464-4)[10X], VAP-6-GW(20-21) (240-56464-5)[33.33X], VAP-6-GW(25-26) (240-56464-6)[40X], VAP-6-GW(30-31) (240-56464-7)[50X], VAP-6-GW(30-35) (240-56464-8)[40X], VAP-6-GW(40-41) (240-56464-9)[25X], VAP-6-GW(45-46) (240-56464-10)[4X], DUP-02(100815) (240-56464-12)[50X], VAP-8-GW(18-19) (240-56464-14) [3.33X], VAP-8-GW(20-21) (240-56464-15)[2.5X], VAP-8-GW(25-26) (240-56464-16)[2X], VAP-7-GW(13-14) (240-56464-24)[2X], VAP-7-GW(15-16) (240-56464-25)[5X], VAP-7-GW(20-21) (240-56464-26)[5X], VAP-7-GW(25-26) (240-56464-27)[3.33X], VAP-7-GW(30-31) (240-56464-28)[2X] and DUP-3 (240-56464-35)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Method(s) 8260B: No MS/MSD for batch 202626 due to analyst prep error. Batch includes: TB-05(100815) (240-56464-1), VAP-6-GW(12-13) (240-56464-3), VAP-6-GW(15-16) (240-56464-4), VAP-6-GW(20-21) (240-56464-5), VAP-6-GW(25-26) (240-56464-6), VAP-6-GW(30-31) (240-56464-7), VAP-6-GW(30-35) (240-56464-8) and VAP-6-GW(40-41) (240-56464-9).

Method(s) 8260B: No MS/MSD in batch 202891due to an instrument fault. Batch includes: VAP-7-GW(13-14) (240-56464-24).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Samples VAP-6(2-4) (240-56464-2), VAP-8-(1-2) (240-56464-13) and VAP-7(2-4) (240-56464-23) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 10/12/2015 and 10/13/2015 and analyzed on 10/15/2015, 10/16/2015 and 10/19/2015.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 240-56464-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Samples VAP-6-GW(15-16) (240-56464-4), VAP-6-GW(20-21) (240-56464-5), VAP-6-GW(25-26) (240-56464-6), VAP-6-GW(30-31) (240-56464-7), VAP-6-GW(30-35) (240-56464-8), VAP-6-GW(40-41) (240-56464-9), VAP-6-GW(45-46) (240-56464-10), VAP-6-GW(49-50) (240-56464-11), DUP-02(100815) (240-56464-12), VAP-8-GW(18-19) (240-56464-14), VAP-8-GW(20-21) (240-56464-15), VAP-8-GW(25-26) (240-56464-16), VAP-8-GW(30-31) (240-56464-17), VAP-8-GW(35-36) (240-56464-18), VAP-8-GW(40-41) (240-56464-19), VAP-8-GW(45-46) (240-56464-20), VAP-8-GW(49-50) (240-56464-21), VAP-7-GW(13-14) (240-56464-24), VAP-7-GW(15-16) (240-56464-25), VAP-7-GW(20-21) (240-56464-26), VAP-7-GW(25-26) (240-56464-27), VAP-7-GW(30-31) (240-56464-28), VAP-7-GW(35-36) (240-56464-29), VAP-7-GW(43-44) (240-56464-30), VAP-7-GW(48-49) (240-56464-31) and DUP-3 (240-56464-35) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 10/12/2015, 10/16/2015 and 10/19/2015 and analyzed on 10/14/2015, 10/15/2015, 10/16/2015, 10/19/2015, 10/20/2015 and 10/21/2015.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

Bis(2-ethylhexyl) phthalate, Caprolactam and Di-n-butyl phthalate were detected in method blank MB 240-201405/21-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Bis(2-ethylhexyl) phthalate was detected in method blank MB 240-201406/21-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Caprolactam and Di-n-butyl phthalate were detected in method blank MB 240-201406/21-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Caprolactam was detected in method blank MB 240-202230/22-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Caprolactam and Di-n-butyl phthalate were detected in method blank MB 240-202493/21-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

2,4,6-Tribromophenol (Surr), 2-Fluorobiphenyl (Surr), 2-Fluorophenol (Surr), Nitrobenzene-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-6-GW(45-46) (240-56464-10). 2-Fluorobiphenyl (Surr), Nitrobenzene-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-8-GW(18-19) (240-56464-14). 2-Fluorobiphenyl (Surr), Nitrobenzene-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-8-GW(20-21) (240-56464-15). Terphenyl-d14 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-8-GW(25-26) (240-56464-16). Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-8-GW(35-36) (240-56464-18). Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-8-GW(40-41) (240-56464-19). Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-8-GW(45-46) (240-56464-20). Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-7-GW(15-16) (240-56464-25). 2-Fluorobiphenyl (Surr) failed the surrogate recovery criteria low for VAP-7-GW(30-31) (240-56464-28). 2,4,6-Tribromophenol (Surr), 2-Fluorobiphenyl (Surr), Nitrobenzene-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-7-GW(35-36) (240-56464-29). 2,4,6-Tribromophenol (Surr), 2-Fluorobiphenyl (Surr), Nitrobenzene-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-7-GW(43-44) (240-56464-30). 2,4,6-Tribromophenol (Surr), 2-Fluorobiphenyl (Surr), Nitrobenzene-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-7-GW(48-49) (240-56464-31). 2-Fluorobiphenyl (Surr), Nitrobenzene-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for DUP-3 (240-56464-35). 2-Fluorobiphenyl (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-6-GW(15-16) (240-56464-4). Several analytes failed the surrogate recovery criteria low for VAP-6-GW(20-21) (240-56464-5). 2,4,6-Tribromophenol (Surr), 2-Fluorobiphenyl (Surr), Nitrobenzene-d5 (Surr), Terphenyl-d14 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-6-GW(25-26) (240-56464-6). 2,4,6-Tribromophenol (Surr), 2-Fluorobiphenyl (Surr), 2-Fluorophenol (Surr), Nitrobenzene-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for VAP-6-GW(30-31) (240-56464-7). Refer to the QC report for details.

Phenol failed the recovery criteria low for LCS 240-201406/22-A. 3,3'-Dichlorobenzidine and 4-Chloroaniline failed the recovery criteria low for LCS 240-202230/23-A. Benzaldehyde failed the recovery criteria high. 3,3'-Dichlorobenzidine and 4-Chloroaniline failed the recovery criteria low for LCS 240-202493/22-A. Benzaldehyde failed the recovery criteria high. Refer to the QC report for details.

Samples VAP-6-GW(20-21) (240-56464-5)[4X], VAP-6-GW(30-35) (240-56464-8)[4X], VAP-8-GW(18-19) (240-56464-14)[5X] and VAP-8-GW(25-26) (240-56464-16)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Job ID: 240-56464-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

Method(s) 8270C: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates, per fraction, to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: VAP-8-GW(25-26) (240-56464-16), VAP-8-GW(35-36) (240-56464-18), VAP-8-GW(40-41) (240-56464-19), VAP-8-GW(45-46) (240-56464-20), VAP-7-GW(15-16) (240-56464-25) and VAP-7-GW(30-31) (240-56464-28). These results have been reported and qualified.

Method(s) 8270C: The LCS for prep batch 201406 recovered low for phenol. Since the recovery limits for LVI are advisory, no corrective action was taken. Batch includes: VAP-6-GW(49-50) (240-56464-11), DUP-02(100815) (240-56464-12), VAP-8-GW(18-19) (240-56464-14), VAP-8-GW(20-21) (240-56464-15), VAP-8-GW(25-26) (240-56464-16), VAP-8-GW(30-31) (240-56464-17), VAP-8-GW(35-36) (240-56464-18), VAP-8-GW(40-41) (240-56464-19), VAP-8-GW(45-46) (240-56464-20), VAP-8-GW(49-50) (240-56464-21), VAP-7-GW(13-14) (240-56464-24), VAP-7-GW(15-16) (240-56464-25), VAP-7-GW(20-21) (240-56464-26), VAP-7-GW(25-26) (240-56464-27), VAP-7-GW(30-31) (240-56464-28), VAP-7-GW(35-36) (240-56464-29), VAP-7-GW(43-44) (240-56464-30), VAP-7-GW(48-49) (240-56464-31) and DUP-3 (240-56464-35).

Method(s) 8270C: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates, per fraction, to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: VAP-6-GW(25-26) (240-56464-6). These results have been reported and qualified.

Method(s) 8270C: The laboratory control sample (LCS) for prep batch 202230 recovered outside control limits for the following analytes: Benzaldehyde. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270C: The laboratory control sample for prep batch 202230 recovered outside control limits for the following analyte(s):3,3'-Dichlorobenzidine and 4-Chloroaniline. Since the LVI limits are advisory only, no furthur corrective action was taken.

Method(s) 8270C: The laboratory control sample (LCS) for prep batch 202493 recovered outside control limits for the following analyte: Benzaldehyde. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270C: The LCS for prep batch 202493 recovered low for the following analytes: 3,3'-Dichlorobenzidine and 4-Chloroaniline. Since recovery limits for LVI are advisory only, no corrective action was taken.

Method(s) 8270C: Surrogate recovery for the following samples were outside control limits: VAP-6-GW(15-16) (240-56464-4), VAP-6-GW(20-21) (240-56464-5), VAP-6-GW(25-26) (240-56464-6), VAP-6-GW(30-31) (240-56464-7), VAP-6-GW(45-46) (240-56464-10), VAP-8-GW(18-19) (240-56464-14), VAP-8-GW(20-21) (240-56464-15), VAP-7-GW(35-36) (240-56464-29), VAP-7-GW(43-44) (240-56464-30), VAP-7-GW(48-49) (240-56464-31) and DUP-3 (240-56464-35). Re-extraction and re-analysis was performed outside of holding time with acceptable results.

Method(s) 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batches 240-201405, 240-201406 and 240-202493.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)

Samples VAP-6(2-4) (240-56464-2), VAP-8-(1-2) (240-56464-13) and VAP-7(2-4) (240-56464-23) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 10/12/2015 and analyzed on 10/13/2015.

Lead was detected in method blank MB 240-201435/1-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Cadmium and Chromium were detected in method blank MB 240-201435/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 240-56464-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

TOTAL RECOVERABLE METALS (ICP)

Samples VAP-6-GW(15-16) (240-56464-4), VAP-6-GW(20-21) (240-56464-5), VAP-6-GW(25-26) (240-56464-6), VAP-6-GW(30-31) (240-56464-7), VAP-6-GW(30-35) (240-56464-8), VAP-6-GW(40-41) (240-56464-9), VAP-6-GW(45-46) (240-56464-10), VAP-6-GW(49-50) (240-56464-11), DUP-02(100815) (240-56464-12), VAP-8-GW(18-19) (240-56464-14), VAP-8-GW(20-21) (240-56464-15), VAP-8-GW(25-26) (240-56464-16), VAP-8-GW(30-31) (240-56464-17), VAP-8-GW(35-36) (240-56464-18), VAP-8-GW(40-41) (240-56464-19), VAP-8-GW(45-46) (240-56464-20), VAP-8-GW(49-50) (240-56464-21), VAP-7-GW(13-14) (240-56464-24), VAP-7-GW(15-16) (240-56464-25), VAP-7-GW(20-21) (240-56464-26), VAP-7-GW(25-26) (240-56464-27), VAP-7-GW(30-31) (240-56464-28), VAP-7-GW(35-36) (240-56464-29), VAP-7-GW(43-44) (240-56464-30), VAP-7-GW(48-49) (240-56464-31) and DUP-3 (240-56464-35) were analyzed for total recoverable metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 10/12/2015 and analyzed on 10/13/2015 and 10/15/2015.

Barium was detected in method blank MB 240-201393/1-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Barium was detected in method blank MB 240-201420/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY

Samples VAP-6-GW(15-16) (240-56464-4), VAP-6-GW(20-21) (240-56464-5), VAP-6-GW(25-26) (240-56464-6), VAP-6-GW(30-31) (240-56464-7), VAP-6-GW(30-35) (240-56464-8), VAP-6-GW(40-41) (240-56464-9), VAP-6-GW(45-46) (240-56464-10), VAP-6-GW(49-50) (240-56464-11), DUP-02(100815) (240-56464-12), VAP-8-GW(18-19) (240-56464-14), VAP-8-GW(20-21) (240-56464-15), VAP-8-GW(25-26) (240-56464-16), VAP-8-GW(30-31) (240-56464-17), VAP-8-GW(35-36) (240-56464-18), VAP-8-GW(40-41) (240-56464-19), VAP-8-GW(45-46) (240-56464-20), VAP-8-GW(49-50) (240-56464-21), VAP-7-GW(13-14) (240-56464-24), VAP-7-GW(15-16) (240-56464-25), VAP-7-GW(20-21) (240-56464-26), VAP-7-GW(25-26) (240-56464-27), VAP-7-GW(30-31) (240-56464-28), VAP-7-GW(35-36) (240-56464-29), VAP-7-GW(43-44) (240-56464-30), VAP-7-GW(48-49) (240-56464-31) and DUP-3 (240-56464-35) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 10/12/2015 and analyzed on 10/14/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY

Samples VAP-6(2-4) (240-56464-2), VAP-8-(1-2) (240-56464-13) and VAP-7(2-4) (240-56464-23) were analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared on 10/12/2015 and analyzed on 10/13/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HEXAVALENT CHROMIUM

Samples VAP-6(2-4) (240-56464-2), VAP-8-(1-2) (240-56464-13) and VAP-7(2-4) (240-56464-23) were analyzed for hexavalent chromium in accordance with EPA SW-846 Method 3060A/7196A. The samples were prepared on 10/19/2015 and analyzed on 10/20/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS

Samples VAP-6(2-4) (240-56464-2), VAP-8-(1-2) (240-56464-13) and VAP-7(2-4) (240-56464-23) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 10/12/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN
7471A	Mercury (CVAA)	SW846	TAL CAN
7196A	Chromium, Hexavalent	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-56464-1	TB-05(100815)	Water	10/08/15 00:00	10/10/15 09:45
240-56464-2	VAP-6(2-4)	Solid	10/08/15 00:00	10/10/15 09:45
240-56464-3	VAP-6-GW(12-13)	Water	10/08/15 08:40	10/10/15 09:45
240-56464-4	VAP-6-GW(15-16)	Water	10/08/15 09:21	10/10/15 09:45
240-56464-5	VAP-6-GW(20-21)	Water	10/08/15 09:42	10/10/15 09:45
240-56464-6	VAP-6-GW(25-26)	Water	10/08/15 10:10	10/10/15 09:45
240-56464-7	VAP-6-GW(30-31)	Water	10/08/15 10:35	10/10/15 09:45
240-56464-8	VAP-6-GW(30-35)	Water	10/08/15 11:15	10/10/15 09:45
240-56464-9	VAP-6-GW(40-41)	Water	10/08/15 11:40	10/10/15 09:45
240-56464-10	VAP-6-GW(45-46)	Water	10/08/15 12:23	10/10/15 09:45
240-56464-11	VAP-6-GW(49-50)	Water	10/08/15 12:47	10/10/15 09:45
240-56464-12	DUP-02(100815)	Water	10/08/15 00:00	10/10/15 09:45
240-56464-13	VAP-8-(1-2)	Solid	10/08/15 13:35	10/10/15 09:45
240-56464-14	VAP-8-GW(18-19)	Water	10/08/15 14:00	10/10/15 09:45
240-56464-15	VAP-8-GW(20-21)	Water	10/08/15 14:40	10/10/15 09:45
240-56464-16	VAP-8-GW(25-26)	Water	10/08/15 15:01	10/10/15 09:45
240-56464-17	VAP-8-GW(30-31)	Water	10/08/15 15:27	10/10/15 09:45
240-56464-18	VAP-8-GW(35-36)	Water	10/08/15 15:55	10/10/15 09:45
240-56464-19	VAP-8-GW(40-41)	Water	10/08/15 16:38	10/10/15 09:45
240-56464-20	VAP-8-GW(45-46)	Water	10/08/15 17:08	10/10/15 09:45
240-56464-21	VAP-8-GW(49-50)	Water	10/08/15 17:40	10/10/15 09:45
240-56464-22	TB-06(100815)	Water	10/08/15 00:00	10/10/15 09:45
240-56464-23	VAP-7(2-4)	Solid	10/09/15 08:07	10/10/15 09:45
240-56464-24	VAP-7-GW(13-14)	Water	10/09/15 08:45	10/10/15 09:45
240-56464-25	VAP-7-GW(15-16)	Water	10/09/15 09:30	10/10/15 09:45
240-56464-26	VAP-7-GW(20-21)	Water	10/09/15 10:00	10/10/15 09:45
240-56464-27	VAP-7-GW(25-26)	Water	10/09/15 10:34	10/10/15 09:45
240-56464-28	VAP-7-GW(30-31)	Water	10/09/15 10:57	10/10/15 09:45
240-56464-29	VAP-7-GW(35-36)	Water	10/09/15 11:34	10/10/15 09:45
240-56464-30	VAP-7-GW(43-44)	Water	10/09/15 11:57	10/10/15 09:45
240-56464-31	VAP-7-GW(48-49)	Water	10/09/15 12:26	10/10/15 09:45
240-56464-32	TB-07(100915)	Water	10/09/15 00:00	10/10/15 09:45
240-56464-35	DUP-3	Water	10/09/15 00:00	10/10/15 09:45

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: TB-05(100815) — Lab Sample ID: 240-56464-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.1	J B	10	0.94	ug/L	1		8260B	Total/NA

Client Sample ID: VAP-6(2-4) — Lab Sample ID: 240-56464-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.7	J B *	18	1.4	ug/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	1.8	J B	18	0.43	ug/Kg	1	☼	8260B	Total/NA
Bis(2-ethylhexyl) phthalate	26	J	87	24	ug/Kg	1	☼	8270C	Total/NA
Di-n-butyl phthalate	41	J	87	19	ug/Kg	1	☼	8270C	Total/NA
Arsenic	8.7		1.2	0.48	mg/Kg	1	☼	6010B	Total/NA
Barium	120		23	0.48	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.090	J B	0.23	0.025	mg/Kg	1	☼	6010B	Total/NA
Chromium	14	B	0.58	0.088	mg/Kg	1	☼	6010B	Total/NA
Lead	8.7	B	0.35	0.23	mg/Kg	1	☼	6010B	Total/NA
Silver	0.12	J	0.58	0.074	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.026	J	0.14	0.019	mg/Kg	1	☼	7471A	Total/NA
Cr (VI)	0.56	J	0.99	0.32	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: VAP-6-GW(12-13) — Lab Sample ID: 240-56464-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	6.7	J B	10	3.3	ug/L	10		8260B	Total/NA
Trichloroethene	160		10	2.2	ug/L	10		8260B	Total/NA
cis-1,2-Dichloroethene	170		10	2.6	ug/L	10		8260B	Total/NA

Client Sample ID: VAP-6-GW(15-16) — Lab Sample ID: 240-56464-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	6.3	J B	10	3.3	ug/L	10		8260B	Total/NA
Trichloroethene	260		10	2.2	ug/L	10		8260B	Total/NA
cis-1,2-Dichloroethene	270		10	2.6	ug/L	10		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	2.8	B	1.9	1.5	ug/L	1		8270C	Total/NA
Caprolactam	24	B	4.8	0.36	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.71	J B	0.96	0.38	ug/L	1		8270C	Total/NA
Bis(2-ethylhexyl) phthalate - RE	1.5	J H	2.0	1.5	ug/L	1		8270C	Total/NA
Caprolactam - RE	13	H B	5.0	0.37	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate - RE	0.71	J H	1.0	0.40	ug/L	1		8270C	Total/NA
Arsenic	51		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	960	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.93	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	250		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	79		3.0	1.9	ug/L	1		6010B	Total Recoverable
Mercury	0.24		0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: VAP-6-GW(20-21) — Lab Sample ID: 240-56464-5

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-6-GW(20-21) (Continued) — Lab Sample ID: 240-56464-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	23	J B	33	11	ug/L	33.33		8260B	Total/NA
Trichloroethene	900		33	7.3	ug/L	33.33		8260B	Total/NA
cis-1,2-Dichloroethene	580		33	8.7	ug/L	33.33		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	4.2	B	1.9	1.4	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.67	J B	0.93	0.37	ug/L	1		8270C	Total/NA
Caprolactam - RA	160	B	19	1.4	ug/L	4		8270C	Total/NA
Bis(2-ethylhexyl) phthalate - RE	3.7	H	1.9	1.5	ug/L	1		8270C	Total/NA
Caprolactam - RE	71	H B	4.8	0.36	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate - RE	0.38	J H	0.96	0.38	ug/L	1		8270C	Total/NA
Barium	21	J B	200	1.0	ug/L	1		6010B	Total Recoverable
Chromium	2.4	J	5.0	0.55	ug/L	1		6010B	Total Recoverable

Client Sample ID: VAP-6-GW(25-26) — Lab Sample ID: 240-56464-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	33	J B	40	13	ug/L	40		8260B	Total/NA
Trichloroethene	1300		40	8.8	ug/L	40		8260B	Total/NA
cis-1,2-Dichloroethene	1100		40	10	ug/L	40		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.9	B	1.9	1.5	ug/L	1		8270C	Total/NA
Caprolactam	30	B	4.8	0.36	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.81	J B	0.96	0.38	ug/L	1		8270C	Total/NA
Caprolactam - RE	52	H B	4.6	0.34	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate - RE	0.37	J H	0.93	0.37	ug/L	1		8270C	Total/NA
Arsenic	34		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	590	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.55	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	260		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	90		3.0	1.9	ug/L	1		6010B	Total Recoverable
Mercury	2.1		0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: VAP-6-GW(30-31) — Lab Sample ID: 240-56464-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	31	J B	50	17	ug/L	50		8260B	Total/NA
Trichloroethene	1600		50	11	ug/L	50		8260B	Total/NA
cis-1,2-Dichloroethene	1300		50	13	ug/L	50		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	2.2	B	1.9	1.5	ug/L	1		8270C	Total/NA
Caprolactam	91	B	4.8	0.36	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	1.1	B	0.96	0.38	ug/L	1		8270C	Total/NA
Caprolactam - RE	22	H B	4.6	0.34	ug/L	1		8270C	Total/NA
Arsenic	12		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	210	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.19	J	2.0	0.14	ug/L	1		6010B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-6-GW(30-31) (Continued) — Lab Sample ID: 240-56464-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	78		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	29		3.0	1.9	ug/L	1		6010B	Total Recoverable

Client Sample ID: VAP-6-GW(30-35) — Lab Sample ID: 240-56464-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	29	J B	40	13	ug/L	40		8260B	Total/NA
Trichloroethene	1300		40	8.8	ug/L	40		8260B	Total/NA
cis-1,2-Dichloroethene	1000		40	10	ug/L	40		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.5	J B	1.9	1.5	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.87	J B	0.96	0.38	ug/L	1		8270C	Total/NA
Caprolactam - RA	150	B	19	1.4	ug/L	4		8270C	Total/NA
Barium	69	J B	200	1.0	ug/L	1		6010B	Total Recoverable
Chromium	5.1		5.0	0.55	ug/L	1		6010B	Total Recoverable

Client Sample ID: VAP-6-GW(40-41) — Lab Sample ID: 240-56464-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	17	J B	25	8.3	ug/L	25		8260B	Total/NA
Trichloroethene	690	F1	25	5.5	ug/L	25		8260B	Total/NA
cis-1,2-Dichloroethene	630	F1	25	6.5	ug/L	25		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.7	J B	2.0	1.5	ug/L	1		8270C	Total/NA
Caprolactam	18	B	5.0	0.37	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.84	J B	1.0	0.40	ug/L	1		8270C	Total/NA
Arsenic	5.3	J	10	2.9	ug/L	1		6010B	Total Recoverable
Barium	180	J B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.19	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	53		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	13		3.0	1.9	ug/L	1		6010B	Total Recoverable
Mercury	0.10	J	0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: VAP-6-GW(45-46) — Lab Sample ID: 240-56464-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	110		4.0	0.88	ug/L	4		8260B	Total/NA
cis-1,2-Dichloroethene	76		4.0	1.0	ug/L	4		8260B	Total/NA
Caprolactam	1.8	J B	5.0	0.37	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.80	J B	1.0	0.40	ug/L	1		8270C	Total/NA
Arsenic	77		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	1400	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	1.2	J	2.0	0.14	ug/L	1		6010B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-6-GW(45-46) (Continued) — Lab Sample ID: 240-56464-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	740		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	180		3.0	1.9	ug/L	1		6010B	Total Recoverable
Selenium	54		5.0	4.0	ug/L	1		6010B	Total Recoverable
Mercury	3.0		0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: VAP-6-GW(49-50) — Lab Sample ID: 240-56464-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.90	J	1.0	0.38	ug/L	1		8260B	Total/NA
Trichloroethene	6.5		1.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	3.5		1.0	0.26	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.8	J B	2.0	1.5	ug/L	1		8270C	Total/NA
Caprolactam	1.3	J B	5.0	0.37	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.86	J B	1.0	0.40	ug/L	1		8270C	Total/NA
Arsenic	9.3	J	10	2.9	ug/L	1		6010B	Total Recoverable
Barium	340	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	1.0	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	160		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	92		3.0	1.9	ug/L	1		6010B	Total Recoverable
Selenium	42		5.0	4.0	ug/L	1		6010B	Total Recoverable
Mercury	0.21		0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: DUP-02(100815) — Lab Sample ID: 240-56464-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1600		50	11	ug/L	50		8260B	Total/NA
cis-1,2-Dichloroethene	1300		50	13	ug/L	50		8260B	Total/NA
trans-1,2-Dichloroethene	21	J	50	15	ug/L	50		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	2.2	B	1.9	1.4	ug/L	1		8270C	Total/NA
Caprolactam	31	B	4.6	0.34	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.30	J	0.93	0.12	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	1.3	B	0.93	0.37	ug/L	1		8270C	Total/NA
Naphthalene	0.21		0.19	0.040	ug/L	1		8270C	Total/NA
Arsenic	12		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	250	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.43	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	92		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	31		3.0	1.9	ug/L	1		6010B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-8-(1-2) — Lab Sample ID: 240-56464-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	22	B *	18	1.5	ug/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	3.6	J B	18	0.44	ug/Kg	1	☼	8260B	Total/NA
Caprolactam	290	J	400	45	ug/Kg	1	☼	8270C	Total/NA
Arsenic	8.9		1.0	0.42	mg/Kg	1	☼	6010B	Total/NA
Barium	45		20	0.42	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.054	J B	0.20	0.022	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.51	0.077	mg/Kg	1	☼	6010B	Total/NA
Lead	12	B	0.31	0.20	mg/Kg	1	☼	6010B	Total/NA
Silver	0.18	J	0.51	0.065	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.041	J	0.13	0.018	mg/Kg	1	☼	7471A	Total/NA
Cr (VI)	0.47	J	0.98	0.32	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: VAP-8-GW(18-19) — Lab Sample ID: 240-56464-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	39		3.3	0.73	ug/L	3.33		8260B	Total/NA
cis-1,2-Dichloroethene	85		3.3	0.87	ug/L	3.33		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.9	J B	2.0	1.5	ug/L	1		8270C	Total/NA
Caprolactam	75	B	5.0	0.37	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.23	J	1.0	0.13	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	1.2	B	1.0	0.40	ug/L	1		8270C	Total/NA
Diethyl phthalate - RE	0.65	J H	1.3	0.16	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate - RE	0.72	J H B	1.3	0.50	ug/L	1		8270C	Total/NA
Caprolactam - RERA	270	H B	31	2.3	ug/L	5		8270C	Total/NA
Arsenic	26		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	680	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.70	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	200		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	70		3.0	1.9	ug/L	1		6010B	Total Recoverable
Mercury	0.31		0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: VAP-8-GW(20-21) — Lab Sample ID: 240-56464-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	31		2.5	0.55	ug/L	2.5		8260B	Total/NA
cis-1,2-Dichloroethene	63		2.5	0.65	ug/L	2.5		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.7	J B	2.0	1.5	ug/L	1		8270C	Total/NA
Caprolactam	33	B	5.0	0.37	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.71	J B	1.0	0.40	ug/L	1		8270C	Total/NA
Caprolactam - RE	16	H B	6.6	0.49	ug/L	1		8270C	Total/NA
Diethyl phthalate - RE	0.51	J H	1.3	0.16	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate - RE	0.84	J H B	1.3	0.52	ug/L	1		8270C	Total/NA
Arsenic	120		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	570	B	200	1.0	ug/L	1		6010B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-8-GW(20-21) (Continued) — Lab Sample ID: 240-56464-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.84	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	180		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	77		3.0	1.9	ug/L	1		6010B	Total Recoverable

Client Sample ID: VAP-8-GW(25-26) — Lab Sample ID: 240-56464-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	24		2.0	0.44	ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	54		2.0	0.52	ug/L	2		8260B	Total/NA
Di-n-butyl phthalate	0.65	J B	0.96	0.38	ug/L	1		8270C	Total/NA
Caprolactam - RA	150	B	19	1.4	ug/L	4		8270C	Total/NA
Arsenic	14		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	920	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.42	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	260		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	100		3.0	1.9	ug/L	1		6010B	Total Recoverable
Selenium	4.5	J	5.0	4.0	ug/L	1		6010B	Total Recoverable
Mercury	0.21		0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: VAP-8-GW(30-31) — Lab Sample ID: 240-56464-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.2	J	10	0.94	ug/L	1		8260B	Total/NA
Trichloroethene	12		1.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	24		1.0	0.26	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	2.0	B	1.9	1.5	ug/L	1		8270C	Total/NA
Caprolactam	70	B	4.8	0.36	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.24	J	0.96	0.12	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	1.2	B	0.96	0.38	ug/L	1		8270C	Total/NA
Naphthalene	0.21		0.19	0.041	ug/L	1		8270C	Total/NA
Arsenic	10		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	520	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.20	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	190		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	47		3.0	1.9	ug/L	1		6010B	Total Recoverable
Mercury	0.17	J	0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: VAP-8-GW(35-36) — Lab Sample ID: 240-56464-18

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-8-GW(35-36) (Continued) — Lab Sample ID: 240-56464-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.9	J	10	0.94	ug/L	1		8260B	Total/NA
Carbon disulfide	0.75	J	1.0	0.38	ug/L	1		8260B	Total/NA
Trichloroethene	5.0		1.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	7.5		1.0	0.26	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.6	J B	2.0	1.5	ug/L	1		8270C	Total/NA
Caprolactam	75	B	5.0	0.37	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.29	J	1.0	0.13	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	1.2	B	1.0	0.40	ug/L	1		8270C	Total/NA
Arsenic	17		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	820	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.41	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	480		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	280		3.0	1.9	ug/L	1		6010B	Total Recoverable
Selenium	13		5.0	4.0	ug/L	1		6010B	Total Recoverable
Mercury	0.35		0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: VAP-8-GW(40-41) — Lab Sample ID: 240-56464-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	56		10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	0.72	J	10	0.53	ug/L	1		8260B	Total/NA
Chlorobenzene	0.53	J	1.0	0.25	ug/L	1		8260B	Total/NA
Chloroform	0.37	J	1.0	0.25	ug/L	1		8260B	Total/NA
4-Methyl-2-pentanone (MIBK)	12		10	0.99	ug/L	1		8260B	Total/NA
Xylenes, Total	0.56	J	2.0	0.52	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.5	J B	2.0	1.5	ug/L	1		8270C	Total/NA
Caprolactam	3.3	J B	5.0	0.37	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.71	J B	1.0	0.40	ug/L	1		8270C	Total/NA
Arsenic	69		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	1100	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	12		2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	500		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	470		3.0	1.9	ug/L	1		6010B	Total Recoverable
Selenium	190		5.0	4.0	ug/L	1		6010B	Total Recoverable
Mercury	0.91		0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: VAP-8-GW(45-46) — Lab Sample ID: 240-56464-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.4		1.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.83	J	1.0	0.26	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-8-GW(45-46) (Continued) — Lab Sample ID: 240-56464-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Caprolactam	2.3	J B	4.6	0.34	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.22	J	0.93	0.12	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.75	J B	0.93	0.37	ug/L	1		8270C	Total/NA
Arsenic	84		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	440	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	2.5		2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	180		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	80		3.0	1.9	ug/L	1		6010B	Total Recoverable
Selenium	14		5.0	4.0	ug/L	1		6010B	Total Recoverable
Mercury	0.22		0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: VAP-8-GW(49-50) — Lab Sample ID: 240-56464-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.31	J	1.0	0.22	ug/L	1		8260B	Total/NA
Caprolactam	3.5	J B	4.8	0.36	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.59	J B	0.96	0.38	ug/L	1		8270C	Total/NA
Arsenic	4.0	J	10	2.9	ug/L	1		6010B	Total Recoverable
Barium	250	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.17	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	39		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	13		3.0	1.9	ug/L	1		6010B	Total Recoverable

Client Sample ID: TB-06(100815) — Lab Sample ID: 240-56464-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.63	J	1.0	0.38	ug/L	1		8260B	Total/NA

Client Sample ID: VAP-7(2-4) — Lab Sample ID: 240-56464-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	0.78	J B	18	0.43	ug/Kg	1	☼	8260B	Total/NA
Arsenic	8.2		1.1	0.47	mg/Kg	1	☼	6010B	Total/NA
Barium	73		23	0.47	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.066	J B	0.23	0.024	mg/Kg	1	☼	6010B	Total/NA
Chromium	12	B	0.57	0.085	mg/Kg	1	☼	6010B	Total/NA
Lead	9.6	B	0.34	0.23	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.022	J	0.15	0.021	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: VAP-7-GW(13-14) — Lab Sample ID: 240-56464-24

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-7-GW(13-14) (Continued) — Lab Sample ID: 240-56464-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	21		2.0	0.44	ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	44		2.0	0.52	ug/L	2		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.7	J B	1.9	1.5	ug/L	1		8270C	Total/NA
Caprolactam	1.5	J B	4.8	0.36	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.63	J B	0.96	0.38	ug/L	1		8270C	Total/NA
Arsenic	18		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	350	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.32	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	130		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	33		3.0	1.9	ug/L	1		6010B	Total Recoverable
Selenium	8.3		5.0	4.0	ug/L	1		6010B	Total Recoverable
Mercury	0.11	J	0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: VAP-7-GW(15-16) — Lab Sample ID: 240-56464-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	62		5.0	1.1	ug/L	5		8260B	Total/NA
cis-1,2-Dichloroethene	130		5.0	1.3	ug/L	5		8260B	Total/NA
Caprolactam	1.1	J B	5.0	0.37	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.56	J B	1.0	0.40	ug/L	1		8270C	Total/NA
Arsenic	18		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	320	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.50	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	120		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	33		3.0	1.9	ug/L	1		6010B	Total Recoverable
Mercury	0.14	J	0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: VAP-7-GW(20-21) — Lab Sample ID: 240-56464-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	79		5.0	1.1	ug/L	5		8260B	Total/NA
cis-1,2-Dichloroethene	140		5.0	1.3	ug/L	5		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.8	J B	1.9	1.4	ug/L	1		8270C	Total/NA
Caprolactam	1.8	J B	4.6	0.34	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.21	J	0.93	0.12	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.74	J B	0.93	0.37	ug/L	1		8270C	Total/NA
Arsenic	6.4	J	10	2.9	ug/L	1		6010B	Total Recoverable
Barium	190	J B	200	1.0	ug/L	1		6010B	Total Recoverable
Chromium	43		5.0	0.55	ug/L	1		6010B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-7-GW(20-21) (Continued) — Lab Sample ID: 240-56464-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	11		3.0	1.9	ug/L	1		6010B	Total Recoverable

Client Sample ID: VAP-7-GW(25-26) — Lab Sample ID: 240-56464-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	76		3.3	0.73	ug/L	3.33		8260B	Total/NA
cis-1,2-Dichloroethene	100		3.3	0.87	ug/L	3.33		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.5	J B	1.9	1.5	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.71	J B	0.96	0.38	ug/L	1		8270C	Total/NA
Arsenic	12		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	390	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.44	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	140		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	47		3.0	1.9	ug/L	1		6010B	Total Recoverable
Mercury	0.093	J	0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: VAP-7-GW(30-31) — Lab Sample ID: 240-56464-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	33	F1	2.0	0.44	ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	54		2.0	0.52	ug/L	2		8260B	Total/NA
Caprolactam	0.68	J B	4.8	0.36	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.51	J B	0.96	0.38	ug/L	1		8270C	Total/NA
Arsenic	9.4	J	10	2.9	ug/L	1		6010B	Total Recoverable
Barium	280	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.40	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	93		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	38		3.0	1.9	ug/L	1		6010B	Total Recoverable
Selenium	4.9	J	5.0	4.0	ug/L	1		6010B	Total Recoverable
Mercury	0.099	J	0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: VAP-7-GW(35-36) — Lab Sample ID: 240-56464-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	10		1.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	14		1.0	0.26	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.6	J B	1.9	1.4	ug/L	1		8270C	Total/NA
Caprolactam	0.80	J B	4.6	0.34	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.23	J	0.93	0.12	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.85	J B	0.93	0.37	ug/L	1		8270C	Total/NA
Caprolactam - RE	2.0	J H B	5.4	0.40	ug/L	1		8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-7-GW(35-36) (Continued) — Lab Sample ID: 240-56464-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Di-n-butyl phthalate - RE	0.62	J H B	1.1	0.43	ug/L	1		8270C	Total/NA
Arsenic	35		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	790	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	1.5	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	380		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	390		3.0	1.9	ug/L	1		6010B	Total Recoverable
Selenium	51		5.0	4.0	ug/L	1		6010B	Total Recoverable
Mercury	1.2		0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: VAP-7-GW(43-44) — Lab Sample ID: 240-56464-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	1.7	J	10	0.53	ug/L	1		8260B	Total/NA
Carbon disulfide	0.45	J	1.0	0.38	ug/L	1		8260B	Total/NA
Trichloroethene	11		1.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	10		1.0	0.26	ug/L	1		8260B	Total/NA
Di-n-butyl phthalate	0.46	J B	0.96	0.38	ug/L	1		8270C	Total/NA
Caprolactam - RE	3.9	J H B	5.0	0.37	ug/L	1		8270C	Total/NA
Diethyl phthalate - RE	0.22	J H	1.0	0.13	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate - RE	0.55	J H B	1.0	0.40	ug/L	1		8270C	Total/NA
Arsenic	46		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	330	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.73	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	180		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	39		3.0	1.9	ug/L	1		6010B	Total Recoverable
Mercury	0.17	J	0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: VAP-7-GW(48-49) — Lab Sample ID: 240-56464-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.40	J	1.0	0.38	ug/L	1		8260B	Total/NA
Trichloroethene	6.6		1.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	3.9		1.0	0.26	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.7	J B	1.8	1.4	ug/L	1		8270C	Total/NA
Caprolactam	1.2	J B	4.5	0.33	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.23	J	0.89	0.11	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.78	J B	0.89	0.36	ug/L	1		8270C	Total/NA
Caprolactam - RE	2.3	J H B	6.0	0.44	ug/L	1		8270C	Total/NA
Arsenic	28		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	250	B	200	1.0	ug/L	1		6010B	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-7-GW(48-49) (Continued) — Lab Sample ID: 240-56464-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.31	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	86		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	27		3.0	1.9	ug/L	1		6010B	Total Recoverable
Mercury	0.18	J	0.20	0.090	ug/L	1		7470A	Total/NA

Client Sample ID: TB-07(100915) — Lab Sample ID: 240-56464-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.3	J	10	0.94	ug/L	1		8260B	Total/NA

Client Sample ID: DUP-3 — Lab Sample ID: 240-56464-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	37		2.0	0.44	ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	55		2.0	0.52	ug/L	2		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	3.8	B	2.0	1.5	ug/L	1		8270C	Total/NA
Caprolactam	1.7	J B	5.0	0.37	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	1.7	B	1.0	0.40	ug/L	1		8270C	Total/NA
Caprolactam - RE	1.3	J H B	5.0	0.37	ug/L	1		8270C	Total/NA
Arsenic	11		10	2.9	ug/L	1		6010B	Total Recoverable
Barium	310	B	200	1.0	ug/L	1		6010B	Total Recoverable
Cadmium	0.40	J	2.0	0.14	ug/L	1		6010B	Total Recoverable
Chromium	110		5.0	0.55	ug/L	1		6010B	Total Recoverable
Lead	46		3.0	1.9	ug/L	1		6010B	Total Recoverable
Selenium	4.0	J	5.0	4.0	ug/L	1		6010B	Total Recoverable
Mercury	0.19	J	0.20	0.090	ug/L	1		7470A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-05(100815)
Date Collected: 10/08/15 00:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.1	J B	10	0.94	ug/L			10/20/15 01:52	1
Benzene	1.0	U	1.0	0.35	ug/L			10/20/15 01:52	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/20/15 01:52	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/20/15 01:52	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/20/15 01:52	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/20/15 01:52	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/20/15 01:52	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/20/15 01:52	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 01:52	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/20/15 01:52	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/20/15 01:52	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/20/15 01:52	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/20/15 01:52	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/20/15 01:52	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/20/15 01:52	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/20/15 01:52	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/20/15 01:52	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/20/15 01:52	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/20/15 01:52	1
2-Hexanone	10	U	10	0.48	ug/L			10/20/15 01:52	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/20/15 01:52	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/20/15 01:52	1
Styrene	1.0	U	1.0	0.45	ug/L			10/20/15 01:52	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/20/15 01:52	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/20/15 01:52	1
Toluene	1.0	U	1.0	0.23	ug/L			10/20/15 01:52	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/20/15 01:52	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/20/15 01:52	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/20/15 01:52	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/20/15 01:52	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/20/15 01:52	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/20/15 01:52	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/20/15 01:52	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/20/15 01:52	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/20/15 01:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/20/15 01:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/20/15 01:52	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/20/15 01:52	1
Methyl acetate	10	U	10	2.3	ug/L			10/20/15 01:52	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/20/15 01:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/20/15 01:52	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/20/15 01:52	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 01:52	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/20/15 01:52	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/20/15 01:52	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/20/15 01:52	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/20/15 01:52	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/20/15 01:52	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: TB-05(100815)
Date Collected: 10/08/15 00:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		78 - 125		10/20/15 01:52	1
4-Bromofluorobenzene (Surr)	93		61 - 120		10/20/15 01:52	1
Toluene-d8 (Surr)	96		80 - 120		10/20/15 01:52	1
Dibromofluoromethane (Surr)	92		79 - 120		10/20/15 01:52	1

Client Sample ID: VAP-6(2-4)
Date Collected: 10/08/15 00:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-2
Matrix: Solid
Percent Solids: 80.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**5.7**	**J B ***	18	1.4	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Benzene	4.5	U	4.5	0.22	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Dichlorobromomethane	4.5	U	4.5	0.19	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Bromoform	4.5	U	4.5	0.34	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Bromomethane	4.5	U	4.5	0.64	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
2-Butanone (MEK)	**1.8**	**J B**	18	0.43	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Carbon disulfide	4.5	U	4.5	0.30	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Carbon tetrachloride	4.5	U	4.5	0.30	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Chlorobenzene	4.5	U	4.5	0.26	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Chloroethane	4.5	U	4.5	0.30	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Chloroform	4.5	U	4.5	0.19	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Chloromethane	4.5	U	4.5	1.2	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
1,1-Dichloroethane	4.5	U	4.5	1.1	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
1,2-Dichloroethane	4.5	U	4.5	0.18	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
1,1-Dichloroethene	4.5	U	4.5	0.44	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
1,2-Dichloropropane	4.5	U	4.5	0.25	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
cis-1,3-Dichloropropene	4.5	U	4.5	0.24	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
trans-1,3-Dichloropropene	4.5	U	4.5	0.19	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Ethylbenzene	4.5	U	4.5	0.29	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
2-Hexanone	18	U	18	0.63	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Methylene Chloride	4.5	U	4.5	0.95	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
4-Methyl-2-pentanone (MIBK)	18	U	18	0.26	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Styrene	4.5	U	4.5	0.24	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
1,1,2,2-Tetrachloroethane	4.5	U	4.5	0.14	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Tetrachloroethene	4.5	U	4.5	0.30	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Toluene	4.5	U	4.5	0.24	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Trichloroethene	4.5	U	4.5	0.23	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Vinyl chloride	4.5	U	4.5	0.35	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Xylenes, Total	9.0	U	9.0	0.56	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
1,1,1-Trichloroethane	4.5	U	4.5	0.23	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
1,1,2-Trichloroethane	4.5	U	4.5	0.44	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Cyclohexane	9.0	U	9.0	0.26	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
1,2-Dibromo-3-Chloropropane	9.0	U	9.0	1.7	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Ethylene Dibromide	4.5	U	4.5	0.22	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Dichlorodifluoromethane	4.5	U	4.5	0.36	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
cis-1,2-Dichloroethene	4.5	U	4.5	0.25	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
trans-1,2-Dichloroethene	4.5	U	4.5	0.33	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Isopropylbenzene	4.5	U	4.5	0.27	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Methyl acetate	9.0	U *	9.0	2.0	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Methyl tert-butyl ether	4.5	U	4.5	0.13	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	4.5	U	4.5	0.35	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
1,2,4-Trichlorobenzene	4.5	U	4.5	0.35	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
1,2-Dichlorobenzene	4.5	U	4.5	0.34	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
1,3-Dichlorobenzene	4.5	U	4.5	0.36	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
1,4-Dichlorobenzene	4.5	U	4.5	0.37	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Trichlorofluoromethane	4.5	U	4.5	0.23	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Chlorodibromomethane	4.5	U	4.5	0.14	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1
Methylcyclohexane	9.0	U	9.0	0.30	ug/Kg	☼	10/13/15 12:14	10/14/15 08:30	1

Client Sample ID: VAP-6(2-4)
Date Collected: 10/08/15 00:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-2
Matrix: Solid
Percent Solids: 80.7

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 120*	*10/13/15 12:14*	*10/14/15 08:30*	*1*
4-Bromofluorobenzene (Surr)	*120*		*64 - 130*	*10/13/15 12:14*	*10/14/15 08:30*	*1*
Toluene-d8 (Surr)	*103*		*69 - 128*	*10/13/15 12:14*	*10/14/15 08:30*	*1*
Dibromofluoromethane (Surr)	*100*		*68 - 120*	*10/13/15 12:14*	*10/14/15 08:30*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	62	U	62	4.3	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
bis (2-chloroisopropyl) ether	120	U	120	12	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
2,4,5-Trichlorophenol	190	U	190	31	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
2,4,6-Trichlorophenol	190	U	190	11	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
2,4-Dichlorophenol	190	U	190	25	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
2,4-Dimethylphenol	190	U	190	25	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
2,4-Dinitrophenol	410	U	410	26	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
2,4-Dinitrotoluene	250	U	250	21	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
2,6-Dinitrotoluene	250	U	250	26	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
2-Chloronaphthalene	62	U	62	0.56	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
2-Chlorophenol	62	U	62	10	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
2-Methylnaphthalene	8.3	U	8.3	0.62	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
2-Methylphenol	250	U	250	14	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
2-Nitroaniline	250	U	250	11	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
2-Nitrophenol	62	U	62	10	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
3,3'-Dichlorobenzidine	120	U	120	22	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
3-Nitroaniline	250	U	250	20	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
4,6-Dinitro-2-methylphenol	190	U	190	11	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
4-Bromophenyl phenyl ether	62	U	62	16	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
4-Chloro-3-methylphenol	190	U	190	26	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
4-Chloroaniline	190	U	190	21	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
4-Chlorophenyl phenyl ether	62	U	62	16	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
4-Nitroaniline	250	U	250	32	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
4-Nitrophenol	410	U	410	21	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Acenaphthene	8.3	U	8.3	0.94	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Acenaphthylene	8.3	U	8.3	0.43	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Acetophenone	120	U	120	11	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Anthracene	8.3	U	8.3	0.97	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Atrazine	250	U	250	11	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Benzaldehyde	120	U	120	15	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Benzo[a]anthracene	8.3	U	8.3	0.78	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Benzo[a]pyrene	8.3	U	8.3	0.79	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Benzo[b]fluoranthene	8.3	U	8.3	0.73	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Benzo[g,h,i]perylene	8.3	U	8.3	0.43	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Benzo[k]fluoranthene	8.3	U	8.3	0.84	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Bis(2-chloroethoxy)methane	120	U	120	27	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Bis(2-chloroethyl)ether	120	U	120	2.5	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Bis(2-ethylhexyl) phthalate	**26**	**J**	87	24	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Butyl benzyl phthalate	87	U	87	12	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Caprolactam	410	U	410	46	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Carbazole	62	U	62	33	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Chrysene	8.3	U	8.3	1.4	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Dibenz(a,h)anthracene	8.3	U	8.3	0.82	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1

Client Sample ID: VAP-6(2-4)
Date Collected: 10/08/15 00:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-2
Matrix: Solid
Percent Solids: 80.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	62	U	62	0.82	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Diethyl phthalate	87	U	87	20	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Dimethyl phthalate	87	U	87	21	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Di-n-butyl phthalate	**41**	**J**	87	19	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Di-n-octyl phthalate	87	U	87	9.8	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Fluoranthene	8.3	U	8.3	0.68	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Fluorene	8.3	U	8.3	0.66	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Hexachlorobenzene	8.3	U	8.3	2.6	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Hexachlorobutadiene	62	U	62	6.9	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Hexachlorocyclopentadiene	410	U	410	10	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Hexachloroethane	62	U	62	11	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Indeno[1,2,3-cd]pyrene	8.3	U	8.3	0.43	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Isophorone	62	U	62	16	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Naphthalene	8.3	U	8.3	1.0	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Nitrobenzene	120	U	120	2.7	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
N-Nitrosodi-n-propylamine	62	U	62	7.8	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
N-Nitrosodiphenylamine	62	U	62	26	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Pentachlorophenol	190	U	190	11	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Phenol	62	U	62	9.1	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Phenanthrene	8.3	U	8.3	0.91	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
Pyrene	8.3	U	8.3	0.55	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1
3 & 4 Methylphenol	500	U	500	25	ug/Kg	☼	10/12/15 07:51	10/19/15 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*58*		*24 - 110*	*10/12/15 07:51*	*10/19/15 18:35*	*1*
2-Fluorophenol (Surr)	*58*		*24 - 110*	*10/12/15 07:51*	*10/19/15 18:35*	*1*
2,4,6-Tribromophenol (Surr)	*34*		*10 - 110*	*10/12/15 07:51*	*10/19/15 18:35*	*1*
Nitrobenzene-d5 (Surr)	*58*		*20 - 110*	*10/12/15 07:51*	*10/19/15 18:35*	*1*
Phenol-d5 (Surr)	*54*		*26 - 110*	*10/12/15 07:51*	*10/19/15 18:35*	*1*
Terphenyl-d14 (Surr)	*80*		*36 - 110*	*10/12/15 07:51*	*10/19/15 18:35*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**8.7**		1.2	0.48	mg/Kg	☼	10/12/15 11:32	10/13/15 18:46	1
Barium	**120**		23	0.48	mg/Kg	☼	10/12/15 11:32	10/13/15 18:46	1
Cadmium	**0.090**	**J B**	0.23	0.025	mg/Kg	☼	10/12/15 11:32	10/13/15 18:46	1
Chromium	**14**	**B**	0.58	0.088	mg/Kg	☼	10/12/15 11:32	10/13/15 18:46	1
Lead	**8.7**	**B**	0.35	0.23	mg/Kg	☼	10/12/15 11:32	10/13/15 18:46	1
Selenium	0.58	U	0.58	0.40	mg/Kg	☼	10/12/15 11:32	10/13/15 18:46	1
Silver	**0.12**	**J**	0.58	0.074	mg/Kg	☼	10/12/15 11:32	10/13/15 18:46	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.026**	**J**	0.14	0.019	mg/Kg	☼	10/12/15 17:25	10/13/15 09:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	**0.56**	**J**	0.99	0.32	mg/Kg	☼	10/19/15 11:20	10/20/15 11:19	1
Percent Solids	**81**		0.10	0.10	%			10/12/15 10:38	1
Percent Moisture	**19**		0.10	0.10	%			10/12/15 10:38	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-6-GW(12-13)
Date Collected: 10/08/15 08:40
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	100	U	100	9.4	ug/L			10/20/15 02:15	10
Benzene	10	U	10	3.5	ug/L			10/20/15 02:15	10
Dichlorobromomethane	10	U	10	2.9	ug/L			10/20/15 02:15	10
Bromoform	10	U	10	5.6	ug/L			10/20/15 02:15	10
Bromomethane	10	U	10	4.4	ug/L			10/20/15 02:15	10
2-Butanone (MEK)	100	U	100	5.3	ug/L			10/20/15 02:15	10
Carbon disulfide	10	U	10	3.8	ug/L			10/20/15 02:15	10
Carbon tetrachloride	10	U	10	4.3	ug/L			10/20/15 02:15	10
Chlorobenzene	10	U	10	2.5	ug/L			10/20/15 02:15	10
Chloroethane	10	U	10	3.2	ug/L			10/20/15 02:15	10
Chloroform	10	U	10	2.5	ug/L			10/20/15 02:15	10
Chloromethane	10	U	10	4.4	ug/L			10/20/15 02:15	10
1,1-Dichloroethane	10	U	10	3.0	ug/L			10/20/15 02:15	10
1,2-Dichloroethane	10	U	10	2.3	ug/L			10/20/15 02:15	10
1,1-Dichloroethene	10	U	10	4.5	ug/L			10/20/15 02:15	10
1,2-Dichloropropane	10	U	10	2.5	ug/L			10/20/15 02:15	10
cis-1,3-Dichloropropene	10	U	10	4.6	ug/L			10/20/15 02:15	10
trans-1,3-Dichloropropene	10	U	10	5.6	ug/L			10/20/15 02:15	10
Ethylbenzene	10	U	10	2.5	ug/L			10/20/15 02:15	10
2-Hexanone	100	U	100	4.8	ug/L			10/20/15 02:15	10
Methylene Chloride	**6.7**	**J B**	10	3.3	ug/L			10/20/15 02:15	10
4-Methyl-2-pentanone (MIBK)	100	U	100	9.9	ug/L			10/20/15 02:15	10
Styrene	10	U	10	4.5	ug/L			10/20/15 02:15	10
1,1,2,2-Tetrachloroethane	10	U	10	2.2	ug/L			10/20/15 02:15	10
Tetrachloroethene	10	U	10	3.1	ug/L			10/20/15 02:15	10
Toluene	10	U	10	2.3	ug/L			10/20/15 02:15	10
Trichloroethene	**160**		10	2.2	ug/L			10/20/15 02:15	10
Vinyl chloride	10	U	10	2.9	ug/L			10/20/15 02:15	10
Xylenes, Total	20	U	20	5.2	ug/L			10/20/15 02:15	10
1,1,1-Trichloroethane	10	U	10	4.4	ug/L			10/20/15 02:15	10
1,1,2-Trichloroethane	10	U	10	2.4	ug/L			10/20/15 02:15	10
Cyclohexane	10	U	10	4.5	ug/L			10/20/15 02:15	10
1,2-Dibromo-3-Chloropropane	20	U	20	8.2	ug/L			10/20/15 02:15	10
Ethylene Dibromide	10	U	10	3.2	ug/L			10/20/15 02:15	10
Dichlorodifluoromethane	10	U	10	3.2	ug/L			10/20/15 02:15	10
cis-1,2-Dichloroethene	**170**		10	2.6	ug/L			10/20/15 02:15	10
trans-1,2-Dichloroethene	10	U	10	3.0	ug/L			10/20/15 02:15	10
Isopropylbenzene	10	U	10	3.5	ug/L			10/20/15 02:15	10
Methyl acetate	100	U	100	23	ug/L			10/20/15 02:15	10
Methyl tert-butyl ether	10	U	10	2.0	ug/L			10/20/15 02:15	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10	4.5	ug/L			10/20/15 02:15	10
1,2,4-Trichlorobenzene	10	U	10	3.2	ug/L			10/20/15 02:15	10
1,2-Dichlorobenzene	10	U	10	2.5	ug/L			10/20/15 02:15	10
1,3-Dichlorobenzene	10	U	10	1.9	ug/L			10/20/15 02:15	10
1,4-Dichlorobenzene	10	U	10	2.7	ug/L			10/20/15 02:15	10
Trichlorofluoromethane	10	U	10	4.9	ug/L			10/20/15 02:15	10
Chlorodibromomethane	10	U	10	4.3	ug/L			10/20/15 02:15	10
Methylcyclohexane	10	U	10	4.3	ug/L			10/20/15 02:15	10

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-6-GW(12-13)
Date Collected: 10/08/15 08:40
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-3
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		78 - 125		10/20/15 02:15	10
4-Bromofluorobenzene (Surr)	99		61 - 120		10/20/15 02:15	10
Toluene-d8 (Surr)	96		80 - 120		10/20/15 02:15	10
Dibromofluoromethane (Surr)	93		79 - 120		10/20/15 02:15	10

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-6-GW(15-16)
Date Collected: 10/08/15 09:21
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	100	U	100	9.4	ug/L			10/20/15 02:37	10
Benzene	10	U	10	3.5	ug/L			10/20/15 02:37	10
Dichlorobromomethane	10	U	10	2.9	ug/L			10/20/15 02:37	10
Bromoform	10	U	10	5.6	ug/L			10/20/15 02:37	10
Bromomethane	10	U	10	4.4	ug/L			10/20/15 02:37	10
2-Butanone (MEK)	100	U	100	5.3	ug/L			10/20/15 02:37	10
Carbon disulfide	10	U	10	3.8	ug/L			10/20/15 02:37	10
Carbon tetrachloride	10	U	10	4.3	ug/L			10/20/15 02:37	10
Chlorobenzene	10	U	10	2.5	ug/L			10/20/15 02:37	10
Chloroethane	10	U	10	3.2	ug/L			10/20/15 02:37	10
Chloroform	10	U	10	2.5	ug/L			10/20/15 02:37	10
Chloromethane	10	U	10	4.4	ug/L			10/20/15 02:37	10
1,1-Dichloroethane	10	U	10	3.0	ug/L			10/20/15 02:37	10
1,2-Dichloroethane	10	U	10	2.3	ug/L			10/20/15 02:37	10
1,1-Dichloroethene	10	U	10	4.5	ug/L			10/20/15 02:37	10
1,2-Dichloropropane	10	U	10	2.5	ug/L			10/20/15 02:37	10
cis-1,3-Dichloropropene	10	U	10	4.6	ug/L			10/20/15 02:37	10
trans-1,3-Dichloropropene	10	U	10	5.6	ug/L			10/20/15 02:37	10
Ethylbenzene	10	U	10	2.5	ug/L			10/20/15 02:37	10
2-Hexanone	100	U	100	4.8	ug/L			10/20/15 02:37	10
Methylene Chloride	**6.3**	**J B**	10	3.3	ug/L			10/20/15 02:37	10
4-Methyl-2-pentanone (MIBK)	100	U	100	9.9	ug/L			10/20/15 02:37	10
Styrene	10	U	10	4.5	ug/L			10/20/15 02:37	10
1,1,2,2-Tetrachloroethane	10	U	10	2.2	ug/L			10/20/15 02:37	10
Tetrachloroethene	10	U	10	3.1	ug/L			10/20/15 02:37	10
Toluene	10	U	10	2.3	ug/L			10/20/15 02:37	10
Trichloroethene	**260**		10	2.2	ug/L			10/20/15 02:37	10
Vinyl chloride	10	U	10	2.9	ug/L			10/20/15 02:37	10
Xylenes, Total	20	U	20	5.2	ug/L			10/20/15 02:37	10
1,1,1-Trichloroethane	10	U	10	4.4	ug/L			10/20/15 02:37	10
1,1,2-Trichloroethane	10	U	10	2.4	ug/L			10/20/15 02:37	10
Cyclohexane	10	U	10	4.5	ug/L			10/20/15 02:37	10
1,2-Dibromo-3-Chloropropane	20	U	20	8.2	ug/L			10/20/15 02:37	10
Ethylene Dibromide	10	U	10	3.2	ug/L			10/20/15 02:37	10
Dichlorodifluoromethane	10	U	10	3.2	ug/L			10/20/15 02:37	10
cis-1,2-Dichloroethene	**270**		10	2.6	ug/L			10/20/15 02:37	10
trans-1,2-Dichloroethene	10	U	10	3.0	ug/L			10/20/15 02:37	10
Isopropylbenzene	10	U	10	3.5	ug/L			10/20/15 02:37	10
Methyl acetate	100	U	100	23	ug/L			10/20/15 02:37	10
Methyl tert-butyl ether	10	U	10	2.0	ug/L			10/20/15 02:37	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10	4.5	ug/L			10/20/15 02:37	10
1,2,4-Trichlorobenzene	10	U	10	3.2	ug/L			10/20/15 02:37	10
1,2-Dichlorobenzene	10	U	10	2.5	ug/L			10/20/15 02:37	10
1,3-Dichlorobenzene	10	U	10	1.9	ug/L			10/20/15 02:37	10
1,4-Dichlorobenzene	10	U	10	2.7	ug/L			10/20/15 02:37	10
Trichlorofluoromethane	10	U	10	4.9	ug/L			10/20/15 02:37	10
Chlorodibromomethane	10	U	10	4.3	ug/L			10/20/15 02:37	10
Methylcyclohexane	10	U	10	4.3	ug/L			10/20/15 02:37	10

Client Sample ID: VAP-6-GW(15-16)

Date Collected: 10/08/15 09:21
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-4

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*78 - 125*		*10/20/15 02:37*	*10*
4-Bromofluorobenzene (Surr)	*96*		*61 - 120*		*10/20/15 02:37*	*10*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/20/15 02:37*	*10*
Dibromofluoromethane (Surr)	*94*		*79 - 120*		*10/20/15 02:37*	*10*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/12/15 09:30	10/14/15 16:19	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/12/15 09:30	10/14/15 16:19	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/12/15 09:30	10/14/15 16:19	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/12/15 09:30	10/14/15 16:19	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/12/15 09:30	10/14/15 16:19	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/12/15 09:30	10/14/15 16:19	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/12/15 09:30	10/14/15 16:19	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/12/15 09:30	10/14/15 16:19	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/12/15 09:30	10/14/15 16:19	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/12/15 09:30	10/14/15 16:19	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/12/15 09:30	10/14/15 16:19	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/12/15 09:30	10/14/15 16:19	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/12/15 09:30	10/14/15 16:19	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/12/15 09:30	10/14/15 16:19	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/12/15 09:30	10/14/15 16:19	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/12/15 09:30	10/14/15 16:19	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/12/15 09:30	10/14/15 16:19	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/12/15 09:30	10/14/15 16:19	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/12/15 09:30	10/14/15 16:19	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/12/15 09:30	10/14/15 16:19	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/12/15 09:30	10/14/15 16:19	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/12/15 09:30	10/14/15 16:19	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/12/15 09:30	10/14/15 16:19	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/12/15 09:30	10/14/15 16:19	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/12/15 09:30	10/14/15 16:19	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/12/15 09:30	10/14/15 16:19	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/12/15 09:30	10/14/15 16:19	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/12/15 09:30	10/14/15 16:19	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/12/15 09:30	10/14/15 16:19	1
Benzaldehyde	0.96	U	0.96	0.28	ug/L		10/12/15 09:30	10/14/15 16:19	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/12/15 09:30	10/14/15 16:19	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/12/15 09:30	10/14/15 16:19	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/12/15 09:30	10/14/15 16:19	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/12/15 09:30	10/14/15 16:19	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/12/15 09:30	10/14/15 16:19	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/12/15 09:30	10/14/15 16:19	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/12/15 09:30	10/14/15 16:19	1
Bis(2-ethylhexyl) phthalate	**2.8**	**B**	1.9	1.5	ug/L		10/12/15 09:30	10/14/15 16:19	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/12/15 09:30	10/14/15 16:19	1
Caprolactam	**24**	**B**	4.8	0.36	ug/L		10/12/15 09:30	10/14/15 16:19	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/12/15 09:30	10/14/15 16:19	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/12/15 09:30	10/14/15 16:19	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/12/15 09:30	10/14/15 16:19	1

Client Sample ID: VAP-6-GW(15-16)

Date Collected: 10/08/15 09:21
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-4

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/12/15 09:30	10/14/15 16:19	1
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/12/15 09:30	10/14/15 16:19	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/12/15 09:30	10/14/15 16:19	1
Di-n-butyl phthalate	**0.71**	**J B**	0.96	0.38	ug/L		10/12/15 09:30	10/14/15 16:19	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/12/15 09:30	10/14/15 16:19	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/12/15 09:30	10/14/15 16:19	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/12/15 09:30	10/14/15 16:19	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/12/15 09:30	10/14/15 16:19	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/12/15 09:30	10/14/15 16:19	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/12/15 09:30	10/14/15 16:19	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/12/15 09:30	10/14/15 16:19	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/12/15 09:30	10/14/15 16:19	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/12/15 09:30	10/14/15 16:19	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/12/15 09:30	10/14/15 16:19	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/12/15 09:30	10/14/15 16:19	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/12/15 09:30	10/14/15 16:19	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/12/15 09:30	10/14/15 16:19	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/12/15 09:30	10/14/15 16:19	1
Phenol	0.96	U	0.96	0.14	ug/L		10/12/15 09:30	10/14/15 16:19	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/12/15 09:30	10/14/15 16:19	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/12/15 09:30	10/14/15 16:19	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/12/15 09:30	10/14/15 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*25*	*X*	*29 - 110*	*10/12/15 09:30*	*10/14/15 16:19*	*1*
2-Fluorophenol (Surr)	*31*		*15 - 110*	*10/12/15 09:30*	*10/14/15 16:19*	*1*
2,4,6-Tribromophenol (Surr)	*22*		*21 - 128*	*10/12/15 09:30*	*10/14/15 16:19*	*1*
Nitrobenzene-d5 (Surr)	*31*		*31 - 110*	*10/12/15 09:30*	*10/14/15 16:19*	*1*
Phenol-d5 (Surr)	*27*		*10 - 110*	*10/12/15 09:30*	*10/14/15 16:19*	*1*
Terphenyl-d14 (Surr)	*30*	*X*	*31 - 115*	*10/12/15 09:30*	*10/14/15 16:19*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U H	1.0	0.12	ug/L		10/16/15 08:59	10/19/15 13:52	1
bis (2-chloroisopropyl) ether	1.0	U H	1.0	0.18	ug/L		10/16/15 08:59	10/19/15 13:52	1
2,4,5-Trichlorophenol	5.0	U H	5.0	0.37	ug/L		10/16/15 08:59	10/19/15 13:52	1
2,4,6-Trichlorophenol	5.0	U H	5.0	0.26	ug/L		10/16/15 08:59	10/19/15 13:52	1
2,4-Dichlorophenol	2.0	U H	2.0	0.29	ug/L		10/16/15 08:59	10/19/15 13:52	1
2,4-Dimethylphenol	2.0	U H	2.0	0.31	ug/L		10/16/15 08:59	10/19/15 13:52	1
2,4-Dinitrophenol	40	U H	40	6.1	ug/L		10/16/15 08:59	10/19/15 13:52	1
2,4-Dinitrotoluene	5.0	U H	5.0	0.26	ug/L		10/16/15 08:59	10/19/15 13:52	1
2,6-Dinitrotoluene	5.0	U H	5.0	0.24	ug/L		10/16/15 08:59	10/19/15 13:52	1
2-Chloronaphthalene	1.0	U H	1.0	0.12	ug/L		10/16/15 08:59	10/19/15 13:52	1
2-Chlorophenol	1.0	U H	1.0	0.13	ug/L		10/16/15 08:59	10/19/15 13:52	1
2-Methylnaphthalene	0.20	U H	0.20	0.037	ug/L		10/16/15 08:59	10/19/15 13:52	1
2-Methylphenol	1.0	U H	1.0	0.19	ug/L		10/16/15 08:59	10/19/15 13:52	1
2-Nitroaniline	2.0	U H	2.0	0.31	ug/L		10/16/15 08:59	10/19/15 13:52	1
2-Nitrophenol	2.0	U H	2.0	0.21	ug/L		10/16/15 08:59	10/19/15 13:52	1
3,3'-Dichlorobenzidine	5.0	U H *	5.0	0.35	ug/L		10/16/15 08:59	10/19/15 13:52	1
3-Nitroaniline	2.0	U H	2.0	0.27	ug/L		10/16/15 08:59	10/19/15 13:52	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-6-GW(15-16)
Date Collected: 10/08/15 09:21
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-4
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	5.0	U H	5.0	0.53	ug/L		10/16/15 08:59	10/19/15 13:52	1
4-Bromophenyl phenyl ether	2.0	U H	2.0	0.35	ug/L		10/16/15 08:59	10/19/15 13:52	1
4-Chloro-3-methylphenol	2.0	U H	2.0	0.28	ug/L		10/16/15 08:59	10/19/15 13:52	1
4-Chloroaniline	2.0	U H *	2.0	0.15	ug/L		10/16/15 08:59	10/19/15 13:52	1
4-Chlorophenyl phenyl ether	2.0	U H	2.0	0.29	ug/L		10/16/15 08:59	10/19/15 13:52	1
4-Nitroaniline	2.0	U H	2.0	0.24	ug/L		10/16/15 08:59	10/19/15 13:52	1
4-Nitrophenol	5.0	U H	5.0	0.59	ug/L		10/16/15 08:59	10/19/15 13:52	1
Acenaphthene	0.20	U H	0.20	0.044	ug/L		10/16/15 08:59	10/19/15 13:52	1
Acenaphthylene	0.20	U H	0.20	0.020	ug/L		10/16/15 08:59	10/19/15 13:52	1
Acetophenone	1.0	U H	1.0	0.14	ug/L		10/16/15 08:59	10/19/15 13:52	1
Anthracene	0.20	U H	0.20	0.031	ug/L		10/16/15 08:59	10/19/15 13:52	1
Atrazine	1.0	U H	1.0	0.12	ug/L		10/16/15 08:59	10/19/15 13:52	1
Benzaldehyde	1.0	U H *	1.0	0.30	ug/L		10/16/15 08:59	10/19/15 13:52	1
Benzo[a]anthracene	0.20	U H	0.20	0.059	ug/L		10/16/15 08:59	10/19/15 13:52	1
Benzo[a]pyrene	0.20	U H	0.20	0.030	ug/L		10/16/15 08:59	10/19/15 13:52	1
Benzo[b]fluoranthene	0.20	U H	0.20	0.059	ug/L		10/16/15 08:59	10/19/15 13:52	1
Benzo[g,h,i]perylene	0.20	U H	0.20	0.050	ug/L		10/16/15 08:59	10/19/15 13:52	1
Benzo[k]fluoranthene	0.20	U H	0.20	0.048	ug/L		10/16/15 08:59	10/19/15 13:52	1
Bis(2-chloroethoxy)methane	1.0	U H	1.0	0.037	ug/L		10/16/15 08:59	10/19/15 13:52	1
Bis(2-chloroethyl)ether	1.0	U H	1.0	0.19	ug/L		10/16/15 08:59	10/19/15 13:52	1
Bis(2-ethylhexyl) phthalate	**1.5**	**J H**	2.0	1.5	ug/L		10/16/15 08:59	10/19/15 13:52	1
Butyl benzyl phthalate	1.0	U H	1.0	0.22	ug/L		10/16/15 08:59	10/19/15 13:52	1
Caprolactam	**13**	**H B**	5.0	0.37	ug/L		10/16/15 08:59	10/19/15 13:52	1
Carbazole	1.0	U H	1.0	0.11	ug/L		10/16/15 08:59	10/19/15 13:52	1
Chrysene	0.20	U H	0.20	0.035	ug/L		10/16/15 08:59	10/19/15 13:52	1
Dibenz(a,h)anthracene	0.20	U H	0.20	0.040	ug/L		10/16/15 08:59	10/19/15 13:52	1
Dibenzofuran	1.0	U H	1.0	0.14	ug/L		10/16/15 08:59	10/19/15 13:52	1
Diethyl phthalate	1.0	U H	1.0	0.13	ug/L		10/16/15 08:59	10/19/15 13:52	1
Dimethyl phthalate	1.0	U H	1.0	0.10	ug/L		10/16/15 08:59	10/19/15 13:52	1
Di-n-butyl phthalate	**0.71**	**J H**	1.0	0.40	ug/L		10/16/15 08:59	10/19/15 13:52	1
Di-n-octyl phthalate	1.0	U H	1.0	0.37	ug/L		10/16/15 08:59	10/19/15 13:52	1
Fluoranthene	0.20	U H	0.20	0.027	ug/L		10/16/15 08:59	10/19/15 13:52	1
Fluorene	0.20	U H	0.20	0.034	ug/L		10/16/15 08:59	10/19/15 13:52	1
Hexachlorobenzene	1.0	U H	1.0	0.12	ug/L		10/16/15 08:59	10/19/15 13:52	1
Hexachlorobutadiene	1.0	U H	1.0	0.14	ug/L		10/16/15 08:59	10/19/15 13:52	1
Hexachlorocyclopentadiene	10	U H	10	2.5	ug/L		10/16/15 08:59	10/19/15 13:52	1
Hexachloroethane	1.0	U H	1.0	0.22	ug/L		10/16/15 08:59	10/19/15 13:52	1
Indeno[1,2,3-cd]pyrene	0.20	U H	0.20	0.048	ug/L		10/16/15 08:59	10/19/15 13:52	1
Isophorone	1.0	U H	1.0	0.042	ug/L		10/16/15 08:59	10/19/15 13:52	1
Naphthalene	0.20	U H	0.20	0.043	ug/L		10/16/15 08:59	10/19/15 13:52	1
Nitrobenzene	1.0	U H	1.0	0.12	ug/L		10/16/15 08:59	10/19/15 13:52	1
N-Nitrosodi-n-propylamine	1.0	U H	1.0	0.16	ug/L		10/16/15 08:59	10/19/15 13:52	1
N-Nitrosodiphenylamine	1.0	U H	1.0	0.11	ug/L		10/16/15 08:59	10/19/15 13:52	1
Pentachlorophenol	40	U H	40	5.5	ug/L		10/16/15 08:59	10/19/15 13:52	1
Phenol	1.0	U H	1.0	0.15	ug/L		10/16/15 08:59	10/19/15 13:52	1
Phenanthrene	0.20	U H	0.20	0.031	ug/L		10/16/15 08:59	10/19/15 13:52	1
Pyrene	0.20	U H	0.20	0.028	ug/L		10/16/15 08:59	10/19/15 13:52	1
3 & 4 Methylphenol	2.0	U H	2.0	0.34	ug/L		10/16/15 08:59	10/19/15 13:52	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-6-GW(15-16)
Date Collected: 10/08/15 09:21
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-4
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*48*		*29 - 110*	*10/16/15 08:59*	*10/19/15 13:52*	*1*
2-Fluorophenol (Surr)	*47*		*15 - 110*	*10/16/15 08:59*	*10/19/15 13:52*	*1*
2,4,6-Tribromophenol (Surr)	*41*		*21 - 128*	*10/16/15 08:59*	*10/19/15 13:52*	*1*
Nitrobenzene-d5 (Surr)	*50*		*31 - 110*	*10/16/15 08:59*	*10/19/15 13:52*	*1*
Phenol-d5 (Surr)	*32*		*10 - 110*	*10/16/15 08:59*	*10/19/15 13:52*	*1*
Terphenyl-d14 (Surr)	*39*		*31 - 115*	*10/16/15 08:59*	*10/19/15 13:52*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**51**		10	2.9	ug/L		10/12/15 10:21	10/15/15 01:55	1
Barium	**960**	**B**	200	1.0	ug/L		10/12/15 10:21	10/15/15 01:55	1
Cadmium	**0.93**	**J**	2.0	0.14	ug/L		10/12/15 10:21	10/15/15 01:55	1
Chromium	**250**		5.0	0.55	ug/L		10/12/15 10:21	10/15/15 01:55	1
Lead	**79**		3.0	1.9	ug/L		10/12/15 10:21	10/15/15 01:55	1
Selenium	5.0	U	5.0	4.0	ug/L		10/12/15 10:21	10/15/15 01:55	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 10:21	10/15/15 01:55	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.24**		0.20	0.090	ug/L		10/12/15 14:00	10/14/15 11:15	1

Client Sample ID: VAP-6-GW(20-21)

Date Collected: 10/08/15 09:42
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	330	U	330	31	ug/L			10/20/15 03:00	33.33
Benzene	33	U	33	12	ug/L			10/20/15 03:00	33.33
Dichlorobromomethane	33	U	33	9.7	ug/L			10/20/15 03:00	33.33
Bromoform	33	U	33	19	ug/L			10/20/15 03:00	33.33
Bromomethane	33	U	33	15	ug/L			10/20/15 03:00	33.33
2-Butanone (MEK)	330	U	330	18	ug/L			10/20/15 03:00	33.33
Carbon disulfide	33	U	33	13	ug/L			10/20/15 03:00	33.33
Carbon tetrachloride	33	U	33	14	ug/L			10/20/15 03:00	33.33
Chlorobenzene	33	U	33	8.3	ug/L			10/20/15 03:00	33.33
Chloroethane	33	U	33	11	ug/L			10/20/15 03:00	33.33
Chloroform	33	U	33	8.3	ug/L			10/20/15 03:00	33.33
Chloromethane	33	U	33	15	ug/L			10/20/15 03:00	33.33
1,1-Dichloroethane	33	U	33	10	ug/L			10/20/15 03:00	33.33
1,2-Dichloroethane	33	U	33	7.7	ug/L			10/20/15 03:00	33.33
1,1-Dichloroethene	33	U	33	15	ug/L			10/20/15 03:00	33.33
1,2-Dichloropropane	33	U	33	8.3	ug/L			10/20/15 03:00	33.33
cis-1,3-Dichloropropene	33	U	33	15	ug/L			10/20/15 03:00	33.33
trans-1,3-Dichloropropene	33	U	33	19	ug/L			10/20/15 03:00	33.33
Ethylbenzene	33	U	33	8.3	ug/L			10/20/15 03:00	33.33
2-Hexanone	330	U	330	16	ug/L			10/20/15 03:00	33.33
Methylene Chloride	**23**	**J B**	33	11	ug/L			10/20/15 03:00	33.33
4-Methyl-2-pentanone (MIBK)	330	U	330	33	ug/L			10/20/15 03:00	33.33
Styrene	33	U	33	15	ug/L			10/20/15 03:00	33.33
1,1,2,2-Tetrachloroethane	33	U	33	7.3	ug/L			10/20/15 03:00	33.33
Tetrachloroethene	33	U	33	10	ug/L			10/20/15 03:00	33.33
Toluene	33	U	33	7.7	ug/L			10/20/15 03:00	33.33
Trichloroethene	**900**		33	7.3	ug/L			10/20/15 03:00	33.33
Vinyl chloride	33	U	33	9.7	ug/L			10/20/15 03:00	33.33
Xylenes, Total	67	U	67	17	ug/L			10/20/15 03:00	33.33
1,1,1-Trichloroethane	33	U	33	15	ug/L			10/20/15 03:00	33.33
1,1,2-Trichloroethane	33	U	33	8.0	ug/L			10/20/15 03:00	33.33
Cyclohexane	33	U	33	15	ug/L			10/20/15 03:00	33.33
1,2-Dibromo-3-Chloropropane	67	U	67	27	ug/L			10/20/15 03:00	33.33
Ethylene Dibromide	33	U	33	11	ug/L			10/20/15 03:00	33.33
Dichlorodifluoromethane	33	U	33	11	ug/L			10/20/15 03:00	33.33
cis-1,2-Dichloroethene	**580**		33	8.7	ug/L			10/20/15 03:00	33.33
trans-1,2-Dichloroethene	33	U	33	10	ug/L			10/20/15 03:00	33.33
Isopropylbenzene	33	U	33	12	ug/L			10/20/15 03:00	33.33
Methyl acetate	330	U	330	76	ug/L			10/20/15 03:00	33.33
Methyl tert-butyl ether	33	U	33	6.7	ug/L			10/20/15 03:00	33.33
1,1,2-Trichloro-1,2,2-trifluoroethane	33	U	33	15	ug/L			10/20/15 03:00	33.33
1,2,4-Trichlorobenzene	33	U	33	11	ug/L			10/20/15 03:00	33.33
1,2-Dichlorobenzene	33	U	33	8.3	ug/L			10/20/15 03:00	33.33
1,3-Dichlorobenzene	33	U	33	6.3	ug/L			10/20/15 03:00	33.33
1,4-Dichlorobenzene	33	U	33	9.0	ug/L			10/20/15 03:00	33.33
Trichlorofluoromethane	33	U	33	16	ug/L			10/20/15 03:00	33.33
Chlorodibromomethane	33	U	33	14	ug/L			10/20/15 03:00	33.33
Methylcyclohexane	33	U	33	14	ug/L			10/20/15 03:00	33.33

Client Sample ID: VAP-6-GW(20-21)

Date Collected: 10/08/15 09:42
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-5

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*78 - 125*		*10/20/15 03:00*	*33.33*
4-Bromofluorobenzene (Surr)	*99*		*61 - 120*		*10/20/15 03:00*	*33.33*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/20/15 03:00*	*33.33*
Dibromofluoromethane (Surr)	*93*		*79 - 120*		*10/20/15 03:00*	*33.33*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/12/15 09:30	10/14/15 16:43	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/12/15 09:30	10/14/15 16:43	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/12/15 09:30	10/14/15 16:43	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/12/15 09:30	10/14/15 16:43	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/12/15 09:30	10/14/15 16:43	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/12/15 09:30	10/14/15 16:43	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/12/15 09:30	10/14/15 16:43	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/12/15 09:30	10/14/15 16:43	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/12/15 09:30	10/14/15 16:43	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/12/15 09:30	10/14/15 16:43	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/12/15 09:30	10/14/15 16:43	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/12/15 09:30	10/14/15 16:43	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/12/15 09:30	10/14/15 16:43	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/12/15 09:30	10/14/15 16:43	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/12/15 09:30	10/14/15 16:43	1
3,3'-Dichlorobenzidine	4.6	U	4.6	0.33	ug/L		10/12/15 09:30	10/14/15 16:43	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/12/15 09:30	10/14/15 16:43	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/12/15 09:30	10/14/15 16:43	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/12/15 09:30	10/14/15 16:43	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/12/15 09:30	10/14/15 16:43	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/12/15 09:30	10/14/15 16:43	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/12/15 09:30	10/14/15 16:43	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/12/15 09:30	10/14/15 16:43	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/12/15 09:30	10/14/15 16:43	1
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/12/15 09:30	10/14/15 16:43	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/12/15 09:30	10/14/15 16:43	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/12/15 09:30	10/14/15 16:43	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/12/15 09:30	10/14/15 16:43	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/12/15 09:30	10/14/15 16:43	1
Benzaldehyde	0.93	U	0.93	0.27	ug/L		10/12/15 09:30	10/14/15 16:43	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/12/15 09:30	10/14/15 16:43	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/12/15 09:30	10/14/15 16:43	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/12/15 09:30	10/14/15 16:43	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/12/15 09:30	10/14/15 16:43	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/12/15 09:30	10/14/15 16:43	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/12/15 09:30	10/14/15 16:43	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/12/15 09:30	10/14/15 16:43	1
Bis(2-ethylhexyl) phthalate	**4.2**	**B**	1.9	1.4	ug/L		10/12/15 09:30	10/14/15 16:43	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/12/15 09:30	10/14/15 16:43	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/12/15 09:30	10/14/15 16:43	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/12/15 09:30	10/14/15 16:43	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/12/15 09:30	10/14/15 16:43	1
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/12/15 09:30	10/14/15 16:43	1

Client Sample ID: VAP-6-GW(20-21)

Date Collected: 10/08/15 09:42
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-5

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	0.93	U	0.93	0.12	ug/L		10/12/15 09:30	10/14/15 16:43	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/12/15 09:30	10/14/15 16:43	1
Di-n-butyl phthalate	**0.67**	**J B**	0.93	0.37	ug/L		10/12/15 09:30	10/14/15 16:43	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/12/15 09:30	10/14/15 16:43	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/12/15 09:30	10/14/15 16:43	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/12/15 09:30	10/14/15 16:43	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/12/15 09:30	10/14/15 16:43	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/12/15 09:30	10/14/15 16:43	1
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/12/15 09:30	10/14/15 16:43	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/12/15 09:30	10/14/15 16:43	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/12/15 09:30	10/14/15 16:43	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/12/15 09:30	10/14/15 16:43	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/12/15 09:30	10/14/15 16:43	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/12/15 09:30	10/14/15 16:43	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/12/15 09:30	10/14/15 16:43	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/12/15 09:30	10/14/15 16:43	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/12/15 09:30	10/14/15 16:43	1
Phenol	0.93	U	0.93	0.14	ug/L		10/12/15 09:30	10/14/15 16:43	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/12/15 09:30	10/14/15 16:43	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/12/15 09:30	10/14/15 16:43	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/12/15 09:30	10/14/15 16:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*13*	*X*	*29 - 110*	*10/12/15 09:30*	*10/14/15 16:43*	*1*
2-Fluorophenol (Surr)	*27*		*15 - 110*	*10/12/15 09:30*	*10/14/15 16:43*	*1*
2,4,6-Tribromophenol (Surr)	*11*	*X*	*21 - 128*	*10/12/15 09:30*	*10/14/15 16:43*	*1*
Nitrobenzene-d5 (Surr)	*18*	*X*	*31 - 110*	*10/12/15 09:30*	*10/14/15 16:43*	*1*
Phenol-d5 (Surr)	*24*		*10 - 110*	*10/12/15 09:30*	*10/14/15 16:43*	*1*
Terphenyl-d14 (Surr)	*13*	*X*	*31 - 115*	*10/12/15 09:30*	*10/14/15 16:43*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**160**	**B**	19	1.4	ug/L		10/12/15 09:30	10/15/15 10:37	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*13*	*X*	*29 - 110*	*10/12/15 09:30*	*10/15/15 10:37*	*4*
2-Fluorophenol (Surr)	*26*		*15 - 110*	*10/12/15 09:30*	*10/15/15 10:37*	*4*
2,4,6-Tribromophenol (Surr)	*9*	*X*	*21 - 128*	*10/12/15 09:30*	*10/15/15 10:37*	*4*
Nitrobenzene-d5 (Surr)	*17*	*X*	*31 - 110*	*10/12/15 09:30*	*10/15/15 10:37*	*4*
Phenol-d5 (Surr)	*23*		*10 - 110*	*10/12/15 09:30*	*10/15/15 10:37*	*4*
Terphenyl-d14 (Surr)	*13*	*X*	*31 - 115*	*10/12/15 09:30*	*10/15/15 10:37*	*4*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U H	0.96	0.12	ug/L		10/16/15 08:59	10/19/15 14:15	1
bis (2-chloroisopropyl) ether	0.96	U H	0.96	0.18	ug/L		10/16/15 08:59	10/19/15 14:15	1
2,4,5-Trichlorophenol	4.8	U H	4.8	0.35	ug/L		10/16/15 08:59	10/19/15 14:15	1
2,4,6-Trichlorophenol	4.8	U H	4.8	0.25	ug/L		10/16/15 08:59	10/19/15 14:15	1
2,4-Dichlorophenol	1.9	U H	1.9	0.28	ug/L		10/16/15 08:59	10/19/15 14:15	1
2,4-Dimethylphenol	1.9	U H	1.9	0.30	ug/L		10/16/15 08:59	10/19/15 14:15	1

Client Sample ID: VAP-6-GW(20-21)
Date Collected: 10/08/15 09:42
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-5
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	38	U H	38	5.9	ug/L		10/16/15 08:59	10/19/15 14:15	1
2,4-Dinitrotoluene	4.8	U H	4.8	0.25	ug/L		10/16/15 08:59	10/19/15 14:15	1
2,6-Dinitrotoluene	4.8	U H	4.8	0.23	ug/L		10/16/15 08:59	10/19/15 14:15	1
2-Chloronaphthalene	0.96	U H	0.96	0.11	ug/L		10/16/15 08:59	10/19/15 14:15	1
2-Chlorophenol	0.96	U H	0.96	0.13	ug/L		10/16/15 08:59	10/19/15 14:15	1
2-Methylnaphthalene	0.19	U H	0.19	0.036	ug/L		10/16/15 08:59	10/19/15 14:15	1
2-Methylphenol	0.96	U H	0.96	0.18	ug/L		10/16/15 08:59	10/19/15 14:15	1
2-Nitroaniline	1.9	U H	1.9	0.30	ug/L		10/16/15 08:59	10/19/15 14:15	1
2-Nitrophenol	1.9	U H	1.9	0.20	ug/L		10/16/15 08:59	10/19/15 14:15	1
3,3'-Dichlorobenzidine	4.8	U H *	4.8	0.34	ug/L		10/16/15 08:59	10/19/15 14:15	1
3-Nitroaniline	1.9	U H	1.9	0.25	ug/L		10/16/15 08:59	10/19/15 14:15	1
4,6-Dinitro-2-methylphenol	4.8	U H	4.8	0.50	ug/L		10/16/15 08:59	10/19/15 14:15	1
4-Bromophenyl phenyl ether	1.9	U H	1.9	0.33	ug/L		10/16/15 08:59	10/19/15 14:15	1
4-Chloro-3-methylphenol	1.9	U H	1.9	0.27	ug/L		10/16/15 08:59	10/19/15 14:15	1
4-Chloroaniline	1.9	U H *	1.9	0.14	ug/L		10/16/15 08:59	10/19/15 14:15	1
4-Chlorophenyl phenyl ether	1.9	U H	1.9	0.28	ug/L		10/16/15 08:59	10/19/15 14:15	1
4-Nitroaniline	1.9	U H	1.9	0.23	ug/L		10/16/15 08:59	10/19/15 14:15	1
4-Nitrophenol	4.8	U H	4.8	0.56	ug/L		10/16/15 08:59	10/19/15 14:15	1
Acenaphthene	0.19	U H	0.19	0.042	ug/L		10/16/15 08:59	10/19/15 14:15	1
Acenaphthylene	0.19	U H	0.19	0.019	ug/L		10/16/15 08:59	10/19/15 14:15	1
Acetophenone	0.96	U H	0.96	0.13	ug/L		10/16/15 08:59	10/19/15 14:15	1
Anthracene	0.19	U H	0.19	0.030	ug/L		10/16/15 08:59	10/19/15 14:15	1
Atrazine	0.96	U H	0.96	0.11	ug/L		10/16/15 08:59	10/19/15 14:15	1
Benzaldehyde	0.96	U H *	0.96	0.28	ug/L		10/16/15 08:59	10/19/15 14:15	1
Benzo[a]anthracene	0.19	U H	0.19	0.057	ug/L		10/16/15 08:59	10/19/15 14:15	1
Benzo[a]pyrene	0.19	U H	0.19	0.029	ug/L		10/16/15 08:59	10/19/15 14:15	1
Benzo[b]fluoranthene	0.19	U H	0.19	0.057	ug/L		10/16/15 08:59	10/19/15 14:15	1
Benzo[g,h,i]perylene	0.19	U H	0.19	0.048	ug/L		10/16/15 08:59	10/19/15 14:15	1
Benzo[k]fluoranthene	0.19	U H	0.19	0.046	ug/L		10/16/15 08:59	10/19/15 14:15	1
Bis(2-chloroethoxy)methane	0.96	U H	0.96	0.036	ug/L		10/16/15 08:59	10/19/15 14:15	1
Bis(2-chloroethyl)ether	0.96	U H	0.96	0.18	ug/L		10/16/15 08:59	10/19/15 14:15	1
Bis(2-ethylhexyl) phthalate	**3.7**	**H**	1.9	1.5	ug/L		10/16/15 08:59	10/19/15 14:15	1
Butyl benzyl phthalate	0.96	U H	0.96	0.21	ug/L		10/16/15 08:59	10/19/15 14:15	1
Caprolactam	**71**	**H B**	4.8	0.36	ug/L		10/16/15 08:59	10/19/15 14:15	1
Carbazole	0.96	U H	0.96	0.10	ug/L		10/16/15 08:59	10/19/15 14:15	1
Chrysene	0.19	U H	0.19	0.034	ug/L		10/16/15 08:59	10/19/15 14:15	1
Dibenz(a,h)anthracene	0.19	U H	0.19	0.038	ug/L		10/16/15 08:59	10/19/15 14:15	1
Dibenzofuran	0.96	U H	0.96	0.13	ug/L		10/16/15 08:59	10/19/15 14:15	1
Diethyl phthalate	0.96	U H	0.96	0.12	ug/L		10/16/15 08:59	10/19/15 14:15	1
Dimethyl phthalate	0.96	U H	0.96	0.097	ug/L		10/16/15 08:59	10/19/15 14:15	1
Di-n-butyl phthalate	**0.38**	**J H**	0.96	0.38	ug/L		10/16/15 08:59	10/19/15 14:15	1
Di-n-octyl phthalate	0.96	U H	0.96	0.35	ug/L		10/16/15 08:59	10/19/15 14:15	1
Fluoranthene	0.19	U H	0.19	0.026	ug/L		10/16/15 08:59	10/19/15 14:15	1
Fluorene	0.19	U H	0.19	0.033	ug/L		10/16/15 08:59	10/19/15 14:15	1
Hexachlorobenzene	0.96	U H	0.96	0.11	ug/L		10/16/15 08:59	10/19/15 14:15	1
Hexachlorobutadiene	0.96	U H	0.96	0.14	ug/L		10/16/15 08:59	10/19/15 14:15	1
Hexachlorocyclopentadiene	9.6	U H	9.6	2.4	ug/L		10/16/15 08:59	10/19/15 14:15	1
Hexachloroethane	0.96	U H	0.96	0.21	ug/L		10/16/15 08:59	10/19/15 14:15	1
Indeno[1,2,3-cd]pyrene	0.19	U H	0.19	0.046	ug/L		10/16/15 08:59	10/19/15 14:15	1

Client Sample ID: VAP-6-GW(20-21)

Date Collected: 10/08/15 09:42
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-5

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	0.96	U H	0.96	0.040	ug/L		10/16/15 08:59	10/19/15 14:15	1
Naphthalene	0.19	U H	0.19	0.041	ug/L		10/16/15 08:59	10/19/15 14:15	1
Nitrobenzene	0.96	U H	0.96	0.11	ug/L		10/16/15 08:59	10/19/15 14:15	1
N-Nitrosodi-n-propylamine	0.96	U H	0.96	0.15	ug/L		10/16/15 08:59	10/19/15 14:15	1
N-Nitrosodiphenylamine	0.96	U H	0.96	0.11	ug/L		10/16/15 08:59	10/19/15 14:15	1
Pentachlorophenol	38	U H	38	5.3	ug/L		10/16/15 08:59	10/19/15 14:15	1
Phenol	0.96	U H	0.96	0.14	ug/L		10/16/15 08:59	10/19/15 14:15	1
Phenanthrene	0.19	U H	0.19	0.030	ug/L		10/16/15 08:59	10/19/15 14:15	1
Pyrene	0.19	U H	0.19	0.027	ug/L		10/16/15 08:59	10/19/15 14:15	1
3 & 4 Methylphenol	1.9	U H	1.9	0.32	ug/L		10/16/15 08:59	10/19/15 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*34*		*29 - 110*	*10/16/15 08:59*	*10/19/15 14:15*	*1*
2-Fluorophenol (Surr)	*40*		*15 - 110*	*10/16/15 08:59*	*10/19/15 14:15*	*1*
2,4,6-Tribromophenol (Surr)	*29*		*21 - 128*	*10/16/15 08:59*	*10/19/15 14:15*	*1*
Nitrobenzene-d5 (Surr)	*38*		*31 - 110*	*10/16/15 08:59*	*10/19/15 14:15*	*1*
Phenol-d5 (Surr)	*26*		*10 - 110*	*10/16/15 08:59*	*10/19/15 14:15*	*1*
Terphenyl-d14 (Surr)	*33*		*31 - 115*	*10/16/15 08:59*	*10/19/15 14:15*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10	U	10	2.9	ug/L		10/12/15 10:21	10/15/15 07:22	1
Barium	**21**	**J B**	200	1.0	ug/L		10/12/15 10:21	10/15/15 07:22	1
Cadmium	2.0	U	2.0	0.14	ug/L		10/12/15 10:21	10/15/15 07:22	1
Chromium	**2.4**	**J**	5.0	0.55	ug/L		10/12/15 10:21	10/15/15 07:22	1
Lead	3.0	U	3.0	1.9	ug/L		10/12/15 10:21	10/15/15 07:22	1
Selenium	5.0	U	5.0	4.0	ug/L		10/12/15 10:21	10/15/15 07:22	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 10:21	10/15/15 07:22	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/12/15 14:00	10/14/15 10:32	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-6-GW(25-26)
Date Collected: 10/08/15 10:10
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	400	U	400	38	ug/L			10/20/15 03:28	40
Benzene	40	U	40	14	ug/L			10/20/15 03:28	40
Dichlorobromomethane	40	U	40	12	ug/L			10/20/15 03:28	40
Bromoform	40	U	40	22	ug/L			10/20/15 03:28	40
Bromomethane	40	U	40	18	ug/L			10/20/15 03:28	40
2-Butanone (MEK)	400	U	400	21	ug/L			10/20/15 03:28	40
Carbon disulfide	40	U	40	15	ug/L			10/20/15 03:28	40
Carbon tetrachloride	40	U	40	17	ug/L			10/20/15 03:28	40
Chlorobenzene	40	U	40	10	ug/L			10/20/15 03:28	40
Chloroethane	40	U	40	13	ug/L			10/20/15 03:28	40
Chloroform	40	U	40	10	ug/L			10/20/15 03:28	40
Chloromethane	40	U	40	18	ug/L			10/20/15 03:28	40
1,1-Dichloroethane	40	U	40	12	ug/L			10/20/15 03:28	40
1,2-Dichloroethane	40	U	40	9.2	ug/L			10/20/15 03:28	40
1,1-Dichloroethene	40	U	40	18	ug/L			10/20/15 03:28	40
1,2-Dichloropropane	40	U	40	10	ug/L			10/20/15 03:28	40
cis-1,3-Dichloropropene	40	U	40	18	ug/L			10/20/15 03:28	40
trans-1,3-Dichloropropene	40	U	40	22	ug/L			10/20/15 03:28	40
Ethylbenzene	40	U	40	10	ug/L			10/20/15 03:28	40
2-Hexanone	400	U	400	19	ug/L			10/20/15 03:28	40
Methylene Chloride	**33**	**J B**	40	13	ug/L			10/20/15 03:28	40
4-Methyl-2-pentanone (MIBK)	400	U	400	40	ug/L			10/20/15 03:28	40
Styrene	40	U	40	18	ug/L			10/20/15 03:28	40
1,1,2,2-Tetrachloroethane	40	U	40	8.8	ug/L			10/20/15 03:28	40
Tetrachloroethene	40	U	40	12	ug/L			10/20/15 03:28	40
Toluene	40	U	40	9.2	ug/L			10/20/15 03:28	40
Trichloroethene	**1300**		40	8.8	ug/L			10/20/15 03:28	40
Vinyl chloride	40	U	40	12	ug/L			10/20/15 03:28	40
Xylenes, Total	80	U	80	21	ug/L			10/20/15 03:28	40
1,1,1-Trichloroethane	40	U	40	18	ug/L			10/20/15 03:28	40
1,1,2-Trichloroethane	40	U	40	9.6	ug/L			10/20/15 03:28	40
Cyclohexane	40	U	40	18	ug/L			10/20/15 03:28	40
1,2-Dibromo-3-Chloropropane	80	U	80	33	ug/L			10/20/15 03:28	40
Ethylene Dibromide	40	U	40	13	ug/L			10/20/15 03:28	40
Dichlorodifluoromethane	40	U	40	13	ug/L			10/20/15 03:28	40
cis-1,2-Dichloroethene	**1100**		40	10	ug/L			10/20/15 03:28	40
trans-1,2-Dichloroethene	40	U	40	12	ug/L			10/20/15 03:28	40
Isopropylbenzene	40	U	40	14	ug/L			10/20/15 03:28	40
Methyl acetate	400	U	400	91	ug/L			10/20/15 03:28	40
Methyl tert-butyl ether	40	U	40	8.0	ug/L			10/20/15 03:28	40
1,1,2-Trichloro-1,2,2-trifluoroethane	40	U	40	18	ug/L			10/20/15 03:28	40
1,2,4-Trichlorobenzene	40	U	40	13	ug/L			10/20/15 03:28	40
1,2-Dichlorobenzene	40	U	40	10	ug/L			10/20/15 03:28	40
1,3-Dichlorobenzene	40	U	40	7.6	ug/L			10/20/15 03:28	40
1,4-Dichlorobenzene	40	U	40	11	ug/L			10/20/15 03:28	40
Trichlorofluoromethane	40	U	40	20	ug/L			10/20/15 03:28	40
Chlorodibromomethane	40	U	40	17	ug/L			10/20/15 03:28	40
Methylcyclohexane	40	U	40	17	ug/L			10/20/15 03:28	40

Client Sample ID: VAP-6-GW(25-26)

Date Collected: 10/08/15 10:10
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-6

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*78 - 125*		*10/20/15 03:28*	*40*
4-Bromofluorobenzene (Surr)	*97*		*61 - 120*		*10/20/15 03:28*	*40*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/20/15 03:28*	*40*
Dibromofluoromethane (Surr)	*94*		*79 - 120*		*10/20/15 03:28*	*40*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/12/15 09:30	10/14/15 17:06	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/12/15 09:30	10/14/15 17:06	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/12/15 09:30	10/14/15 17:06	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/12/15 09:30	10/14/15 17:06	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/12/15 09:30	10/14/15 17:06	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/12/15 09:30	10/14/15 17:06	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/12/15 09:30	10/14/15 17:06	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/12/15 09:30	10/14/15 17:06	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/12/15 09:30	10/14/15 17:06	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/12/15 09:30	10/14/15 17:06	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/12/15 09:30	10/14/15 17:06	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/12/15 09:30	10/14/15 17:06	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/12/15 09:30	10/14/15 17:06	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/12/15 09:30	10/14/15 17:06	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/12/15 09:30	10/14/15 17:06	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/12/15 09:30	10/14/15 17:06	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/12/15 09:30	10/14/15 17:06	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/12/15 09:30	10/14/15 17:06	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/12/15 09:30	10/14/15 17:06	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/12/15 09:30	10/14/15 17:06	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/12/15 09:30	10/14/15 17:06	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/12/15 09:30	10/14/15 17:06	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/12/15 09:30	10/14/15 17:06	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/12/15 09:30	10/14/15 17:06	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/12/15 09:30	10/14/15 17:06	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/12/15 09:30	10/14/15 17:06	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/12/15 09:30	10/14/15 17:06	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/12/15 09:30	10/14/15 17:06	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/12/15 09:30	10/14/15 17:06	1
Benzaldehyde	0.96	U	0.96	0.28	ug/L		10/12/15 09:30	10/14/15 17:06	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/12/15 09:30	10/14/15 17:06	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/12/15 09:30	10/14/15 17:06	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/12/15 09:30	10/14/15 17:06	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/12/15 09:30	10/14/15 17:06	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/12/15 09:30	10/14/15 17:06	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/12/15 09:30	10/14/15 17:06	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/12/15 09:30	10/14/15 17:06	1
Bis(2-ethylhexyl) phthalate	**1.9**	**B**	1.9	1.5	ug/L		10/12/15 09:30	10/14/15 17:06	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/12/15 09:30	10/14/15 17:06	1
Caprolactam	**30**	**B**	4.8	0.36	ug/L		10/12/15 09:30	10/14/15 17:06	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/12/15 09:30	10/14/15 17:06	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/12/15 09:30	10/14/15 17:06	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/12/15 09:30	10/14/15 17:06	1

Client Sample ID: VAP-6-GW(25-26)
Date Collected: 10/08/15 10:10
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-6
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/12/15 09:30	10/14/15 17:06	1
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/12/15 09:30	10/14/15 17:06	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/12/15 09:30	10/14/15 17:06	1
Di-n-butyl phthalate	**0.81**	**J B**	0.96	0.38	ug/L		10/12/15 09:30	10/14/15 17:06	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/12/15 09:30	10/14/15 17:06	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/12/15 09:30	10/14/15 17:06	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/12/15 09:30	10/14/15 17:06	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/12/15 09:30	10/14/15 17:06	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/12/15 09:30	10/14/15 17:06	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/12/15 09:30	10/14/15 17:06	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/12/15 09:30	10/14/15 17:06	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/12/15 09:30	10/14/15 17:06	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/12/15 09:30	10/14/15 17:06	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/12/15 09:30	10/14/15 17:06	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/12/15 09:30	10/14/15 17:06	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/12/15 09:30	10/14/15 17:06	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/12/15 09:30	10/14/15 17:06	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/12/15 09:30	10/14/15 17:06	1
Phenol	0.96	U	0.96	0.14	ug/L		10/12/15 09:30	10/14/15 17:06	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/12/15 09:30	10/14/15 17:06	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/12/15 09:30	10/14/15 17:06	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/12/15 09:30	10/14/15 17:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*17*	*X*	*29 - 110*	*10/12/15 09:30*	*10/14/15 17:06*	*1*
2-Fluorophenol (Surr)	*23*		*15 - 110*	*10/12/15 09:30*	*10/14/15 17:06*	*1*
2,4,6-Tribromophenol (Surr)	*17*	*X*	*21 - 128*	*10/12/15 09:30*	*10/14/15 17:06*	*1*
Nitrobenzene-d5 (Surr)	*21*	*X*	*31 - 110*	*10/12/15 09:30*	*10/14/15 17:06*	*1*
Phenol-d5 (Surr)	*20*		*10 - 110*	*10/12/15 09:30*	*10/14/15 17:06*	*1*
Terphenyl-d14 (Surr)	*17*	*X*	*31 - 115*	*10/12/15 09:30*	*10/14/15 17:06*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.93	U H	0.93	0.11	ug/L		10/16/15 08:59	10/19/15 14:39	1
bis (2-chloroisopropyl) ether	0.93	U H	0.93	0.17	ug/L		10/16/15 08:59	10/19/15 14:39	1
2,4,5-Trichlorophenol	4.6	U H	4.6	0.34	ug/L		10/16/15 08:59	10/19/15 14:39	1
2,4,6-Trichlorophenol	4.6	U H	4.6	0.24	ug/L		10/16/15 08:59	10/19/15 14:39	1
2,4-Dichlorophenol	1.9	U H	1.9	0.27	ug/L		10/16/15 08:59	10/19/15 14:39	1
2,4-Dimethylphenol	1.9	U H	1.9	0.29	ug/L		10/16/15 08:59	10/19/15 14:39	1
2,4-Dinitrophenol	37	U H	37	5.7	ug/L		10/16/15 08:59	10/19/15 14:39	1
2,4-Dinitrotoluene	4.6	U H	4.6	0.24	ug/L		10/16/15 08:59	10/19/15 14:39	1
2,6-Dinitrotoluene	4.6	U H	4.6	0.22	ug/L		10/16/15 08:59	10/19/15 14:39	1
2-Chloronaphthalene	0.93	U H	0.93	0.11	ug/L		10/16/15 08:59	10/19/15 14:39	1
2-Chlorophenol	0.93	U H	0.93	0.12	ug/L		10/16/15 08:59	10/19/15 14:39	1
2-Methylnaphthalene	0.19	U H	0.19	0.034	ug/L		10/16/15 08:59	10/19/15 14:39	1
2-Methylphenol	0.93	U H	0.93	0.17	ug/L		10/16/15 08:59	10/19/15 14:39	1
2-Nitroaniline	1.9	U H	1.9	0.29	ug/L		10/16/15 08:59	10/19/15 14:39	1
2-Nitrophenol	1.9	U H	1.9	0.19	ug/L		10/16/15 08:59	10/19/15 14:39	1
3,3'-Dichlorobenzidine	4.6	U H *	4.6	0.33	ug/L		10/16/15 08:59	10/19/15 14:39	1
3-Nitroaniline	1.9	U H	1.9	0.25	ug/L		10/16/15 08:59	10/19/15 14:39	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-6-GW(25-26)
Date Collected: 10/08/15 10:10
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-6
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	4.6	U H	4.6	0.49	ug/L		10/16/15 08:59	10/19/15 14:39	1
4-Bromophenyl phenyl ether	1.9	U H	1.9	0.32	ug/L		10/16/15 08:59	10/19/15 14:39	1
4-Chloro-3-methylphenol	1.9	U H	1.9	0.26	ug/L		10/16/15 08:59	10/19/15 14:39	1
4-Chloroaniline	1.9	U H *	1.9	0.14	ug/L		10/16/15 08:59	10/19/15 14:39	1
4-Chlorophenyl phenyl ether	1.9	U H	1.9	0.27	ug/L		10/16/15 08:59	10/19/15 14:39	1
4-Nitroaniline	1.9	U H	1.9	0.22	ug/L		10/16/15 08:59	10/19/15 14:39	1
4-Nitrophenol	4.6	U H	4.6	0.54	ug/L		10/16/15 08:59	10/19/15 14:39	1
Acenaphthene	0.19	U H	0.19	0.041	ug/L		10/16/15 08:59	10/19/15 14:39	1
Acenaphthylene	0.19	U H	0.19	0.019	ug/L		10/16/15 08:59	10/19/15 14:39	1
Acetophenone	0.93	U H	0.93	0.13	ug/L		10/16/15 08:59	10/19/15 14:39	1
Anthracene	0.19	U H	0.19	0.029	ug/L		10/16/15 08:59	10/19/15 14:39	1
Atrazine	0.93	U H	0.93	0.11	ug/L		10/16/15 08:59	10/19/15 14:39	1
Benzaldehyde	0.93	U H *	0.93	0.27	ug/L		10/16/15 08:59	10/19/15 14:39	1
Benzo[a]anthracene	0.19	U H	0.19	0.055	ug/L		10/16/15 08:59	10/19/15 14:39	1
Benzo[a]pyrene	0.19	U H	0.19	0.028	ug/L		10/16/15 08:59	10/19/15 14:39	1
Benzo[b]fluoranthene	0.19	U H	0.19	0.055	ug/L		10/16/15 08:59	10/19/15 14:39	1
Benzo[g,h,i]perylene	0.19	U H	0.19	0.046	ug/L		10/16/15 08:59	10/19/15 14:39	1
Benzo[k]fluoranthene	0.19	U H	0.19	0.044	ug/L		10/16/15 08:59	10/19/15 14:39	1
Bis(2-chloroethoxy)methane	0.93	U H	0.93	0.034	ug/L		10/16/15 08:59	10/19/15 14:39	1
Bis(2-chloroethyl)ether	0.93	U H	0.93	0.18	ug/L		10/16/15 08:59	10/19/15 14:39	1
Bis(2-ethylhexyl) phthalate	1.9	U H	1.9	1.4	ug/L		10/16/15 08:59	10/19/15 14:39	1
Butyl benzyl phthalate	0.93	U H	0.93	0.20	ug/L		10/16/15 08:59	10/19/15 14:39	1
Caprolactam	**52**	**H B**	4.6	0.34	ug/L		10/16/15 08:59	10/19/15 14:39	1
Carbazole	0.93	U H	0.93	0.097	ug/L		10/16/15 08:59	10/19/15 14:39	1
Chrysene	0.19	U H	0.19	0.032	ug/L		10/16/15 08:59	10/19/15 14:39	1
Dibenz(a,h)anthracene	0.19	U H	0.19	0.037	ug/L		10/16/15 08:59	10/19/15 14:39	1
Dibenzofuran	0.93	U H	0.93	0.13	ug/L		10/16/15 08:59	10/19/15 14:39	1
Diethyl phthalate	0.93	U H	0.93	0.12	ug/L		10/16/15 08:59	10/19/15 14:39	1
Dimethyl phthalate	0.93	U H	0.93	0.094	ug/L		10/16/15 08:59	10/19/15 14:39	1
Di-n-butyl phthalate	**0.37**	**J H**	0.93	0.37	ug/L		10/16/15 08:59	10/19/15 14:39	1
Di-n-octyl phthalate	0.93	U H	0.93	0.34	ug/L		10/16/15 08:59	10/19/15 14:39	1
Fluoranthene	0.19	U H	0.19	0.025	ug/L		10/16/15 08:59	10/19/15 14:39	1
Fluorene	0.19	U H	0.19	0.031	ug/L		10/16/15 08:59	10/19/15 14:39	1
Hexachlorobenzene	0.93	U H	0.93	0.11	ug/L		10/16/15 08:59	10/19/15 14:39	1
Hexachlorobutadiene	0.93	U H	0.93	0.13	ug/L		10/16/15 08:59	10/19/15 14:39	1
Hexachlorocyclopentadiene	9.3	U H	9.3	2.3	ug/L		10/16/15 08:59	10/19/15 14:39	1
Hexachloroethane	0.93	U H	0.93	0.20	ug/L		10/16/15 08:59	10/19/15 14:39	1
Indeno[1,2,3-cd]pyrene	0.19	U H	0.19	0.044	ug/L		10/16/15 08:59	10/19/15 14:39	1
Isophorone	0.93	U H	0.93	0.039	ug/L		10/16/15 08:59	10/19/15 14:39	1
Naphthalene	0.19	U H	0.19	0.040	ug/L		10/16/15 08:59	10/19/15 14:39	1
Nitrobenzene	0.93	U H	0.93	0.11	ug/L		10/16/15 08:59	10/19/15 14:39	1
N-Nitrosodi-n-propylamine	0.93	U H	0.93	0.15	ug/L		10/16/15 08:59	10/19/15 14:39	1
N-Nitrosodiphenylamine	0.93	U H	0.93	0.10	ug/L		10/16/15 08:59	10/19/15 14:39	1
Pentachlorophenol	37	U H	37	5.1	ug/L		10/16/15 08:59	10/19/15 14:39	1
Phenol	0.93	U H	0.93	0.14	ug/L		10/16/15 08:59	10/19/15 14:39	1
Phenanthrene	0.19	U H	0.19	0.029	ug/L		10/16/15 08:59	10/19/15 14:39	1
Pyrene	0.19	U H	0.19	0.026	ug/L		10/16/15 08:59	10/19/15 14:39	1
3 & 4 Methylphenol	1.9	U H	1.9	0.31	ug/L		10/16/15 08:59	10/19/15 14:39	1

Client Sample ID: VAP-6-GW(25-26)

Date Collected: 10/08/15 10:10
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-6

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*34*		*29 - 110*	*10/16/15 08:59*	*10/19/15 14:39*	*1*
2-Fluorophenol (Surr)	*25*		*15 - 110*	*10/16/15 08:59*	*10/19/15 14:39*	*1*
2,4,6-Tribromophenol (Surr)	*30*		*21 - 128*	*10/16/15 08:59*	*10/19/15 14:39*	*1*
Nitrobenzene-d5 (Surr)	*38*		*31 - 110*	*10/16/15 08:59*	*10/19/15 14:39*	*1*
Phenol-d5 (Surr)	*13*		*10 - 110*	*10/16/15 08:59*	*10/19/15 14:39*	*1*
Terphenyl-d14 (Surr)	*18*	*X*	*31 - 115*	*10/16/15 08:59*	*10/19/15 14:39*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**34**		10	2.9	ug/L		10/12/15 10:21	10/15/15 02:00	1
Barium	**590**	**B**	200	1.0	ug/L		10/12/15 10:21	10/15/15 02:00	1
Cadmium	**0.55**	**J**	2.0	0.14	ug/L		10/12/15 10:21	10/15/15 02:00	1
Chromium	**260**		5.0	0.55	ug/L		10/12/15 10:21	10/15/15 02:00	1
Lead	**90**		3.0	1.9	ug/L		10/12/15 10:21	10/15/15 02:00	1
Selenium	5.0	U	5.0	4.0	ug/L		10/12/15 10:21	10/15/15 02:00	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 10:21	10/15/15 02:00	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**2.1**		0.20	0.090	ug/L		10/12/15 14:00	10/14/15 11:17	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-6-GW(30-31)
Date Collected: 10/08/15 10:35
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	500	U	500	47	ug/L			10/20/15 03:50	50
Benzene	50	U	50	18	ug/L			10/20/15 03:50	50
Dichlorobromomethane	50	U	50	15	ug/L			10/20/15 03:50	50
Bromoform	50	U	50	28	ug/L			10/20/15 03:50	50
Bromomethane	50	U	50	22	ug/L			10/20/15 03:50	50
2-Butanone (MEK)	500	U	500	27	ug/L			10/20/15 03:50	50
Carbon disulfide	50	U	50	19	ug/L			10/20/15 03:50	50
Carbon tetrachloride	50	U	50	22	ug/L			10/20/15 03:50	50
Chlorobenzene	50	U	50	13	ug/L			10/20/15 03:50	50
Chloroethane	50	U	50	16	ug/L			10/20/15 03:50	50
Chloroform	50	U	50	13	ug/L			10/20/15 03:50	50
Chloromethane	50	U	50	22	ug/L			10/20/15 03:50	50
1,1-Dichloroethane	50	U	50	15	ug/L			10/20/15 03:50	50
1,2-Dichloroethane	50	U	50	12	ug/L			10/20/15 03:50	50
1,1-Dichloroethene	50	U	50	23	ug/L			10/20/15 03:50	50
1,2-Dichloropropane	50	U	50	13	ug/L			10/20/15 03:50	50
cis-1,3-Dichloropropene	50	U	50	23	ug/L			10/20/15 03:50	50
trans-1,3-Dichloropropene	50	U	50	28	ug/L			10/20/15 03:50	50
Ethylbenzene	50	U	50	13	ug/L			10/20/15 03:50	50
2-Hexanone	500	U	500	24	ug/L			10/20/15 03:50	50
Methylene Chloride	**31**	**J B**	50	17	ug/L			10/20/15 03:50	50
4-Methyl-2-pentanone (MIBK)	500	U	500	50	ug/L			10/20/15 03:50	50
Styrene	50	U	50	23	ug/L			10/20/15 03:50	50
1,1,2,2-Tetrachloroethane	50	U	50	11	ug/L			10/20/15 03:50	50
Tetrachloroethene	50	U	50	16	ug/L			10/20/15 03:50	50
Toluene	50	U	50	12	ug/L			10/20/15 03:50	50
Trichloroethene	**1600**		50	11	ug/L			10/20/15 03:50	50
Vinyl chloride	50	U	50	15	ug/L			10/20/15 03:50	50
Xylenes, Total	100	U	100	26	ug/L			10/20/15 03:50	50
1,1,1-Trichloroethane	50	U	50	22	ug/L			10/20/15 03:50	50
1,1,2-Trichloroethane	50	U	50	12	ug/L			10/20/15 03:50	50
Cyclohexane	50	U	50	23	ug/L			10/20/15 03:50	50
1,2-Dibromo-3-Chloropropane	100	U	100	41	ug/L			10/20/15 03:50	50
Ethylene Dibromide	50	U	50	16	ug/L			10/20/15 03:50	50
Dichlorodifluoromethane	50	U	50	16	ug/L			10/20/15 03:50	50
cis-1,2-Dichloroethene	**1300**		50	13	ug/L			10/20/15 03:50	50
trans-1,2-Dichloroethene	50	U	50	15	ug/L			10/20/15 03:50	50
Isopropylbenzene	50	U	50	18	ug/L			10/20/15 03:50	50
Methyl acetate	500	U	500	110	ug/L			10/20/15 03:50	50
Methyl tert-butyl ether	50	U	50	10	ug/L			10/20/15 03:50	50
1,1,2-Trichloro-1,2,2-trifluoroethane	50	U	50	23	ug/L			10/20/15 03:50	50
1,2,4-Trichlorobenzene	50	U	50	16	ug/L			10/20/15 03:50	50
1,2-Dichlorobenzene	50	U	50	13	ug/L			10/20/15 03:50	50
1,3-Dichlorobenzene	50	U	50	9.5	ug/L			10/20/15 03:50	50
1,4-Dichlorobenzene	50	U	50	14	ug/L			10/20/15 03:50	50
Trichlorofluoromethane	50	U	50	25	ug/L			10/20/15 03:50	50
Chlorodibromomethane	50	U	50	22	ug/L			10/20/15 03:50	50
Methylcyclohexane	50	U	50	22	ug/L			10/20/15 03:50	50

Client Sample ID: VAP-6-GW(30-31)

Date Collected: 10/08/15 10:35
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-7

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*78 - 125*		*10/20/15 03:50*	*50*
4-Bromofluorobenzene (Surr)	*95*		*61 - 120*		*10/20/15 03:50*	*50*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/20/15 03:50*	*50*
Dibromofluoromethane (Surr)	*92*		*79 - 120*		*10/20/15 03:50*	*50*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/12/15 09:30	10/14/15 17:29	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/12/15 09:30	10/14/15 17:29	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/12/15 09:30	10/14/15 17:29	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/12/15 09:30	10/14/15 17:29	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/12/15 09:30	10/14/15 17:29	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/12/15 09:30	10/14/15 17:29	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/12/15 09:30	10/14/15 17:29	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/12/15 09:30	10/14/15 17:29	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/12/15 09:30	10/14/15 17:29	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/12/15 09:30	10/14/15 17:29	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/12/15 09:30	10/14/15 17:29	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/12/15 09:30	10/14/15 17:29	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/12/15 09:30	10/14/15 17:29	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/12/15 09:30	10/14/15 17:29	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/12/15 09:30	10/14/15 17:29	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/12/15 09:30	10/14/15 17:29	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/12/15 09:30	10/14/15 17:29	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/12/15 09:30	10/14/15 17:29	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/12/15 09:30	10/14/15 17:29	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/12/15 09:30	10/14/15 17:29	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/12/15 09:30	10/14/15 17:29	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/12/15 09:30	10/14/15 17:29	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/12/15 09:30	10/14/15 17:29	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/12/15 09:30	10/14/15 17:29	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/12/15 09:30	10/14/15 17:29	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/12/15 09:30	10/14/15 17:29	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/12/15 09:30	10/14/15 17:29	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/12/15 09:30	10/14/15 17:29	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/12/15 09:30	10/14/15 17:29	1
Benzaldehyde	0.96	U	0.96	0.28	ug/L		10/12/15 09:30	10/14/15 17:29	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/12/15 09:30	10/14/15 17:29	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/12/15 09:30	10/14/15 17:29	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/12/15 09:30	10/14/15 17:29	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/12/15 09:30	10/14/15 17:29	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/12/15 09:30	10/14/15 17:29	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/12/15 09:30	10/14/15 17:29	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/12/15 09:30	10/14/15 17:29	1
Bis(2-ethylhexyl) phthalate	**2.2**	**B**	1.9	1.5	ug/L		10/12/15 09:30	10/14/15 17:29	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/12/15 09:30	10/14/15 17:29	1
Caprolactam	**91**	**B**	4.8	0.36	ug/L		10/12/15 09:30	10/14/15 17:29	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/12/15 09:30	10/14/15 17:29	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/12/15 09:30	10/14/15 17:29	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/12/15 09:30	10/14/15 17:29	1

Client Sample ID: VAP-6-GW(30-31)

Date Collected: 10/08/15 10:35
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-7
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/12/15 09:30	10/14/15 17:29	1
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/12/15 09:30	10/14/15 17:29	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/12/15 09:30	10/14/15 17:29	1
Di-n-butyl phthalate	**1.1**	**B**	0.96	0.38	ug/L		10/12/15 09:30	10/14/15 17:29	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/12/15 09:30	10/14/15 17:29	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/12/15 09:30	10/14/15 17:29	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/12/15 09:30	10/14/15 17:29	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/12/15 09:30	10/14/15 17:29	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/12/15 09:30	10/14/15 17:29	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/12/15 09:30	10/14/15 17:29	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/12/15 09:30	10/14/15 17:29	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/12/15 09:30	10/14/15 17:29	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/12/15 09:30	10/14/15 17:29	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/12/15 09:30	10/14/15 17:29	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/12/15 09:30	10/14/15 17:29	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/12/15 09:30	10/14/15 17:29	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/12/15 09:30	10/14/15 17:29	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/12/15 09:30	10/14/15 17:29	1
Phenol	0.96	U	0.96	0.14	ug/L		10/12/15 09:30	10/14/15 17:29	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/12/15 09:30	10/14/15 17:29	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/12/15 09:30	10/14/15 17:29	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/12/15 09:30	10/14/15 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*10*	*X*	*29 - 110*	*10/12/15 09:30*	*10/14/15 17:29*	*1*
2-Fluorophenol (Surr)	*13*	*X*	*15 - 110*	*10/12/15 09:30*	*10/14/15 17:29*	*1*
2,4,6-Tribromophenol (Surr)	*9*	*X*	*21 - 128*	*10/12/15 09:30*	*10/14/15 17:29*	*1*
Nitrobenzene-d5 (Surr)	*12*	*X*	*31 - 110*	*10/12/15 09:30*	*10/14/15 17:29*	*1*
Phenol-d5 (Surr)	*11*		*10 - 110*	*10/12/15 09:30*	*10/14/15 17:29*	*1*
Terphenyl-d14 (Surr)	*9*	*X*	*31 - 115*	*10/12/15 09:30*	*10/14/15 17:29*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.93	U H	0.93	0.11	ug/L		10/16/15 08:59	10/19/15 15:02	1
bis (2-chloroisopropyl) ether	0.93	U H	0.93	0.17	ug/L		10/16/15 08:59	10/19/15 15:02	1
2,4,5-Trichlorophenol	4.6	U H	4.6	0.34	ug/L		10/16/15 08:59	10/19/15 15:02	1
2,4,6-Trichlorophenol	4.6	U H	4.6	0.24	ug/L		10/16/15 08:59	10/19/15 15:02	1
2,4-Dichlorophenol	1.9	U H	1.9	0.27	ug/L		10/16/15 08:59	10/19/15 15:02	1
2,4-Dimethylphenol	1.9	U H	1.9	0.29	ug/L		10/16/15 08:59	10/19/15 15:02	1
2,4-Dinitrophenol	37	U H	37	5.7	ug/L		10/16/15 08:59	10/19/15 15:02	1
2,4-Dinitrotoluene	4.6	U H	4.6	0.24	ug/L		10/16/15 08:59	10/19/15 15:02	1
2,6-Dinitrotoluene	4.6	U H	4.6	0.22	ug/L		10/16/15 08:59	10/19/15 15:02	1
2-Chloronaphthalene	0.93	U H	0.93	0.11	ug/L		10/16/15 08:59	10/19/15 15:02	1
2-Chlorophenol	0.93	U H	0.93	0.12	ug/L		10/16/15 08:59	10/19/15 15:02	1
2-Methylnaphthalene	0.19	U H	0.19	0.034	ug/L		10/16/15 08:59	10/19/15 15:02	1
2-Methylphenol	0.93	U H	0.93	0.17	ug/L		10/16/15 08:59	10/19/15 15:02	1
2-Nitroaniline	1.9	U H	1.9	0.29	ug/L		10/16/15 08:59	10/19/15 15:02	1
2-Nitrophenol	1.9	U H	1.9	0.19	ug/L		10/16/15 08:59	10/19/15 15:02	1
3,3'-Dichlorobenzidine	4.6	U H *	4.6	0.33	ug/L		10/16/15 08:59	10/19/15 15:02	1
3-Nitroaniline	1.9	U H	1.9	0.25	ug/L		10/16/15 08:59	10/19/15 15:02	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-6-GW(30-31)
Date Collected: 10/08/15 10:35
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-7
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	4.6	U H	4.6	0.49	ug/L		10/16/15 08:59	10/19/15 15:02	1
4-Bromophenyl phenyl ether	1.9	U H	1.9	0.32	ug/L		10/16/15 08:59	10/19/15 15:02	1
4-Chloro-3-methylphenol	1.9	U H	1.9	0.26	ug/L		10/16/15 08:59	10/19/15 15:02	1
4-Chloroaniline	1.9	U H *	1.9	0.14	ug/L		10/16/15 08:59	10/19/15 15:02	1
4-Chlorophenyl phenyl ether	1.9	U H	1.9	0.27	ug/L		10/16/15 08:59	10/19/15 15:02	1
4-Nitroaniline	1.9	U H	1.9	0.22	ug/L		10/16/15 08:59	10/19/15 15:02	1
4-Nitrophenol	4.6	U H	4.6	0.54	ug/L		10/16/15 08:59	10/19/15 15:02	1
Acenaphthene	0.19	U H	0.19	0.041	ug/L		10/16/15 08:59	10/19/15 15:02	1
Acenaphthylene	0.19	U H	0.19	0.019	ug/L		10/16/15 08:59	10/19/15 15:02	1
Acetophenone	0.93	U H	0.93	0.13	ug/L		10/16/15 08:59	10/19/15 15:02	1
Anthracene	0.19	U H	0.19	0.029	ug/L		10/16/15 08:59	10/19/15 15:02	1
Atrazine	0.93	U H	0.93	0.11	ug/L		10/16/15 08:59	10/19/15 15:02	1
Benzaldehyde	0.93	U H *	0.93	0.27	ug/L		10/16/15 08:59	10/19/15 15:02	1
Benzo[a]anthracene	0.19	U H	0.19	0.055	ug/L		10/16/15 08:59	10/19/15 15:02	1
Benzo[a]pyrene	0.19	U H	0.19	0.028	ug/L		10/16/15 08:59	10/19/15 15:02	1
Benzo[b]fluoranthene	0.19	U H	0.19	0.055	ug/L		10/16/15 08:59	10/19/15 15:02	1
Benzo[g,h,i]perylene	0.19	U H	0.19	0.046	ug/L		10/16/15 08:59	10/19/15 15:02	1
Benzo[k]fluoranthene	0.19	U H	0.19	0.044	ug/L		10/16/15 08:59	10/19/15 15:02	1
Bis(2-chloroethoxy)methane	0.93	U H	0.93	0.034	ug/L		10/16/15 08:59	10/19/15 15:02	1
Bis(2-chloroethyl)ether	0.93	U H	0.93	0.18	ug/L		10/16/15 08:59	10/19/15 15:02	1
Bis(2-ethylhexyl) phthalate	1.9	U H	1.9	1.4	ug/L		10/16/15 08:59	10/19/15 15:02	1
Butyl benzyl phthalate	0.93	U H	0.93	0.20	ug/L		10/16/15 08:59	10/19/15 15:02	1
Caprolactam	**22**	**H B**	4.6	0.34	ug/L		10/16/15 08:59	10/19/15 15:02	1
Carbazole	0.93	U H	0.93	0.097	ug/L		10/16/15 08:59	10/19/15 15:02	1
Chrysene	0.19	U H	0.19	0.032	ug/L		10/16/15 08:59	10/19/15 15:02	1
Dibenz(a,h)anthracene	0.19	U H	0.19	0.037	ug/L		10/16/15 08:59	10/19/15 15:02	1
Dibenzofuran	0.93	U H	0.93	0.13	ug/L		10/16/15 08:59	10/19/15 15:02	1
Diethyl phthalate	0.93	U H	0.93	0.12	ug/L		10/16/15 08:59	10/19/15 15:02	1
Dimethyl phthalate	0.93	U H	0.93	0.094	ug/L		10/16/15 08:59	10/19/15 15:02	1
Di-n-butyl phthalate	0.93	U H	0.93	0.37	ug/L		10/16/15 08:59	10/19/15 15:02	1
Di-n-octyl phthalate	0.93	U H	0.93	0.34	ug/L		10/16/15 08:59	10/19/15 15:02	1
Fluoranthene	0.19	U H	0.19	0.025	ug/L		10/16/15 08:59	10/19/15 15:02	1
Fluorene	0.19	U H	0.19	0.031	ug/L		10/16/15 08:59	10/19/15 15:02	1
Hexachlorobenzene	0.93	U H	0.93	0.11	ug/L		10/16/15 08:59	10/19/15 15:02	1
Hexachlorobutadiene	0.93	U H	0.93	0.13	ug/L		10/16/15 08:59	10/19/15 15:02	1
Hexachlorocyclopentadiene	9.3	U H	9.3	2.3	ug/L		10/16/15 08:59	10/19/15 15:02	1
Hexachloroethane	0.93	U H	0.93	0.20	ug/L		10/16/15 08:59	10/19/15 15:02	1
Indeno[1,2,3-cd]pyrene	0.19	U H	0.19	0.044	ug/L		10/16/15 08:59	10/19/15 15:02	1
Isophorone	0.93	U H	0.93	0.039	ug/L		10/16/15 08:59	10/19/15 15:02	1
Naphthalene	0.19	U H	0.19	0.040	ug/L		10/16/15 08:59	10/19/15 15:02	1
Nitrobenzene	0.93	U H	0.93	0.11	ug/L		10/16/15 08:59	10/19/15 15:02	1
N-Nitrosodi-n-propylamine	0.93	U H	0.93	0.15	ug/L		10/16/15 08:59	10/19/15 15:02	1
N-Nitrosodiphenylamine	0.93	U H	0.93	0.10	ug/L		10/16/15 08:59	10/19/15 15:02	1
Pentachlorophenol	37	U H	37	5.1	ug/L		10/16/15 08:59	10/19/15 15:02	1
Phenol	0.93	U H	0.93	0.14	ug/L		10/16/15 08:59	10/19/15 15:02	1
Phenanthrene	0.19	U H	0.19	0.029	ug/L		10/16/15 08:59	10/19/15 15:02	1
Pyrene	0.19	U H	0.19	0.026	ug/L		10/16/15 08:59	10/19/15 15:02	1
3 & 4 Methylphenol	1.9	U H	1.9	0.31	ug/L		10/16/15 08:59	10/19/15 15:02	1

Client Sample ID: VAP-6-GW(30-31)

Date Collected: 10/08/15 10:35
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-7

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*52*		*29 - 110*	*10/16/15 08:59*	*10/19/15 15:02*	*1*
2-Fluorophenol (Surr)	*32*		*15 - 110*	*10/16/15 08:59*	*10/19/15 15:02*	*1*
2,4,6-Tribromophenol (Surr)	*39*		*21 - 128*	*10/16/15 08:59*	*10/19/15 15:02*	*1*
Nitrobenzene-d5 (Surr)	*52*		*31 - 110*	*10/16/15 08:59*	*10/19/15 15:02*	*1*
Phenol-d5 (Surr)	*15*		*10 - 110*	*10/16/15 08:59*	*10/19/15 15:02*	*1*
Terphenyl-d14 (Surr)	*39*		*31 - 115*	*10/16/15 08:59*	*10/19/15 15:02*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**12**		10	2.9	ug/L		10/12/15 10:21	10/15/15 02:04	1
Barium	**210**	**B**	200	1.0	ug/L		10/12/15 10:21	10/15/15 02:04	1
Cadmium	**0.19**	**J**	2.0	0.14	ug/L		10/12/15 10:21	10/15/15 02:04	1
Chromium	**78**		5.0	0.55	ug/L		10/12/15 10:21	10/15/15 02:04	1
Lead	**29**		3.0	1.9	ug/L		10/12/15 10:21	10/15/15 02:04	1
Selenium	5.0	U	5.0	4.0	ug/L		10/12/15 10:21	10/15/15 02:04	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 10:21	10/15/15 02:04	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/12/15 14:00	10/14/15 11:20	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-6-GW(30-35)
Date Collected: 10/08/15 11:15
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	400	U	400	38	ug/L			10/20/15 04:12	40
Benzene	40	U	40	14	ug/L			10/20/15 04:12	40
Dichlorobromomethane	40	U	40	12	ug/L			10/20/15 04:12	40
Bromoform	40	U	40	22	ug/L			10/20/15 04:12	40
Bromomethane	40	U	40	18	ug/L			10/20/15 04:12	40
2-Butanone (MEK)	400	U	400	21	ug/L			10/20/15 04:12	40
Carbon disulfide	40	U	40	15	ug/L			10/20/15 04:12	40
Carbon tetrachloride	40	U	40	17	ug/L			10/20/15 04:12	40
Chlorobenzene	40	U	40	10	ug/L			10/20/15 04:12	40
Chloroethane	40	U	40	13	ug/L			10/20/15 04:12	40
Chloroform	40	U	40	10	ug/L			10/20/15 04:12	40
Chloromethane	40	U	40	18	ug/L			10/20/15 04:12	40
1,1-Dichloroethane	40	U	40	12	ug/L			10/20/15 04:12	40
1,2-Dichloroethane	40	U	40	9.2	ug/L			10/20/15 04:12	40
1,1-Dichloroethene	40	U	40	18	ug/L			10/20/15 04:12	40
1,2-Dichloropropane	40	U	40	10	ug/L			10/20/15 04:12	40
cis-1,3-Dichloropropene	40	U	40	18	ug/L			10/20/15 04:12	40
trans-1,3-Dichloropropene	40	U	40	22	ug/L			10/20/15 04:12	40
Ethylbenzene	40	U	40	10	ug/L			10/20/15 04:12	40
2-Hexanone	400	U	400	19	ug/L			10/20/15 04:12	40
Methylene Chloride	**29**	**J B**	40	13	ug/L			10/20/15 04:12	40
4-Methyl-2-pentanone (MIBK)	400	U	400	40	ug/L			10/20/15 04:12	40
Styrene	40	U	40	18	ug/L			10/20/15 04:12	40
1,1,2,2-Tetrachloroethane	40	U	40	8.8	ug/L			10/20/15 04:12	40
Tetrachloroethene	40	U	40	12	ug/L			10/20/15 04:12	40
Toluene	40	U	40	9.2	ug/L			10/20/15 04:12	40
Trichloroethene	**1300**		40	8.8	ug/L			10/20/15 04:12	40
Vinyl chloride	40	U	40	12	ug/L			10/20/15 04:12	40
Xylenes, Total	80	U	80	21	ug/L			10/20/15 04:12	40
1,1,1-Trichloroethane	40	U	40	18	ug/L			10/20/15 04:12	40
1,1,2-Trichloroethane	40	U	40	9.6	ug/L			10/20/15 04:12	40
Cyclohexane	40	U	40	18	ug/L			10/20/15 04:12	40
1,2-Dibromo-3-Chloropropane	80	U	80	33	ug/L			10/20/15 04:12	40
Ethylene Dibromide	40	U	40	13	ug/L			10/20/15 04:12	40
Dichlorodifluoromethane	40	U	40	13	ug/L			10/20/15 04:12	40
cis-1,2-Dichloroethene	**1000**		40	10	ug/L			10/20/15 04:12	40
trans-1,2-Dichloroethene	40	U	40	12	ug/L			10/20/15 04:12	40
Isopropylbenzene	40	U	40	14	ug/L			10/20/15 04:12	40
Methyl acetate	400	U	400	91	ug/L			10/20/15 04:12	40
Methyl tert-butyl ether	40	U	40	8.0	ug/L			10/20/15 04:12	40
1,1,2-Trichloro-1,2,2-trifluoroethane	40	U	40	18	ug/L			10/20/15 04:12	40
1,2,4-Trichlorobenzene	40	U	40	13	ug/L			10/20/15 04:12	40
1,2-Dichlorobenzene	40	U	40	10	ug/L			10/20/15 04:12	40
1,3-Dichlorobenzene	40	U	40	7.6	ug/L			10/20/15 04:12	40
1,4-Dichlorobenzene	40	U	40	11	ug/L			10/20/15 04:12	40
Trichlorofluoromethane	40	U	40	20	ug/L			10/20/15 04:12	40
Chlorodibromomethane	40	U	40	17	ug/L			10/20/15 04:12	40
Methylcyclohexane	40	U	40	17	ug/L			10/20/15 04:12	40

Client Sample ID: VAP-6-GW(30-35)

Date Collected: 10/08/15 11:15
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-8

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*78 - 125*		*10/20/15 04:12*	*40*
4-Bromofluorobenzene (Surr)	*96*		*61 - 120*		*10/20/15 04:12*	*40*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/20/15 04:12*	*40*
Dibromofluoromethane (Surr)	*92*		*79 - 120*		*10/20/15 04:12*	*40*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/12/15 09:30	10/14/15 17:53	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/12/15 09:30	10/14/15 17:53	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/12/15 09:30	10/14/15 17:53	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/12/15 09:30	10/14/15 17:53	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/12/15 09:30	10/14/15 17:53	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/12/15 09:30	10/14/15 17:53	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/12/15 09:30	10/14/15 17:53	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/12/15 09:30	10/14/15 17:53	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/12/15 09:30	10/14/15 17:53	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/12/15 09:30	10/14/15 17:53	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/12/15 09:30	10/14/15 17:53	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/12/15 09:30	10/14/15 17:53	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/12/15 09:30	10/14/15 17:53	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/12/15 09:30	10/14/15 17:53	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/12/15 09:30	10/14/15 17:53	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/12/15 09:30	10/14/15 17:53	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/12/15 09:30	10/14/15 17:53	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/12/15 09:30	10/14/15 17:53	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/12/15 09:30	10/14/15 17:53	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/12/15 09:30	10/14/15 17:53	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/12/15 09:30	10/14/15 17:53	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/12/15 09:30	10/14/15 17:53	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/12/15 09:30	10/14/15 17:53	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/12/15 09:30	10/14/15 17:53	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/12/15 09:30	10/14/15 17:53	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/12/15 09:30	10/14/15 17:53	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/12/15 09:30	10/14/15 17:53	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/12/15 09:30	10/14/15 17:53	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/12/15 09:30	10/14/15 17:53	1
Benzaldehyde	0.96	U	0.96	0.28	ug/L		10/12/15 09:30	10/14/15 17:53	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/12/15 09:30	10/14/15 17:53	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/12/15 09:30	10/14/15 17:53	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/12/15 09:30	10/14/15 17:53	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/12/15 09:30	10/14/15 17:53	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/12/15 09:30	10/14/15 17:53	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/12/15 09:30	10/14/15 17:53	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/12/15 09:30	10/14/15 17:53	1
Bis(2-ethylhexyl) phthalate	**1.5**	**J B**	1.9	1.5	ug/L		10/12/15 09:30	10/14/15 17:53	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/12/15 09:30	10/14/15 17:53	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/12/15 09:30	10/14/15 17:53	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/12/15 09:30	10/14/15 17:53	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/12/15 09:30	10/14/15 17:53	1
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/12/15 09:30	10/14/15 17:53	1

Client Sample ID: VAP-6-GW(30-35)

Date Collected: 10/08/15 11:15
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-8

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/12/15 09:30	10/14/15 17:53	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/12/15 09:30	10/14/15 17:53	1
Di-n-butyl phthalate	**0.87**	**J B**	0.96	0.38	ug/L		10/12/15 09:30	10/14/15 17:53	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/12/15 09:30	10/14/15 17:53	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/12/15 09:30	10/14/15 17:53	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/12/15 09:30	10/14/15 17:53	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/12/15 09:30	10/14/15 17:53	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/12/15 09:30	10/14/15 17:53	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/12/15 09:30	10/14/15 17:53	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/12/15 09:30	10/14/15 17:53	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/12/15 09:30	10/14/15 17:53	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/12/15 09:30	10/14/15 17:53	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/12/15 09:30	10/14/15 17:53	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/12/15 09:30	10/14/15 17:53	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/12/15 09:30	10/14/15 17:53	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/12/15 09:30	10/14/15 17:53	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/12/15 09:30	10/14/15 17:53	1
Phenol	0.96	U	0.96	0.14	ug/L		10/12/15 09:30	10/14/15 17:53	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/12/15 09:30	10/14/15 17:53	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/12/15 09:30	10/14/15 17:53	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/12/15 09:30	10/14/15 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*48*		*29 - 110*	*10/12/15 09:30*	*10/14/15 17:53*	*1*
2-Fluorophenol (Surr)	*43*		*15 - 110*	*10/12/15 09:30*	*10/14/15 17:53*	*1*
2,4,6-Tribromophenol (Surr)	*43*		*21 - 128*	*10/12/15 09:30*	*10/14/15 17:53*	*1*
Nitrobenzene-d5 (Surr)	*51*		*31 - 110*	*10/12/15 09:30*	*10/14/15 17:53*	*1*
Phenol-d5 (Surr)	*34*		*10 - 110*	*10/12/15 09:30*	*10/14/15 17:53*	*1*
Terphenyl-d14 (Surr)	*50*		*31 - 115*	*10/12/15 09:30*	*10/14/15 17:53*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**150**	**B**	19	1.4	ug/L		10/12/15 09:30	10/15/15 11:00	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*52*		*29 - 110*	*10/12/15 09:30*	*10/15/15 11:00*	*4*
2-Fluorophenol (Surr)	*47*		*15 - 110*	*10/12/15 09:30*	*10/15/15 11:00*	*4*
2,4,6-Tribromophenol (Surr)	*40*		*21 - 128*	*10/12/15 09:30*	*10/15/15 11:00*	*4*
Nitrobenzene-d5 (Surr)	*51*		*31 - 110*	*10/12/15 09:30*	*10/15/15 11:00*	*4*
Phenol-d5 (Surr)	*36*		*10 - 110*	*10/12/15 09:30*	*10/15/15 11:00*	*4*
Terphenyl-d14 (Surr)	*49*		*31 - 115*	*10/12/15 09:30*	*10/15/15 11:00*	*4*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10	U	10	2.9	ug/L		10/12/15 10:21	10/15/15 02:08	1
Barium	**69**	**J B**	200	1.0	ug/L		10/12/15 10:21	10/15/15 02:08	1
Cadmium	2.0	U	2.0	0.14	ug/L		10/12/15 10:21	10/15/15 02:08	1
Chromium	**5.1**		5.0	0.55	ug/L		10/12/15 10:21	10/15/15 02:08	1
Lead	3.0	U	3.0	1.9	ug/L		10/12/15 10:21	10/15/15 07:35	1
Selenium	5.0	U	5.0	4.0	ug/L		10/12/15 10:21	10/15/15 02:08	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-6-GW(30-35)
Date Collected: 10/08/15 11:15
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-8
Matrix: Water

Method: 6010B - Metals (ICP) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 10:21	10/15/15 02:08	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/12/15 14:00	10/14/15 11:22	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-6-GW(40-41)
Date Collected: 10/08/15 11:40
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	250	U	250	24	ug/L			10/20/15 04:35	25
Benzene	25	U F2	25	8.8	ug/L			10/20/15 04:35	25
Dichlorobromomethane	25	U	25	7.3	ug/L			10/20/15 04:35	25
Bromoform	25	U	25	14	ug/L			10/20/15 04:35	25
Bromomethane	25	U	25	11	ug/L			10/20/15 04:35	25
2-Butanone (MEK)	250	U F2	250	13	ug/L			10/20/15 04:35	25
Carbon disulfide	25	U	25	9.5	ug/L			10/20/15 04:35	25
Carbon tetrachloride	25	U F2	25	11	ug/L			10/20/15 04:35	25
Chlorobenzene	25	U F2	25	6.3	ug/L			10/20/15 04:35	25
Chloroethane	25	U	25	8.0	ug/L			10/20/15 04:35	25
Chloroform	25	U	25	6.3	ug/L			10/20/15 04:35	25
Chloromethane	25	U	25	11	ug/L			10/20/15 04:35	25
1,1-Dichloroethane	25	U	25	7.5	ug/L			10/20/15 04:35	25
1,2-Dichloroethane	25	U	25	5.8	ug/L			10/20/15 04:35	25
1,1-Dichloroethene	25	U	25	11	ug/L			10/20/15 04:35	25
1,2-Dichloropropane	25	U	25	6.3	ug/L			10/20/15 04:35	25
cis-1,3-Dichloropropene	25	U	25	12	ug/L			10/20/15 04:35	25
trans-1,3-Dichloropropene	25	U	25	14	ug/L			10/20/15 04:35	25
Ethylbenzene	25	U F2	25	6.3	ug/L			10/20/15 04:35	25
2-Hexanone	250	U	250	12	ug/L			10/20/15 04:35	25
Methylene Chloride	**17**	**J B**	25	8.3	ug/L			10/20/15 04:35	25
4-Methyl-2-pentanone (MIBK)	250	U	250	25	ug/L			10/20/15 04:35	25
Styrene	25	U	25	11	ug/L			10/20/15 04:35	25
1,1,2,2-Tetrachloroethane	25	U F2	25	5.5	ug/L			10/20/15 04:35	25
Tetrachloroethene	25	U F2	25	7.8	ug/L			10/20/15 04:35	25
Toluene	25	U F2	25	5.8	ug/L			10/20/15 04:35	25
Trichloroethene	**690**	**F1**	25	5.5	ug/L			10/20/15 04:35	25
Vinyl chloride	25	U	25	7.3	ug/L			10/20/15 04:35	25
Xylenes, Total	50	U F2	50	13	ug/L			10/20/15 04:35	25
1,1,1-Trichloroethane	25	U F2	25	11	ug/L			10/20/15 04:35	25
1,1,2-Trichloroethane	25	U	25	6.0	ug/L			10/20/15 04:35	25
Cyclohexane	25	U	25	11	ug/L			10/20/15 04:35	25
1,2-Dibromo-3-Chloropropane	50	U	50	21	ug/L			10/20/15 04:35	25
Ethylene Dibromide	25	U	25	8.0	ug/L			10/20/15 04:35	25
Dichlorodifluoromethane	25	U F2	25	8.0	ug/L			10/20/15 04:35	25
cis-1,2-Dichloroethene	**630**	**F1**	25	6.5	ug/L			10/20/15 04:35	25
trans-1,2-Dichloroethene	25	U	25	7.5	ug/L			10/20/15 04:35	25
Isopropylbenzene	25	U	25	8.8	ug/L			10/20/15 04:35	25
Methyl acetate	250	U F2	250	57	ug/L			10/20/15 04:35	25
Methyl tert-butyl ether	25	U F2	25	5.0	ug/L			10/20/15 04:35	25
1,1,2-Trichloro-1,2,2-trifluoroethane	25	U F2	25	11	ug/L			10/20/15 04:35	25
1,2,4-Trichlorobenzene	25	U	25	8.0	ug/L			10/20/15 04:35	25
1,2-Dichlorobenzene	25	U F2	25	6.3	ug/L			10/20/15 04:35	25
1,3-Dichlorobenzene	25	U F2	25	4.8	ug/L			10/20/15 04:35	25
1,4-Dichlorobenzene	25	U F2	25	6.8	ug/L			10/20/15 04:35	25
Trichlorofluoromethane	25	U F2	25	12	ug/L			10/20/15 04:35	25
Chlorodibromomethane	25	U	25	11	ug/L			10/20/15 04:35	25
Methylcyclohexane	25	U	25	11	ug/L			10/20/15 04:35	25

Client Sample ID: VAP-6-GW(40-41)

Date Collected: 10/08/15 11:40
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-9

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*78 - 125*		*10/20/15 04:35*	*25*
4-Bromofluorobenzene (Surr)	*94*		*61 - 120*		*10/20/15 04:35*	*25*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/20/15 04:35*	*25*
Dibromofluoromethane (Surr)	*95*		*79 - 120*		*10/20/15 04:35*	*25*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/12/15 09:30	10/14/15 18:16	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/12/15 09:30	10/14/15 18:16	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/12/15 09:30	10/14/15 18:16	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/12/15 09:30	10/14/15 18:16	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/12/15 09:30	10/14/15 18:16	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/12/15 09:30	10/14/15 18:16	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/12/15 09:30	10/14/15 18:16	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/12/15 09:30	10/14/15 18:16	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/12/15 09:30	10/14/15 18:16	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/12/15 09:30	10/14/15 18:16	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/12/15 09:30	10/14/15 18:16	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/12/15 09:30	10/14/15 18:16	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/12/15 09:30	10/14/15 18:16	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/12/15 09:30	10/14/15 18:16	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/12/15 09:30	10/14/15 18:16	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/12/15 09:30	10/14/15 18:16	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/12/15 09:30	10/14/15 18:16	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/12/15 09:30	10/14/15 18:16	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/12/15 09:30	10/14/15 18:16	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/12/15 09:30	10/14/15 18:16	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/12/15 09:30	10/14/15 18:16	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/12/15 09:30	10/14/15 18:16	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/12/15 09:30	10/14/15 18:16	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/12/15 09:30	10/14/15 18:16	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/12/15 09:30	10/14/15 18:16	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/12/15 09:30	10/14/15 18:16	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/12/15 09:30	10/14/15 18:16	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/12/15 09:30	10/14/15 18:16	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/12/15 09:30	10/14/15 18:16	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/12/15 09:30	10/14/15 18:16	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/12/15 09:30	10/14/15 18:16	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/12/15 09:30	10/14/15 18:16	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/12/15 09:30	10/14/15 18:16	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/12/15 09:30	10/14/15 18:16	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/12/15 09:30	10/14/15 18:16	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/12/15 09:30	10/14/15 18:16	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/12/15 09:30	10/14/15 18:16	1
Bis(2-ethylhexyl) phthalate	**1.7**	**J B**	2.0	1.5	ug/L		10/12/15 09:30	10/14/15 18:16	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/12/15 09:30	10/14/15 18:16	1
Caprolactam	**18**	**B**	5.0	0.37	ug/L		10/12/15 09:30	10/14/15 18:16	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/12/15 09:30	10/14/15 18:16	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/12/15 09:30	10/14/15 18:16	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/12/15 09:30	10/14/15 18:16	1

Client Sample ID: VAP-6-GW(40-41)

Date Collected: 10/08/15 11:40
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-9
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/12/15 09:30	10/14/15 18:16	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/12/15 09:30	10/14/15 18:16	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/12/15 09:30	10/14/15 18:16	1
Di-n-butyl phthalate	**0.84**	**J B**	1.0	0.40	ug/L		10/12/15 09:30	10/14/15 18:16	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/12/15 09:30	10/14/15 18:16	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/12/15 09:30	10/14/15 18:16	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/12/15 09:30	10/14/15 18:16	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/12/15 09:30	10/14/15 18:16	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/12/15 09:30	10/14/15 18:16	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/12/15 09:30	10/14/15 18:16	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/12/15 09:30	10/14/15 18:16	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/12/15 09:30	10/14/15 18:16	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/12/15 09:30	10/14/15 18:16	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/12/15 09:30	10/14/15 18:16	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/12/15 09:30	10/14/15 18:16	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/12/15 09:30	10/14/15 18:16	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/12/15 09:30	10/14/15 18:16	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/12/15 09:30	10/14/15 18:16	1
Phenol	1.0	U	1.0	0.15	ug/L		10/12/15 09:30	10/14/15 18:16	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/12/15 09:30	10/14/15 18:16	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/12/15 09:30	10/14/15 18:16	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/12/15 09:30	10/14/15 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*39*		*29 - 110*	*10/12/15 09:30*	*10/14/15 18:16*	*1*
2-Fluorophenol (Surr)	*37*		*15 - 110*	*10/12/15 09:30*	*10/14/15 18:16*	*1*
2,4,6-Tribromophenol (Surr)	*35*		*21 - 128*	*10/12/15 09:30*	*10/14/15 18:16*	*1*
Nitrobenzene-d5 (Surr)	*40*		*31 - 110*	*10/12/15 09:30*	*10/14/15 18:16*	*1*
Phenol-d5 (Surr)	*32*		*10 - 110*	*10/12/15 09:30*	*10/14/15 18:16*	*1*
Terphenyl-d14 (Surr)	*50*		*31 - 115*	*10/12/15 09:30*	*10/14/15 18:16*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.3**	**J**	10	2.9	ug/L		10/12/15 10:21	10/15/15 02:12	1
Barium	**180**	**J B**	200	1.0	ug/L		10/12/15 10:21	10/15/15 02:12	1
Cadmium	**0.19**	**J**	2.0	0.14	ug/L		10/12/15 10:21	10/15/15 02:12	1
Chromium	**53**		5.0	0.55	ug/L		10/12/15 10:21	10/15/15 02:12	1
Lead	**13**		3.0	1.9	ug/L		10/12/15 10:21	10/15/15 02:12	1
Selenium	5.0	U	5.0	4.0	ug/L		10/12/15 10:21	10/15/15 02:12	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 10:21	10/15/15 02:12	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.10**	**J**	0.20	0.090	ug/L		10/12/15 14:00	10/14/15 11:24	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-6-GW(45-46)
Date Collected: 10/08/15 12:23
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	40	U	40	3.8	ug/L			10/20/15 11:35	4
Benzene	4.0	U	4.0	1.4	ug/L			10/20/15 11:35	4
Dichlorobromomethane	4.0	U	4.0	1.2	ug/L			10/20/15 11:35	4
Bromoform	4.0	U	4.0	2.2	ug/L			10/20/15 11:35	4
Bromomethane	4.0	U	4.0	1.8	ug/L			10/20/15 11:35	4
2-Butanone (MEK)	40	U	40	2.1	ug/L			10/20/15 11:35	4
Carbon disulfide	4.0	U	4.0	1.5	ug/L			10/20/15 11:35	4
Carbon tetrachloride	4.0	U	4.0	1.7	ug/L			10/20/15 11:35	4
Chlorobenzene	4.0	U	4.0	1.0	ug/L			10/20/15 11:35	4
Chloroethane	4.0	U	4.0	1.3	ug/L			10/20/15 11:35	4
Chloroform	4.0	U	4.0	1.0	ug/L			10/20/15 11:35	4
Chloromethane	4.0	U	4.0	1.8	ug/L			10/20/15 11:35	4
1,1-Dichloroethane	4.0	U	4.0	1.2	ug/L			10/20/15 11:35	4
1,2-Dichloroethane	4.0	U	4.0	0.92	ug/L			10/20/15 11:35	4
1,1-Dichloroethene	4.0	U	4.0	1.8	ug/L			10/20/15 11:35	4
1,2-Dichloropropane	4.0	U	4.0	1.0	ug/L			10/20/15 11:35	4
cis-1,3-Dichloropropene	4.0	U	4.0	1.8	ug/L			10/20/15 11:35	4
trans-1,3-Dichloropropene	4.0	U	4.0	2.2	ug/L			10/20/15 11:35	4
Ethylbenzene	4.0	U	4.0	1.0	ug/L			10/20/15 11:35	4
2-Hexanone	40	U	40	1.9	ug/L			10/20/15 11:35	4
Methylene Chloride	4.0	U	4.0	1.3	ug/L			10/20/15 11:35	4
4-Methyl-2-pentanone (MIBK)	40	U	40	4.0	ug/L			10/20/15 11:35	4
Styrene	4.0	U	4.0	1.8	ug/L			10/20/15 11:35	4
1,1,2,2-Tetrachloroethane	4.0	U	4.0	0.88	ug/L			10/20/15 11:35	4
Tetrachloroethene	4.0	U	4.0	1.2	ug/L			10/20/15 11:35	4
Toluene	4.0	U	4.0	0.92	ug/L			10/20/15 11:35	4
Trichloroethene	**110**		4.0	0.88	ug/L			10/20/15 11:35	4
Vinyl chloride	4.0	U	4.0	1.2	ug/L			10/20/15 11:35	4
Xylenes, Total	8.0	U	8.0	2.1	ug/L			10/20/15 11:35	4
1,1,1-Trichloroethane	4.0	U	4.0	1.8	ug/L			10/20/15 11:35	4
1,1,2-Trichloroethane	4.0	U	4.0	0.96	ug/L			10/20/15 11:35	4
Cyclohexane	4.0	U	4.0	1.8	ug/L			10/20/15 11:35	4
1,2-Dibromo-3-Chloropropane	8.0	U	8.0	3.3	ug/L			10/20/15 11:35	4
Ethylene Dibromide	4.0	U	4.0	1.3	ug/L			10/20/15 11:35	4
Dichlorodifluoromethane	4.0	U	4.0	1.3	ug/L			10/20/15 11:35	4
cis-1,2-Dichloroethene	**76**		4.0	1.0	ug/L			10/20/15 11:35	4
trans-1,2-Dichloroethene	4.0	U	4.0	1.2	ug/L			10/20/15 11:35	4
Isopropylbenzene	4.0	U	4.0	1.4	ug/L			10/20/15 11:35	4
Methyl acetate	40	U	40	9.1	ug/L			10/20/15 11:35	4
Methyl tert-butyl ether	4.0	U	4.0	0.80	ug/L			10/20/15 11:35	4
1,1,2-Trichloro-1,2,2-trifluoroethane	4.0	U	4.0	1.8	ug/L			10/20/15 11:35	4
1,2,4-Trichlorobenzene	4.0	U	4.0	1.3	ug/L			10/20/15 11:35	4
1,2-Dichlorobenzene	4.0	U	4.0	1.0	ug/L			10/20/15 11:35	4
1,3-Dichlorobenzene	4.0	U	4.0	0.76	ug/L			10/20/15 11:35	4
1,4-Dichlorobenzene	4.0	U	4.0	1.1	ug/L			10/20/15 11:35	4
Trichlorofluoromethane	4.0	U	4.0	2.0	ug/L			10/20/15 11:35	4
Chlorodibromomethane	4.0	U	4.0	1.7	ug/L			10/20/15 11:35	4
Methylcyclohexane	4.0	U	4.0	1.7	ug/L			10/20/15 11:35	4

Client Sample ID: VAP-6-GW(45-46)

Date Collected: 10/08/15 12:23
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-10

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*78 - 125*		*10/20/15 11:35*	*4*
4-Bromofluorobenzene (Surr)	*94*		*61 - 120*		*10/20/15 11:35*	*4*
Toluene-d8 (Surr)	*92*		*80 - 120*		*10/20/15 11:35*	*4*
Dibromofluoromethane (Surr)	*107*		*79 - 120*		*10/20/15 11:35*	*4*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/12/15 09:30	10/14/15 18:39	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/12/15 09:30	10/14/15 18:39	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/12/15 09:30	10/14/15 18:39	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/12/15 09:30	10/14/15 18:39	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/12/15 09:30	10/14/15 18:39	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/12/15 09:30	10/14/15 18:39	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/12/15 09:30	10/14/15 18:39	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/12/15 09:30	10/14/15 18:39	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/12/15 09:30	10/14/15 18:39	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/12/15 09:30	10/14/15 18:39	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/12/15 09:30	10/14/15 18:39	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/12/15 09:30	10/14/15 18:39	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/12/15 09:30	10/14/15 18:39	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/12/15 09:30	10/14/15 18:39	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/12/15 09:30	10/14/15 18:39	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/12/15 09:30	10/14/15 18:39	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/12/15 09:30	10/14/15 18:39	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/12/15 09:30	10/14/15 18:39	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/12/15 09:30	10/14/15 18:39	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/12/15 09:30	10/14/15 18:39	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/12/15 09:30	10/14/15 18:39	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/12/15 09:30	10/14/15 18:39	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/12/15 09:30	10/14/15 18:39	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/12/15 09:30	10/14/15 18:39	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/12/15 09:30	10/14/15 18:39	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/12/15 09:30	10/14/15 18:39	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/12/15 09:30	10/14/15 18:39	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/12/15 09:30	10/14/15 18:39	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/12/15 09:30	10/14/15 18:39	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/12/15 09:30	10/14/15 18:39	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/12/15 09:30	10/14/15 18:39	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/12/15 09:30	10/14/15 18:39	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/12/15 09:30	10/14/15 18:39	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/12/15 09:30	10/14/15 18:39	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/12/15 09:30	10/14/15 18:39	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/12/15 09:30	10/14/15 18:39	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/12/15 09:30	10/14/15 18:39	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	1.5	ug/L		10/12/15 09:30	10/14/15 18:39	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/12/15 09:30	10/14/15 18:39	1
Caprolactam	**1.8**	**J B**	5.0	0.37	ug/L		10/12/15 09:30	10/14/15 18:39	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/12/15 09:30	10/14/15 18:39	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/12/15 09:30	10/14/15 18:39	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/12/15 09:30	10/14/15 18:39	1

Client Sample ID: VAP-6-GW(45-46)

Date Collected: 10/08/15 12:23
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-10

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/12/15 09:30	10/14/15 18:39	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/12/15 09:30	10/14/15 18:39	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/12/15 09:30	10/14/15 18:39	1
Di-n-butyl phthalate	**0.80**	**J B**	1.0	0.40	ug/L		10/12/15 09:30	10/14/15 18:39	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/12/15 09:30	10/14/15 18:39	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/12/15 09:30	10/14/15 18:39	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/12/15 09:30	10/14/15 18:39	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/12/15 09:30	10/14/15 18:39	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/12/15 09:30	10/14/15 18:39	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/12/15 09:30	10/14/15 18:39	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/12/15 09:30	10/14/15 18:39	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/12/15 09:30	10/14/15 18:39	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/12/15 09:30	10/14/15 18:39	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/12/15 09:30	10/14/15 18:39	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/12/15 09:30	10/14/15 18:39	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/12/15 09:30	10/14/15 18:39	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/12/15 09:30	10/14/15 18:39	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/12/15 09:30	10/14/15 18:39	1
Phenol	1.0	U	1.0	0.15	ug/L		10/12/15 09:30	10/14/15 18:39	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/12/15 09:30	10/14/15 18:39	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/12/15 09:30	10/14/15 18:39	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/12/15 09:30	10/14/15 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*13*	*X*	*29 - 110*	*10/12/15 09:30*	*10/14/15 18:39*	*1*
2-Fluorophenol (Surr)	*14*	*X*	*15 - 110*	*10/12/15 09:30*	*10/14/15 18:39*	*1*
2,4,6-Tribromophenol (Surr)	*10*	*X*	*21 - 128*	*10/12/15 09:30*	*10/14/15 18:39*	*1*
Nitrobenzene-d5 (Surr)	*16*	*X*	*31 - 110*	*10/12/15 09:30*	*10/14/15 18:39*	*1*
Phenol-d5 (Surr)	*12*		*10 - 110*	*10/12/15 09:30*	*10/14/15 18:39*	*1*
Terphenyl-d14 (Surr)	*11*	*X*	*31 - 115*	*10/12/15 09:30*	*10/14/15 18:39*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**77**		10	2.9	ug/L		10/12/15 10:21	10/15/15 02:24	1
Barium	**1400**	**B**	200	1.0	ug/L		10/12/15 10:21	10/15/15 02:24	1
Cadmium	**1.2**	**J**	2.0	0.14	ug/L		10/12/15 10:21	10/15/15 02:24	1
Chromium	**740**		5.0	0.55	ug/L		10/12/15 10:21	10/15/15 02:24	1
Lead	**180**		3.0	1.9	ug/L		10/12/15 10:21	10/15/15 02:24	1
Selenium	**54**		5.0	4.0	ug/L		10/12/15 10:21	10/15/15 02:24	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 10:21	10/15/15 02:24	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**3.0**		0.20	0.090	ug/L		10/12/15 14:00	10/14/15 11:31	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-6-GW(49-50)
Date Collected: 10/08/15 12:47
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/20/15 11:58	1
Benzene	1.0	U	1.0	0.35	ug/L			10/20/15 11:58	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/20/15 11:58	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/20/15 11:58	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/20/15 11:58	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/20/15 11:58	1
Carbon disulfide	**0.90**	**J**	1.0	0.38	ug/L			10/20/15 11:58	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/20/15 11:58	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 11:58	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/20/15 11:58	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/20/15 11:58	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/20/15 11:58	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/20/15 11:58	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/20/15 11:58	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/20/15 11:58	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/20/15 11:58	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/20/15 11:58	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/20/15 11:58	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/20/15 11:58	1
2-Hexanone	10	U	10	0.48	ug/L			10/20/15 11:58	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/20/15 11:58	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/20/15 11:58	1
Styrene	1.0	U	1.0	0.45	ug/L			10/20/15 11:58	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/20/15 11:58	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/20/15 11:58	1
Toluene	1.0	U	1.0	0.23	ug/L			10/20/15 11:58	1
Trichloroethene	**6.5**		1.0	0.22	ug/L			10/20/15 11:58	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/20/15 11:58	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/20/15 11:58	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/20/15 11:58	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/20/15 11:58	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/20/15 11:58	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/20/15 11:58	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/20/15 11:58	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/20/15 11:58	1
cis-1,2-Dichloroethene	**3.5**		1.0	0.26	ug/L			10/20/15 11:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/20/15 11:58	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/20/15 11:58	1
Methyl acetate	10	U	10	2.3	ug/L			10/20/15 11:58	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/20/15 11:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/20/15 11:58	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/20/15 11:58	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 11:58	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/20/15 11:58	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/20/15 11:58	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/20/15 11:58	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/20/15 11:58	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/20/15 11:58	1

Client Sample ID: VAP-6-GW(49-50)

Date Collected: 10/08/15 12:47
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-11

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*78 - 125*		*10/20/15 11:58*	*1*
4-Bromofluorobenzene (Surr)	*90*		*61 - 120*		*10/20/15 11:58*	*1*
Toluene-d8 (Surr)	*86*		*80 - 120*		*10/20/15 11:58*	*1*
Dibromofluoromethane (Surr)	*102*		*79 - 120*		*10/20/15 11:58*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 11:23	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/12/15 09:34	10/15/15 11:23	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/12/15 09:34	10/15/15 11:23	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/12/15 09:34	10/15/15 11:23	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/12/15 09:34	10/15/15 11:23	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/12/15 09:34	10/15/15 11:23	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/12/15 09:34	10/15/15 11:23	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/12/15 09:34	10/15/15 11:23	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/12/15 09:34	10/15/15 11:23	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 11:23	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/12/15 09:34	10/15/15 11:23	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/12/15 09:34	10/15/15 11:23	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/12/15 09:34	10/15/15 11:23	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/12/15 09:34	10/15/15 11:23	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/12/15 09:34	10/15/15 11:23	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/12/15 09:34	10/15/15 11:23	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/12/15 09:34	10/15/15 11:23	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/12/15 09:34	10/15/15 11:23	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/12/15 09:34	10/15/15 11:23	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/12/15 09:34	10/15/15 11:23	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/12/15 09:34	10/15/15 11:23	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/12/15 09:34	10/15/15 11:23	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/12/15 09:34	10/15/15 11:23	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/12/15 09:34	10/15/15 11:23	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/12/15 09:34	10/15/15 11:23	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/12/15 09:34	10/15/15 11:23	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/15/15 11:23	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/12/15 09:34	10/15/15 11:23	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 11:23	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/12/15 09:34	10/15/15 11:23	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/12/15 09:34	10/15/15 11:23	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/12/15 09:34	10/15/15 11:23	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/12/15 09:34	10/15/15 11:23	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/12/15 09:34	10/15/15 11:23	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/12/15 09:34	10/15/15 11:23	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/12/15 09:34	10/15/15 11:23	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/12/15 09:34	10/15/15 11:23	1
Bis(2-ethylhexyl) phthalate	**1.8**	**J B**	2.0	1.5	ug/L		10/12/15 09:34	10/15/15 11:23	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/12/15 09:34	10/15/15 11:23	1
Caprolactam	**1.3**	**J B**	5.0	0.37	ug/L		10/12/15 09:34	10/15/15 11:23	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/12/15 09:34	10/15/15 11:23	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/12/15 09:34	10/15/15 11:23	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/12/15 09:34	10/15/15 11:23	1

Client Sample ID: VAP-6-GW(49-50)
Date Collected: 10/08/15 12:47
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-11
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/15/15 11:23	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/12/15 09:34	10/15/15 11:23	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/12/15 09:34	10/15/15 11:23	1
Di-n-butyl phthalate	**0.86**	**J B**	1.0	0.40	ug/L		10/12/15 09:34	10/15/15 11:23	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/12/15 09:34	10/15/15 11:23	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/12/15 09:34	10/15/15 11:23	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/12/15 09:34	10/15/15 11:23	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 11:23	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/15/15 11:23	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/12/15 09:34	10/15/15 11:23	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/12/15 09:34	10/15/15 11:23	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/12/15 09:34	10/15/15 11:23	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/12/15 09:34	10/15/15 11:23	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/12/15 09:34	10/15/15 11:23	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 11:23	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/12/15 09:34	10/15/15 11:23	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/12/15 09:34	10/15/15 11:23	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/12/15 09:34	10/15/15 11:23	1
Phenol	1.0	U *	1.0	0.15	ug/L		10/12/15 09:34	10/15/15 11:23	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/12/15 09:34	10/15/15 11:23	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/12/15 09:34	10/15/15 11:23	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/12/15 09:34	10/15/15 11:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*58*		*29 - 110*	*10/12/15 09:34*	*10/15/15 11:23*	*1*
2-Fluorophenol (Surr)	*56*		*15 - 110*	*10/12/15 09:34*	*10/15/15 11:23*	*1*
2,4,6-Tribromophenol (Surr)	*47*		*21 - 128*	*10/12/15 09:34*	*10/15/15 11:23*	*1*
Nitrobenzene-d5 (Surr)	*60*		*31 - 110*	*10/12/15 09:34*	*10/15/15 11:23*	*1*
Phenol-d5 (Surr)	*45*		*10 - 110*	*10/12/15 09:34*	*10/15/15 11:23*	*1*
Terphenyl-d14 (Surr)	*54*		*31 - 115*	*10/12/15 09:34*	*10/15/15 11:23*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**9.3**	**J**	10	2.9	ug/L		10/12/15 10:21	10/15/15 02:28	1
Barium	**340**	**B**	200	1.0	ug/L		10/12/15 10:21	10/15/15 02:28	1
Cadmium	**1.0**	**J**	2.0	0.14	ug/L		10/12/15 10:21	10/15/15 02:28	1
Chromium	**160**		5.0	0.55	ug/L		10/12/15 10:21	10/15/15 02:28	1
Lead	**92**		3.0	1.9	ug/L		10/12/15 10:21	10/15/15 02:28	1
Selenium	**42**		5.0	4.0	ug/L		10/12/15 10:21	10/15/15 02:28	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 10:21	10/15/15 02:28	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.21**		0.20	0.090	ug/L		10/12/15 14:00	10/14/15 10:38	1

Client Sample ID: DUP-02(100815)

Date Collected: 10/08/15 00:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-12

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	500	U	500	47	ug/L			10/20/15 12:20	50
Benzene	50	U	50	18	ug/L			10/20/15 12:20	50
Dichlorobromomethane	50	U	50	15	ug/L			10/20/15 12:20	50
Bromoform	50	U	50	28	ug/L			10/20/15 12:20	50
Bromomethane	50	U	50	22	ug/L			10/20/15 12:20	50
2-Butanone (MEK)	500	U	500	27	ug/L			10/20/15 12:20	50
Carbon disulfide	50	U	50	19	ug/L			10/20/15 12:20	50
Carbon tetrachloride	50	U	50	22	ug/L			10/20/15 12:20	50
Chlorobenzene	50	U	50	13	ug/L			10/20/15 12:20	50
Chloroethane	50	U	50	16	ug/L			10/20/15 12:20	50
Chloroform	50	U	50	13	ug/L			10/20/15 12:20	50
Chloromethane	50	U	50	22	ug/L			10/20/15 12:20	50
1,1-Dichloroethane	50	U	50	15	ug/L			10/20/15 12:20	50
1,2-Dichloroethane	50	U	50	12	ug/L			10/20/15 12:20	50
1,1-Dichloroethene	50	U	50	23	ug/L			10/20/15 12:20	50
1,2-Dichloropropane	50	U	50	13	ug/L			10/20/15 12:20	50
cis-1,3-Dichloropropene	50	U	50	23	ug/L			10/20/15 12:20	50
trans-1,3-Dichloropropene	50	U	50	28	ug/L			10/20/15 12:20	50
Ethylbenzene	50	U	50	13	ug/L			10/20/15 12:20	50
2-Hexanone	500	U	500	24	ug/L			10/20/15 12:20	50
Methylene Chloride	50	U	50	17	ug/L			10/20/15 12:20	50
4-Methyl-2-pentanone (MIBK)	500	U	500	50	ug/L			10/20/15 12:20	50
Styrene	50	U	50	23	ug/L			10/20/15 12:20	50
1,1,2,2-Tetrachloroethane	50	U	50	11	ug/L			10/20/15 12:20	50
Tetrachloroethene	50	U	50	16	ug/L			10/20/15 12:20	50
Toluene	50	U	50	12	ug/L			10/20/15 12:20	50
Trichloroethene	**1600**		50	11	ug/L			10/20/15 12:20	50
Vinyl chloride	50	U	50	15	ug/L			10/20/15 12:20	50
Xylenes, Total	100	U	100	26	ug/L			10/20/15 12:20	50
1,1,1-Trichloroethane	50	U	50	22	ug/L			10/20/15 12:20	50
1,1,2-Trichloroethane	50	U	50	12	ug/L			10/20/15 12:20	50
Cyclohexane	50	U	50	23	ug/L			10/20/15 12:20	50
1,2-Dibromo-3-Chloropropane	100	U	100	41	ug/L			10/20/15 12:20	50
Ethylene Dibromide	50	U	50	16	ug/L			10/20/15 12:20	50
Dichlorodifluoromethane	50	U	50	16	ug/L			10/20/15 12:20	50
cis-1,2-Dichloroethene	**1300**		50	13	ug/L			10/20/15 12:20	50
trans-1,2-Dichloroethene	**21**	**J**	50	15	ug/L			10/20/15 12:20	50
Isopropylbenzene	50	U	50	18	ug/L			10/20/15 12:20	50
Methyl acetate	500	U	500	110	ug/L			10/20/15 12:20	50
Methyl tert-butyl ether	50	U	50	10	ug/L			10/20/15 12:20	50
1,1,2-Trichloro-1,2,2-trifluoroethane	50	U	50	23	ug/L			10/20/15 12:20	50
1,2,4-Trichlorobenzene	50	U	50	16	ug/L			10/20/15 12:20	50
1,2-Dichlorobenzene	50	U	50	13	ug/L			10/20/15 12:20	50
1,3-Dichlorobenzene	50	U	50	9.5	ug/L			10/20/15 12:20	50
1,4-Dichlorobenzene	50	U	50	14	ug/L			10/20/15 12:20	50
Trichlorofluoromethane	50	U	50	25	ug/L			10/20/15 12:20	50
Chlorodibromomethane	50	U	50	22	ug/L			10/20/15 12:20	50
Methylcyclohexane	50	U	50	22	ug/L			10/20/15 12:20	50

Client Sample ID: DUP-02(100815)

Date Collected: 10/08/15 00:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-12

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*78 - 125*		*10/20/15 12:20*	*50*
4-Bromofluorobenzene (Surr)	*89*		*61 - 120*		*10/20/15 12:20*	*50*
Toluene-d8 (Surr)	*90*		*80 - 120*		*10/20/15 12:20*	*50*
Dibromofluoromethane (Surr)	*106*		*79 - 120*		*10/20/15 12:20*	*50*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/12/15 09:34	10/15/15 11:47	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/12/15 09:34	10/15/15 11:47	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/12/15 09:34	10/15/15 11:47	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/12/15 09:34	10/15/15 11:47	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/12/15 09:34	10/15/15 11:47	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/12/15 09:34	10/15/15 11:47	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/12/15 09:34	10/15/15 11:47	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/12/15 09:34	10/15/15 11:47	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/12/15 09:34	10/15/15 11:47	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/12/15 09:34	10/15/15 11:47	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/12/15 09:34	10/15/15 11:47	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/12/15 09:34	10/15/15 11:47	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/12/15 09:34	10/15/15 11:47	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/12/15 09:34	10/15/15 11:47	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/12/15 09:34	10/15/15 11:47	1
3,3'-Dichlorobenzidine	4.6	U	4.6	0.33	ug/L		10/12/15 09:34	10/15/15 11:47	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/12/15 09:34	10/15/15 11:47	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/12/15 09:34	10/15/15 11:47	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/12/15 09:34	10/15/15 11:47	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/12/15 09:34	10/15/15 11:47	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/12/15 09:34	10/15/15 11:47	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/12/15 09:34	10/15/15 11:47	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/12/15 09:34	10/15/15 11:47	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/12/15 09:34	10/15/15 11:47	1
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/12/15 09:34	10/15/15 11:47	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/12/15 09:34	10/15/15 11:47	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/12/15 09:34	10/15/15 11:47	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/12/15 09:34	10/15/15 11:47	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/12/15 09:34	10/15/15 11:47	1
Benzaldehyde	0.93	U	0.93	0.27	ug/L		10/12/15 09:34	10/15/15 11:47	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/12/15 09:34	10/15/15 11:47	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/12/15 09:34	10/15/15 11:47	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/12/15 09:34	10/15/15 11:47	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/12/15 09:34	10/15/15 11:47	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/12/15 09:34	10/15/15 11:47	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/12/15 09:34	10/15/15 11:47	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/12/15 09:34	10/15/15 11:47	1
Bis(2-ethylhexyl) phthalate	**2.2**	**B**	1.9	1.4	ug/L		10/12/15 09:34	10/15/15 11:47	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/12/15 09:34	10/15/15 11:47	1
Caprolactam	**31**	**B**	4.6	0.34	ug/L		10/12/15 09:34	10/15/15 11:47	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/12/15 09:34	10/15/15 11:47	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/12/15 09:34	10/15/15 11:47	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/12/15 09:34	10/15/15 11:47	1

Client Sample ID: DUP-02(100815)

Date Collected: 10/08/15 00:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-12

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/12/15 09:34	10/15/15 11:47	1
Diethyl phthalate	**0.30**	**J**	0.93	0.12	ug/L		10/12/15 09:34	10/15/15 11:47	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/12/15 09:34	10/15/15 11:47	1
Di-n-butyl phthalate	**1.3**	**B**	0.93	0.37	ug/L		10/12/15 09:34	10/15/15 11:47	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/12/15 09:34	10/15/15 11:47	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/12/15 09:34	10/15/15 11:47	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/12/15 09:34	10/15/15 11:47	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/12/15 09:34	10/15/15 11:47	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/12/15 09:34	10/15/15 11:47	1
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/12/15 09:34	10/15/15 11:47	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/12/15 09:34	10/15/15 11:47	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/12/15 09:34	10/15/15 11:47	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/12/15 09:34	10/15/15 11:47	1
Naphthalene	**0.21**		0.19	0.040	ug/L		10/12/15 09:34	10/15/15 11:47	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/12/15 09:34	10/15/15 11:47	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/12/15 09:34	10/15/15 11:47	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/12/15 09:34	10/15/15 11:47	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/12/15 09:34	10/15/15 11:47	1
Phenol	0.93	U *	0.93	0.14	ug/L		10/12/15 09:34	10/15/15 11:47	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/12/15 09:34	10/15/15 11:47	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/12/15 09:34	10/15/15 11:47	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/12/15 09:34	10/15/15 11:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*53*		*29 - 110*	*10/12/15 09:34*	*10/15/15 11:47*	*1*
2-Fluorophenol (Surr)	*52*		*15 - 110*	*10/12/15 09:34*	*10/15/15 11:47*	*1*
2,4,6-Tribromophenol (Surr)	*46*		*21 - 128*	*10/12/15 09:34*	*10/15/15 11:47*	*1*
Nitrobenzene-d5 (Surr)	*54*		*31 - 110*	*10/12/15 09:34*	*10/15/15 11:47*	*1*
Phenol-d5 (Surr)	*43*		*10 - 110*	*10/12/15 09:34*	*10/15/15 11:47*	*1*
Terphenyl-d14 (Surr)	*39*		*31 - 115*	*10/12/15 09:34*	*10/15/15 11:47*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**12**		10	2.9	ug/L		10/12/15 10:21	10/15/15 02:32	1
Barium	**250**	**B**	200	1.0	ug/L		10/12/15 10:21	10/15/15 02:32	1
Cadmium	**0.43**	**J**	2.0	0.14	ug/L		10/12/15 10:21	10/15/15 02:32	1
Chromium	**92**		5.0	0.55	ug/L		10/12/15 10:21	10/15/15 02:32	1
Lead	**31**		3.0	1.9	ug/L		10/12/15 10:21	10/15/15 02:32	1
Selenium	5.0	U	5.0	4.0	ug/L		10/12/15 10:21	10/15/15 02:32	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 10:21	10/15/15 02:32	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/12/15 14:00	10/14/15 10:44	1

Client Sample ID: VAP-8-(1-2)
Date Collected: 10/08/15 13:35
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-13
Matrix: Solid
Percent Solids: 81.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**22**	**B ***	18	1.5	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Benzene	4.6	U	4.6	0.22	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Dichlorobromomethane	4.6	U	4.6	0.19	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Bromoform	4.6	U	4.6	0.35	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Bromomethane	4.6	U	4.6	0.65	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
2-Butanone (MEK)	**3.6**	**J B**	18	0.44	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Carbon disulfide	4.6	U	4.6	0.31	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Carbon tetrachloride	4.6	U	4.6	0.30	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Chlorobenzene	4.6	U	4.6	0.27	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Chloroethane	4.6	U	4.6	0.31	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Chloroform	4.6	U	4.6	0.19	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Chloromethane	4.6	U	4.6	1.2	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
1,1-Dichloroethane	4.6	U	4.6	1.1	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
1,2-Dichloroethane	4.6	U	4.6	0.18	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
1,1-Dichloroethene	4.6	U	4.6	0.45	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
1,2-Dichloropropane	4.6	U	4.6	0.26	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
cis-1,3-Dichloropropene	4.6	U	4.6	0.25	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
trans-1,3-Dichloropropene	4.6	U	4.6	0.19	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Ethylbenzene	4.6	U	4.6	0.29	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
2-Hexanone	18	U	18	0.64	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Methylene Chloride	4.6	U	4.6	0.97	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
4-Methyl-2-pentanone (MIBK)	18	U	18	0.27	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Styrene	4.6	U	4.6	0.25	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
1,1,2,2-Tetrachloroethane	4.6	U	4.6	0.15	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Tetrachloroethene	4.6	U	4.6	0.30	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Toluene	4.6	U	4.6	0.25	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Trichloroethene	4.6	U	4.6	0.24	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Vinyl chloride	4.6	U	4.6	0.36	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Xylenes, Total	9.2	U	9.2	0.58	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
1,1,1-Trichloroethane	4.6	U	4.6	0.24	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
1,1,2-Trichloroethane	4.6	U	4.6	0.45	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Cyclohexane	9.2	U	9.2	0.27	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
1,2-Dibromo-3-Chloropropane	9.2	U	9.2	1.7	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Ethylene Dibromide	4.6	U	4.6	0.23	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Dichlorodifluoromethane	4.6	U	4.6	0.37	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
cis-1,2-Dichloroethene	4.6	U	4.6	0.26	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
trans-1,2-Dichloroethene	4.6	U	4.6	0.34	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Isopropylbenzene	4.6	U	4.6	0.28	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Methyl acetate	9.2	U *	9.2	2.1	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Methyl tert-butyl ether	4.6	U	4.6	0.14	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	4.6	U	4.6	0.36	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
1,2,4-Trichlorobenzene	4.6	U	4.6	0.36	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
1,2-Dichlorobenzene	4.6	U	4.6	0.35	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
1,3-Dichlorobenzene	4.6	U	4.6	0.37	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
1,4-Dichlorobenzene	4.6	U	4.6	0.38	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Trichlorofluoromethane	4.6	U	4.6	0.24	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Chlorodibromomethane	4.6	U	4.6	0.15	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1
Methylcyclohexane	9.2	U	9.2	0.30	ug/Kg	☼	10/13/15 12:14	10/14/15 08:51	1

Client Sample ID: VAP-8-(1-2)
Date Collected: 10/08/15 13:35
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-13
Matrix: Solid
Percent Solids: 81.3

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 120*	*10/13/15 12:14*	*10/14/15 08:51*	*1*
4-Bromofluorobenzene (Surr)	*116*		*64 - 130*	*10/13/15 12:14*	*10/14/15 08:51*	*1*
Toluene-d8 (Surr)	*100*		*69 - 128*	*10/13/15 12:14*	*10/14/15 08:51*	*1*
Dibromofluoromethane (Surr)	*98*		*68 - 120*	*10/13/15 12:14*	*10/14/15 08:51*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	61	U	61	4.3	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
bis (2-chloroisopropyl) ether	120	U	120	12	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
2,4,5-Trichlorophenol	180	U	180	31	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
2,4,6-Trichlorophenol	180	U	180	11	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
2,4-Dichlorophenol	180	U	180	24	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
2,4-Dimethylphenol	180	U	180	24	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
2,4-Dinitrophenol	400	U	400	26	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
2,4-Dinitrotoluene	240	U	240	21	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
2,6-Dinitrotoluene	240	U	240	26	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
2-Chloronaphthalene	61	U	61	0.55	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
2-Chlorophenol	61	U	61	10	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
2-Methylnaphthalene	8.2	U	8.2	0.61	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
2-Methylphenol	240	U	240	13	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
2-Nitroaniline	240	U	240	11	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
2-Nitrophenol	61	U	61	10	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
3,3'-Dichlorobenzidine	120	U	120	22	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
3-Nitroaniline	240	U	240	20	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
4,6-Dinitro-2-methylphenol	180	U	180	11	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
4-Bromophenyl phenyl ether	61	U	61	16	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
4-Chloro-3-methylphenol	180	U	180	26	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
4-Chloroaniline	180	U	180	21	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
4-Chlorophenyl phenyl ether	61	U	61	16	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
4-Nitroaniline	240	U	240	32	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
4-Nitrophenol	400	U	400	21	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Acenaphthene	8.2	U	8.2	0.93	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Acenaphthylene	8.2	U	8.2	0.43	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Acetophenone	120	U	120	11	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Anthracene	8.2	U	8.2	0.96	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Atrazine	240	U	240	11	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Benzaldehyde	120	U	120	15	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Benzo[a]anthracene	8.2	U	8.2	0.77	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Benzo[a]pyrene	8.2	U	8.2	0.78	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Benzo[b]fluoranthene	8.2	U	8.2	0.72	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Benzo[g,h,i]perylene	8.2	U	8.2	0.43	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Benzo[k]fluoranthene	8.2	U	8.2	0.83	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Bis(2-chloroethoxy)methane	120	U	120	27	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Bis(2-chloroethyl)ether	120	U	120	2.4	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Bis(2-ethylhexyl) phthalate	86	U	86	23	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Butyl benzyl phthalate	86	U	86	12	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Caprolactam	**290**	**J**	400	45	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Carbazole	61	U	61	33	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Chrysene	8.2	U	8.2	1.3	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Dibenz(a,h)anthracene	8.2	U	8.2	0.81	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1

Client Sample ID: VAP-8-(1-2)

Date Collected: 10/08/15 13:35
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-13

Matrix: Solid
Percent Solids: 81.3

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	61	U	61	0.81	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Diethyl phthalate	86	U	86	20	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Dimethyl phthalate	86	U	86	21	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Di-n-butyl phthalate	86	U	86	18	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Di-n-octyl phthalate	86	U	86	9.7	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Fluoranthene	8.2	U	8.2	0.67	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Fluorene	8.2	U	8.2	0.65	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Hexachlorobenzene	8.2	U	8.2	2.6	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Hexachlorobutadiene	61	U	61	6.9	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Hexachlorocyclopentadiene	400	U	400	9.9	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Hexachloroethane	61	U	61	11	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Indeno[1,2,3-cd]pyrene	8.2	U	8.2	0.43	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Isophorone	61	U	61	16	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Naphthalene	8.2	U	8.2	1.0	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Nitrobenzene	120	U	120	2.7	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
N-Nitrosodi-n-propylamine	61	U	61	7.7	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
N-Nitrosodiphenylamine	61	U	61	26	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Pentachlorophenol	180	U	180	11	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Phenol	61	U	61	8.9	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Phenanthrene	8.2	U	8.2	0.89	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
Pyrene	8.2	U	8.2	0.54	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1
3 & 4 Methylphenol	490	U	490	24	ug/Kg	☼	10/13/15 08:07	10/15/15 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*70*		*24 - 110*	*10/13/15 08:07*	*10/15/15 19:03*	*1*
2-Fluorophenol (Surr)	*67*		*24 - 110*	*10/13/15 08:07*	*10/15/15 19:03*	*1*
2,4,6-Tribromophenol (Surr)	*29*		*10 - 110*	*10/13/15 08:07*	*10/15/15 19:03*	*1*
Nitrobenzene-d5 (Surr)	*65*		*20 - 110*	*10/13/15 08:07*	*10/15/15 19:03*	*1*
Phenol-d5 (Surr)	*69*		*26 - 110*	*10/13/15 08:07*	*10/15/15 19:03*	*1*
Terphenyl-d14 (Surr)	*77*		*36 - 110*	*10/13/15 08:07*	*10/15/15 19:03*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**8.9**		1.0	0.42	mg/Kg	☼	10/12/15 11:32	10/13/15 18:50	1
Barium	**45**		20	0.42	mg/Kg	☼	10/12/15 11:32	10/13/15 18:50	1
Cadmium	**0.054**	**J B**	0.20	0.022	mg/Kg	☼	10/12/15 11:32	10/13/15 18:50	1
Chromium	**12**	**B**	0.51	0.077	mg/Kg	☼	10/12/15 11:32	10/13/15 18:50	1
Lead	**12**	**B**	0.31	0.20	mg/Kg	☼	10/12/15 11:32	10/13/15 18:50	1
Selenium	0.51	U	0.51	0.35	mg/Kg	☼	10/12/15 11:32	10/13/15 18:50	1
Silver	**0.18**	**J**	0.51	0.065	mg/Kg	☼	10/12/15 11:32	10/13/15 18:50	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.041**	**J**	0.13	0.018	mg/Kg	☼	10/12/15 17:25	10/13/15 09:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	**0.47**	**J**	0.98	0.32	mg/Kg	☼	10/19/15 11:20	10/20/15 11:22	1
Percent Solids	**81**		0.10	0.10	%			10/12/15 10:38	1
Percent Moisture	**19**		0.10	0.10	%			10/12/15 10:38	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-8-GW(18-19)
Date Collected: 10/08/15 14:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-14
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	33	U	33	3.1	ug/L			10/20/15 12:43	3.33
Benzene	3.3	U	3.3	1.2	ug/L			10/20/15 12:43	3.33
Dichlorobromomethane	3.3	U	3.3	0.97	ug/L			10/20/15 12:43	3.33
Bromoform	3.3	U	3.3	1.9	ug/L			10/20/15 12:43	3.33
Bromomethane	3.3	U	3.3	1.5	ug/L			10/20/15 12:43	3.33
2-Butanone (MEK)	33	U	33	1.8	ug/L			10/20/15 12:43	3.33
Carbon disulfide	3.3	U	3.3	1.3	ug/L			10/20/15 12:43	3.33
Carbon tetrachloride	3.3	U	3.3	1.4	ug/L			10/20/15 12:43	3.33
Chlorobenzene	3.3	U	3.3	0.83	ug/L			10/20/15 12:43	3.33
Chloroethane	3.3	U	3.3	1.1	ug/L			10/20/15 12:43	3.33
Chloroform	3.3	U	3.3	0.83	ug/L			10/20/15 12:43	3.33
Chloromethane	3.3	U	3.3	1.5	ug/L			10/20/15 12:43	3.33
1,1-Dichloroethane	3.3	U	3.3	1.0	ug/L			10/20/15 12:43	3.33
1,2-Dichloroethane	3.3	U	3.3	0.77	ug/L			10/20/15 12:43	3.33
1,1-Dichloroethene	3.3	U	3.3	1.5	ug/L			10/20/15 12:43	3.33
1,2-Dichloropropane	3.3	U	3.3	0.83	ug/L			10/20/15 12:43	3.33
cis-1,3-Dichloropropene	3.3	U	3.3	1.5	ug/L			10/20/15 12:43	3.33
trans-1,3-Dichloropropene	3.3	U	3.3	1.9	ug/L			10/20/15 12:43	3.33
Ethylbenzene	3.3	U	3.3	0.83	ug/L			10/20/15 12:43	3.33
2-Hexanone	33	U	33	1.6	ug/L			10/20/15 12:43	3.33
Methylene Chloride	3.3	U	3.3	1.1	ug/L			10/20/15 12:43	3.33
4-Methyl-2-pentanone (MIBK)	33	U	33	3.3	ug/L			10/20/15 12:43	3.33
Styrene	3.3	U	3.3	1.5	ug/L			10/20/15 12:43	3.33
1,1,2,2-Tetrachloroethane	3.3	U	3.3	0.73	ug/L			10/20/15 12:43	3.33
Tetrachloroethene	3.3	U	3.3	1.0	ug/L			10/20/15 12:43	3.33
Toluene	3.3	U	3.3	0.77	ug/L			10/20/15 12:43	3.33
Trichloroethene	**39**		3.3	0.73	ug/L			10/20/15 12:43	3.33
Vinyl chloride	3.3	U	3.3	0.97	ug/L			10/20/15 12:43	3.33
Xylenes, Total	6.7	U	6.7	1.7	ug/L			10/20/15 12:43	3.33
1,1,1-Trichloroethane	3.3	U	3.3	1.5	ug/L			10/20/15 12:43	3.33
1,1,2-Trichloroethane	3.3	U	3.3	0.80	ug/L			10/20/15 12:43	3.33
Cyclohexane	3.3	U	3.3	1.5	ug/L			10/20/15 12:43	3.33
1,2-Dibromo-3-Chloropropane	6.7	U	6.7	2.7	ug/L			10/20/15 12:43	3.33
Ethylene Dibromide	3.3	U	3.3	1.1	ug/L			10/20/15 12:43	3.33
Dichlorodifluoromethane	3.3	U	3.3	1.1	ug/L			10/20/15 12:43	3.33
cis-1,2-Dichloroethene	**85**		3.3	0.87	ug/L			10/20/15 12:43	3.33
trans-1,2-Dichloroethene	3.3	U	3.3	1.0	ug/L			10/20/15 12:43	3.33
Isopropylbenzene	3.3	U	3.3	1.2	ug/L			10/20/15 12:43	3.33
Methyl acetate	33	U	33	7.6	ug/L			10/20/15 12:43	3.33
Methyl tert-butyl ether	3.3	U	3.3	0.67	ug/L			10/20/15 12:43	3.33
1,1,2-Trichloro-1,2,2-trifluoroethane	3.3	U	3.3	1.5	ug/L			10/20/15 12:43	3.33
1,2,4-Trichlorobenzene	3.3	U	3.3	1.1	ug/L			10/20/15 12:43	3.33
1,2-Dichlorobenzene	3.3	U	3.3	0.83	ug/L			10/20/15 12:43	3.33
1,3-Dichlorobenzene	3.3	U	3.3	0.63	ug/L			10/20/15 12:43	3.33
1,4-Dichlorobenzene	3.3	U	3.3	0.90	ug/L			10/20/15 12:43	3.33
Trichlorofluoromethane	3.3	U	3.3	1.6	ug/L			10/20/15 12:43	3.33
Chlorodibromomethane	3.3	U	3.3	1.4	ug/L			10/20/15 12:43	3.33
Methylcyclohexane	3.3	U	3.3	1.4	ug/L			10/20/15 12:43	3.33

Client Sample ID: VAP-8-GW(18-19)

Date Collected: 10/08/15 14:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-14

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*78 - 125*		*10/20/15 12:43*	*3.33*
4-Bromofluorobenzene (Surr)	*94*		*61 - 120*		*10/20/15 12:43*	*3.33*
Toluene-d8 (Surr)	*93*		*80 - 120*		*10/20/15 12:43*	*3.33*
Dibromofluoromethane (Surr)	*115*		*79 - 120*		*10/20/15 12:43*	*3.33*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 12:10	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/12/15 09:34	10/15/15 12:10	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/12/15 09:34	10/15/15 12:10	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/12/15 09:34	10/15/15 12:10	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/12/15 09:34	10/15/15 12:10	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/12/15 09:34	10/15/15 12:10	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/12/15 09:34	10/15/15 12:10	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/12/15 09:34	10/15/15 12:10	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/12/15 09:34	10/15/15 12:10	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 12:10	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/12/15 09:34	10/15/15 12:10	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/12/15 09:34	10/15/15 12:10	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/12/15 09:34	10/15/15 12:10	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/12/15 09:34	10/15/15 12:10	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/12/15 09:34	10/15/15 12:10	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/12/15 09:34	10/15/15 12:10	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/12/15 09:34	10/15/15 12:10	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/12/15 09:34	10/15/15 12:10	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/12/15 09:34	10/15/15 12:10	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/12/15 09:34	10/15/15 12:10	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/12/15 09:34	10/15/15 12:10	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/12/15 09:34	10/15/15 12:10	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/12/15 09:34	10/15/15 12:10	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/12/15 09:34	10/15/15 12:10	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/12/15 09:34	10/15/15 12:10	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/12/15 09:34	10/15/15 12:10	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/15/15 12:10	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/12/15 09:34	10/15/15 12:10	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 12:10	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/12/15 09:34	10/15/15 12:10	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/12/15 09:34	10/15/15 12:10	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/12/15 09:34	10/15/15 12:10	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/12/15 09:34	10/15/15 12:10	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/12/15 09:34	10/15/15 12:10	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/12/15 09:34	10/15/15 12:10	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/12/15 09:34	10/15/15 12:10	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/12/15 09:34	10/15/15 12:10	1
Bis(2-ethylhexyl) phthalate	**1.9**	**J B**	2.0	1.5	ug/L		10/12/15 09:34	10/15/15 12:10	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/12/15 09:34	10/15/15 12:10	1
Caprolactam	**75**	**B**	5.0	0.37	ug/L		10/12/15 09:34	10/15/15 12:10	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/12/15 09:34	10/15/15 12:10	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/12/15 09:34	10/15/15 12:10	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/12/15 09:34	10/15/15 12:10	1

Client Sample ID: VAP-8-GW(18-19)
Date Collected: 10/08/15 14:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-14
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/15/15 12:10	1
Diethyl phthalate	**0.23**	**J**	1.0	0.13	ug/L		10/12/15 09:34	10/15/15 12:10	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/12/15 09:34	10/15/15 12:10	1
Di-n-butyl phthalate	**1.2**	**B**	1.0	0.40	ug/L		10/12/15 09:34	10/15/15 12:10	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/12/15 09:34	10/15/15 12:10	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/12/15 09:34	10/15/15 12:10	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/12/15 09:34	10/15/15 12:10	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 12:10	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/15/15 12:10	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/12/15 09:34	10/15/15 12:10	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/12/15 09:34	10/15/15 12:10	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/12/15 09:34	10/15/15 12:10	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/12/15 09:34	10/15/15 12:10	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/12/15 09:34	10/15/15 12:10	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 12:10	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/12/15 09:34	10/15/15 12:10	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/12/15 09:34	10/15/15 12:10	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/12/15 09:34	10/15/15 12:10	1
Phenol	1.0	U *	1.0	0.15	ug/L		10/12/15 09:34	10/15/15 12:10	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/12/15 09:34	10/15/15 12:10	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/12/15 09:34	10/15/15 12:10	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/12/15 09:34	10/15/15 12:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*26*	*X*	*29 - 110*	*10/12/15 09:34*	*10/15/15 12:10*	*1*
2-Fluorophenol (Surr)	*30*		*15 - 110*	*10/12/15 09:34*	*10/15/15 12:10*	*1*
2,4,6-Tribromophenol (Surr)	*25*		*21 - 128*	*10/12/15 09:34*	*10/15/15 12:10*	*1*
Nitrobenzene-d5 (Surr)	*30*	*X*	*31 - 110*	*10/12/15 09:34*	*10/15/15 12:10*	*1*
Phenol-d5 (Surr)	*24*		*10 - 110*	*10/12/15 09:34*	*10/15/15 12:10*	*1*
Terphenyl-d14 (Surr)	*17*	*X*	*31 - 115*	*10/12/15 09:34*	*10/15/15 12:10*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.3	U H	1.3	0.16	ug/L		10/19/15 09:03	10/20/15 14:13	1
bis (2-chloroisopropyl) ether	1.3	U H	1.3	0.23	ug/L		10/19/15 09:03	10/20/15 14:13	1
2,4,5-Trichlorophenol	6.3	U H	6.3	0.46	ug/L		10/19/15 09:03	10/20/15 14:13	1
2,4,6-Trichlorophenol	6.3	U H	6.3	0.33	ug/L		10/19/15 09:03	10/20/15 14:13	1
2,4-Dichlorophenol	2.5	U H	2.5	0.37	ug/L		10/19/15 09:03	10/20/15 14:13	1
2,4-Dimethylphenol	2.5	U H	2.5	0.39	ug/L		10/19/15 09:03	10/20/15 14:13	1
2,4-Dinitrophenol	50	U H	50	7.7	ug/L		10/19/15 09:03	10/20/15 14:13	1
2,4-Dinitrotoluene	6.3	U H	6.3	0.32	ug/L		10/19/15 09:03	10/20/15 14:13	1
2,6-Dinitrotoluene	6.3	U H	6.3	0.29	ug/L		10/19/15 09:03	10/20/15 14:13	1
2-Chloronaphthalene	1.3	U H	1.3	0.14	ug/L		10/19/15 09:03	10/20/15 14:13	1
2-Chlorophenol	1.3	U H	1.3	0.17	ug/L		10/19/15 09:03	10/20/15 14:13	1
2-Methylnaphthalene	0.25	U H	0.25	0.046	ug/L		10/19/15 09:03	10/20/15 14:13	1
2-Methylphenol	1.3	U H	1.3	0.24	ug/L		10/19/15 09:03	10/20/15 14:13	1
2-Nitroaniline	2.5	U H	2.5	0.39	ug/L		10/19/15 09:03	10/20/15 14:13	1
2-Nitrophenol	2.5	U H	2.5	0.26	ug/L		10/19/15 09:03	10/20/15 14:13	1
3,3'-Dichlorobenzidine	6.3	U H *	6.3	0.44	ug/L		10/19/15 09:03	10/20/15 14:13	1
3-Nitroaniline	2.5	U H	2.5	0.33	ug/L		10/19/15 09:03	10/20/15 14:13	1

Client Sample ID: VAP-8-GW(18-19)
Date Collected: 10/08/15 14:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-14
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	6.3	U H	6.3	0.66	ug/L		10/19/15 09:03	10/20/15 14:13	1
4-Bromophenyl phenyl ether	2.5	U H	2.5	0.43	ug/L		10/19/15 09:03	10/20/15 14:13	1
4-Chloro-3-methylphenol	2.5	U H	2.5	0.35	ug/L		10/19/15 09:03	10/20/15 14:13	1
4-Chloroaniline	2.5	U H *	2.5	0.19	ug/L		10/19/15 09:03	10/20/15 14:13	1
4-Chlorophenyl phenyl ether	2.5	U H	2.5	0.37	ug/L		10/19/15 09:03	10/20/15 14:13	1
4-Nitroaniline	2.5	U H	2.5	0.30	ug/L		10/19/15 09:03	10/20/15 14:13	1
4-Nitrophenol	6.3	U H	6.3	0.73	ug/L		10/19/15 09:03	10/20/15 14:13	1
Acenaphthene	0.25	U H	0.25	0.055	ug/L		10/19/15 09:03	10/20/15 14:13	1
Acenaphthylene	0.25	U H	0.25	0.025	ug/L		10/19/15 09:03	10/20/15 14:13	1
Acetophenone	1.3	U H	1.3	0.18	ug/L		10/19/15 09:03	10/20/15 14:13	1
Anthracene	0.25	U H	0.25	0.039	ug/L		10/19/15 09:03	10/20/15 14:13	1
Atrazine	1.3	U H	1.3	0.15	ug/L		10/19/15 09:03	10/20/15 14:13	1
Benzaldehyde	1.3	U H *	1.3	0.37	ug/L		10/19/15 09:03	10/20/15 14:13	1
Benzo[a]anthracene	0.25	U H	0.25	0.074	ug/L		10/19/15 09:03	10/20/15 14:13	1
Benzo[a]pyrene	0.25	U H	0.25	0.038	ug/L		10/19/15 09:03	10/20/15 14:13	1
Benzo[b]fluoranthene	0.25	U H	0.25	0.074	ug/L		10/19/15 09:03	10/20/15 14:13	1
Benzo[g,h,i]perylene	0.25	U H	0.25	0.063	ug/L		10/19/15 09:03	10/20/15 14:13	1
Benzo[k]fluoranthene	0.25	U H	0.25	0.060	ug/L		10/19/15 09:03	10/20/15 14:13	1
Bis(2-chloroethoxy)methane	1.3	U H	1.3	0.046	ug/L		10/19/15 09:03	10/20/15 14:13	1
Bis(2-chloroethyl)ether	1.3	U H	1.3	0.24	ug/L		10/19/15 09:03	10/20/15 14:13	1
Bis(2-ethylhexyl) phthalate	2.5	U H	2.5	1.9	ug/L		10/19/15 09:03	10/20/15 14:13	1
Butyl benzyl phthalate	1.3	U H	1.3	0.27	ug/L		10/19/15 09:03	10/20/15 14:13	1
Carbazole	1.3	U H	1.3	0.13	ug/L		10/19/15 09:03	10/20/15 14:13	1
Chrysene	0.25	U H	0.25	0.044	ug/L		10/19/15 09:03	10/20/15 14:13	1
Dibenz(a,h)anthracene	0.25	U H	0.25	0.050	ug/L		10/19/15 09:03	10/20/15 14:13	1
Dibenzofuran	1.3	U H	1.3	0.17	ug/L		10/19/15 09:03	10/20/15 14:13	1
Diethyl phthalate	**0.65**	**J H**	1.3	0.16	ug/L		10/19/15 09:03	10/20/15 14:13	1
Dimethyl phthalate	1.3	U H	1.3	0.13	ug/L		10/19/15 09:03	10/20/15 14:13	1
Di-n-butyl phthalate	**0.72**	**J H B**	1.3	0.50	ug/L		10/19/15 09:03	10/20/15 14:13	1
Di-n-octyl phthalate	1.3	U H	1.3	0.46	ug/L		10/19/15 09:03	10/20/15 14:13	1
Fluoranthene	0.25	U H	0.25	0.034	ug/L		10/19/15 09:03	10/20/15 14:13	1
Fluorene	0.25	U H	0.25	0.043	ug/L		10/19/15 09:03	10/20/15 14:13	1
Hexachlorobenzene	1.3	U H	1.3	0.14	ug/L		10/19/15 09:03	10/20/15 14:13	1
Hexachlorobutadiene	1.3	U H	1.3	0.18	ug/L		10/19/15 09:03	10/20/15 14:13	1
Hexachlorocyclopentadiene	13	U H	13	3.1	ug/L		10/19/15 09:03	10/20/15 14:13	1
Hexachloroethane	1.3	U H	1.3	0.27	ug/L		10/19/15 09:03	10/20/15 14:13	1
Indeno[1,2,3-cd]pyrene	0.25	U H	0.25	0.060	ug/L		10/19/15 09:03	10/20/15 14:13	1
Isophorone	1.3	U H	1.3	0.053	ug/L		10/19/15 09:03	10/20/15 14:13	1
Naphthalene	0.25	U H	0.25	0.054	ug/L		10/19/15 09:03	10/20/15 14:13	1
Nitrobenzene	1.3	U H	1.3	0.15	ug/L		10/19/15 09:03	10/20/15 14:13	1
N-Nitrosodi-n-propylamine	1.3	U H	1.3	0.20	ug/L		10/19/15 09:03	10/20/15 14:13	1
N-Nitrosodiphenylamine	1.3	U H	1.3	0.14	ug/L		10/19/15 09:03	10/20/15 14:13	1
Pentachlorophenol	50	U H	50	6.8	ug/L		10/19/15 09:03	10/20/15 14:13	1
Phenol	1.3	U H	1.3	0.19	ug/L		10/19/15 09:03	10/20/15 14:13	1
Phenanthrene	0.25	U H	0.25	0.039	ug/L		10/19/15 09:03	10/20/15 14:13	1
Pyrene	0.25	U H	0.25	0.035	ug/L		10/19/15 09:03	10/20/15 14:13	1
3 & 4 Methylphenol	2.5	U H	2.5	0.42	ug/L		10/19/15 09:03	10/20/15 14:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*68*		*29 - 110*	*10/19/15 09:03*	*10/20/15 14:13*	*1*

Client Sample ID: VAP-8-GW(18-19)
Date Collected: 10/08/15 14:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-14
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*44*		*15 - 110*	*10/19/15 09:03*	*10/20/15 14:13*	*1*
2,4,6-Tribromophenol (Surr)	*62*		*21 - 128*	*10/19/15 09:03*	*10/20/15 14:13*	*1*
Nitrobenzene-d5 (Surr)	*67*		*31 - 110*	*10/19/15 09:03*	*10/20/15 14:13*	*1*
Phenol-d5 (Surr)	*33*		*10 - 110*	*10/19/15 09:03*	*10/20/15 14:13*	*1*
Terphenyl-d14 (Surr)	*70*		*31 - 115*	*10/19/15 09:03*	*10/20/15 14:13*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RERA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**270**	**H B**	31	2.3	ug/L		10/19/15 09:03	10/21/15 17:33	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*66*		*29 - 110*	*10/19/15 09:03*	*10/21/15 17:33*	*5*
2-Fluorophenol (Surr)	*43*		*15 - 110*	*10/19/15 09:03*	*10/21/15 17:33*	*5*
2,4,6-Tribromophenol (Surr)	*30*		*21 - 128*	*10/19/15 09:03*	*10/21/15 17:33*	*5*
Nitrobenzene-d5 (Surr)	*62*		*31 - 110*	*10/19/15 09:03*	*10/21/15 17:33*	*5*
Phenol-d5 (Surr)	*26*		*10 - 110*	*10/19/15 09:03*	*10/21/15 17:33*	*5*
Terphenyl-d14 (Surr)	*66*		*31 - 115*	*10/19/15 09:03*	*10/21/15 17:33*	*5*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**26**		10	2.9	ug/L		10/12/15 10:21	10/15/15 02:36	1
Barium	**680**	**B**	200	1.0	ug/L		10/12/15 10:21	10/15/15 02:36	1
Cadmium	**0.70**	**J**	2.0	0.14	ug/L		10/12/15 10:21	10/15/15 02:36	1
Chromium	**200**		5.0	0.55	ug/L		10/12/15 10:21	10/15/15 02:36	1
Lead	**70**		3.0	1.9	ug/L		10/12/15 10:21	10/15/15 02:36	1
Selenium	5.0	U	5.0	4.0	ug/L		10/12/15 10:21	10/15/15 02:36	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 10:21	10/15/15 02:36	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.31**		0.20	0.090	ug/L		10/12/15 14:00	10/14/15 10:47	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-8-GW(20-21)
Date Collected: 10/08/15 14:40
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-15
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	25	2.4	ug/L			10/20/15 13:05	2.5
Benzene	2.5	U	2.5	0.88	ug/L			10/20/15 13:05	2.5
Dichlorobromomethane	2.5	U	2.5	0.73	ug/L			10/20/15 13:05	2.5
Bromoform	2.5	U	2.5	1.4	ug/L			10/20/15 13:05	2.5
Bromomethane	2.5	U	2.5	1.1	ug/L			10/20/15 13:05	2.5
2-Butanone (MEK)	25	U	25	1.3	ug/L			10/20/15 13:05	2.5
Carbon disulfide	2.5	U	2.5	0.95	ug/L			10/20/15 13:05	2.5
Carbon tetrachloride	2.5	U	2.5	1.1	ug/L			10/20/15 13:05	2.5
Chlorobenzene	2.5	U	2.5	0.63	ug/L			10/20/15 13:05	2.5
Chloroethane	2.5	U	2.5	0.80	ug/L			10/20/15 13:05	2.5
Chloroform	2.5	U	2.5	0.63	ug/L			10/20/15 13:05	2.5
Chloromethane	2.5	U	2.5	1.1	ug/L			10/20/15 13:05	2.5
1,1-Dichloroethane	2.5	U	2.5	0.75	ug/L			10/20/15 13:05	2.5
1,2-Dichloroethane	2.5	U	2.5	0.58	ug/L			10/20/15 13:05	2.5
1,1-Dichloroethene	2.5	U	2.5	1.1	ug/L			10/20/15 13:05	2.5
1,2-Dichloropropane	2.5	U	2.5	0.63	ug/L			10/20/15 13:05	2.5
cis-1,3-Dichloropropene	2.5	U	2.5	1.2	ug/L			10/20/15 13:05	2.5
trans-1,3-Dichloropropene	2.5	U	2.5	1.4	ug/L			10/20/15 13:05	2.5
Ethylbenzene	2.5	U	2.5	0.63	ug/L			10/20/15 13:05	2.5
2-Hexanone	25	U	25	1.2	ug/L			10/20/15 13:05	2.5
Methylene Chloride	2.5	U	2.5	0.83	ug/L			10/20/15 13:05	2.5
4-Methyl-2-pentanone (MIBK)	25	U	25	2.5	ug/L			10/20/15 13:05	2.5
Styrene	2.5	U	2.5	1.1	ug/L			10/20/15 13:05	2.5
1,1,2,2-Tetrachloroethane	2.5	U	2.5	0.55	ug/L			10/20/15 13:05	2.5
Tetrachloroethene	2.5	U	2.5	0.78	ug/L			10/20/15 13:05	2.5
Toluene	2.5	U	2.5	0.58	ug/L			10/20/15 13:05	2.5
Trichloroethene	**31**		2.5	0.55	ug/L			10/20/15 13:05	2.5
Vinyl chloride	2.5	U	2.5	0.73	ug/L			10/20/15 13:05	2.5
Xylenes, Total	5.0	U	5.0	1.3	ug/L			10/20/15 13:05	2.5
1,1,1-Trichloroethane	2.5	U	2.5	1.1	ug/L			10/20/15 13:05	2.5
1,1,2-Trichloroethane	2.5	U	2.5	0.60	ug/L			10/20/15 13:05	2.5
Cyclohexane	2.5	U	2.5	1.1	ug/L			10/20/15 13:05	2.5
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	2.1	ug/L			10/20/15 13:05	2.5
Ethylene Dibromide	2.5	U	2.5	0.80	ug/L			10/20/15 13:05	2.5
Dichlorodifluoromethane	2.5	U	2.5	0.80	ug/L			10/20/15 13:05	2.5
cis-1,2-Dichloroethene	**63**		2.5	0.65	ug/L			10/20/15 13:05	2.5
trans-1,2-Dichloroethene	2.5	U	2.5	0.75	ug/L			10/20/15 13:05	2.5
Isopropylbenzene	2.5	U	2.5	0.88	ug/L			10/20/15 13:05	2.5
Methyl acetate	25	U	25	5.7	ug/L			10/20/15 13:05	2.5
Methyl tert-butyl ether	2.5	U	2.5	0.50	ug/L			10/20/15 13:05	2.5
1,1,2-Trichloro-1,2,2-trifluoroethane	2.5	U	2.5	1.1	ug/L			10/20/15 13:05	2.5
1,2,4-Trichlorobenzene	2.5	U	2.5	0.80	ug/L			10/20/15 13:05	2.5
1,2-Dichlorobenzene	2.5	U	2.5	0.63	ug/L			10/20/15 13:05	2.5
1,3-Dichlorobenzene	2.5	U	2.5	0.48	ug/L			10/20/15 13:05	2.5
1,4-Dichlorobenzene	2.5	U	2.5	0.68	ug/L			10/20/15 13:05	2.5
Trichlorofluoromethane	2.5	U	2.5	1.2	ug/L			10/20/15 13:05	2.5
Chlorodibromomethane	2.5	U	2.5	1.1	ug/L			10/20/15 13:05	2.5
Methylcyclohexane	2.5	U	2.5	1.1	ug/L			10/20/15 13:05	2.5

Client Sample ID: VAP-8-GW(20-21)

Date Collected: 10/08/15 14:40
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-15

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*78 - 125*		*10/20/15 13:05*	*2.5*
4-Bromofluorobenzene (Surr)	*96*		*61 - 120*		*10/20/15 13:05*	*2.5*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/20/15 13:05*	*2.5*
Dibromofluoromethane (Surr)	*109*		*79 - 120*		*10/20/15 13:05*	*2.5*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 12:33	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/12/15 09:34	10/15/15 12:33	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/12/15 09:34	10/15/15 12:33	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/12/15 09:34	10/15/15 12:33	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/12/15 09:34	10/15/15 12:33	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/12/15 09:34	10/15/15 12:33	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/12/15 09:34	10/15/15 12:33	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/12/15 09:34	10/15/15 12:33	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/12/15 09:34	10/15/15 12:33	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 12:33	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/12/15 09:34	10/15/15 12:33	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/12/15 09:34	10/15/15 12:33	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/12/15 09:34	10/15/15 12:33	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/12/15 09:34	10/15/15 12:33	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/12/15 09:34	10/15/15 12:33	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/12/15 09:34	10/15/15 12:33	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/12/15 09:34	10/15/15 12:33	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/12/15 09:34	10/15/15 12:33	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/12/15 09:34	10/15/15 12:33	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/12/15 09:34	10/15/15 12:33	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/12/15 09:34	10/15/15 12:33	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/12/15 09:34	10/15/15 12:33	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/12/15 09:34	10/15/15 12:33	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/12/15 09:34	10/15/15 12:33	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/12/15 09:34	10/15/15 12:33	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/12/15 09:34	10/15/15 12:33	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/15/15 12:33	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/12/15 09:34	10/15/15 12:33	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 12:33	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/12/15 09:34	10/15/15 12:33	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/12/15 09:34	10/15/15 12:33	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/12/15 09:34	10/15/15 12:33	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/12/15 09:34	10/15/15 12:33	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/12/15 09:34	10/15/15 12:33	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/12/15 09:34	10/15/15 12:33	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/12/15 09:34	10/15/15 12:33	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/12/15 09:34	10/15/15 12:33	1
Bis(2-ethylhexyl) phthalate	**1.7**	**J B**	2.0	1.5	ug/L		10/12/15 09:34	10/15/15 12:33	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/12/15 09:34	10/15/15 12:33	1
Caprolactam	**33**	**B**	5.0	0.37	ug/L		10/12/15 09:34	10/15/15 12:33	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/12/15 09:34	10/15/15 12:33	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/12/15 09:34	10/15/15 12:33	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/12/15 09:34	10/15/15 12:33	1

Client Sample ID: VAP-8-GW(20-21)
Date Collected: 10/08/15 14:40
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-15
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/15/15 12:33	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/12/15 09:34	10/15/15 12:33	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/12/15 09:34	10/15/15 12:33	1
Di-n-butyl phthalate	**0.71**	**J B**	1.0	0.40	ug/L		10/12/15 09:34	10/15/15 12:33	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/12/15 09:34	10/15/15 12:33	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/12/15 09:34	10/15/15 12:33	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/12/15 09:34	10/15/15 12:33	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 12:33	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/15/15 12:33	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/12/15 09:34	10/15/15 12:33	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/12/15 09:34	10/15/15 12:33	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/12/15 09:34	10/15/15 12:33	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/12/15 09:34	10/15/15 12:33	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/12/15 09:34	10/15/15 12:33	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 12:33	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/12/15 09:34	10/15/15 12:33	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/12/15 09:34	10/15/15 12:33	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/12/15 09:34	10/15/15 12:33	1
Phenol	1.0	U *	1.0	0.15	ug/L		10/12/15 09:34	10/15/15 12:33	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/12/15 09:34	10/15/15 12:33	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/12/15 09:34	10/15/15 12:33	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/12/15 09:34	10/15/15 12:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*22*	*X*	*29 - 110*	*10/12/15 09:34*	*10/15/15 12:33*	*1*
2-Fluorophenol (Surr)	*29*		*15 - 110*	*10/12/15 09:34*	*10/15/15 12:33*	*1*
2,4,6-Tribromophenol (Surr)	*21*		*21 - 128*	*10/12/15 09:34*	*10/15/15 12:33*	*1*
Nitrobenzene-d5 (Surr)	*28*	*X*	*31 - 110*	*10/12/15 09:34*	*10/15/15 12:33*	*1*
Phenol-d5 (Surr)	*24*		*10 - 110*	*10/12/15 09:34*	*10/15/15 12:33*	*1*
Terphenyl-d14 (Surr)	*17*	*X*	*31 - 115*	*10/12/15 09:34*	*10/15/15 12:33*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.3	U H	1.3	0.16	ug/L		10/19/15 09:03	10/20/15 14:37	1
bis (2-chloroisopropyl) ether	1.3	U H	1.3	0.24	ug/L		10/19/15 09:03	10/20/15 14:37	1
2,4,5-Trichlorophenol	6.6	U H	6.6	0.48	ug/L		10/19/15 09:03	10/20/15 14:37	1
2,4,6-Trichlorophenol	6.6	U H	6.6	0.34	ug/L		10/19/15 09:03	10/20/15 14:37	1
2,4-Dichlorophenol	2.6	U H	2.6	0.39	ug/L		10/19/15 09:03	10/20/15 14:37	1
2,4-Dimethylphenol	2.6	U H	2.6	0.41	ug/L		10/19/15 09:03	10/20/15 14:37	1
2,4-Dinitrophenol	53	U H	53	8.1	ug/L		10/19/15 09:03	10/20/15 14:37	1
2,4-Dinitrotoluene	6.6	U H	6.6	0.34	ug/L		10/19/15 09:03	10/20/15 14:37	1
2,6-Dinitrotoluene	6.6	U H	6.6	0.31	ug/L		10/19/15 09:03	10/20/15 14:37	1
2-Chloronaphthalene	1.3	U H	1.3	0.15	ug/L		10/19/15 09:03	10/20/15 14:37	1
2-Chlorophenol	1.3	U H	1.3	0.17	ug/L		10/19/15 09:03	10/20/15 14:37	1
2-Methylnaphthalene	0.26	U H	0.26	0.049	ug/L		10/19/15 09:03	10/20/15 14:37	1
2-Methylphenol	1.3	U H	1.3	0.25	ug/L		10/19/15 09:03	10/20/15 14:37	1
2-Nitroaniline	2.6	U H	2.6	0.41	ug/L		10/19/15 09:03	10/20/15 14:37	1
2-Nitrophenol	2.6	U H	2.6	0.27	ug/L		10/19/15 09:03	10/20/15 14:37	1
3,3'-Dichlorobenzidine	6.6	U H *	6.6	0.46	ug/L		10/19/15 09:03	10/20/15 14:37	1
3-Nitroaniline	2.6	U H	2.6	0.35	ug/L		10/19/15 09:03	10/20/15 14:37	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-8-GW(20-21)
Date Collected: 10/08/15 14:40
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-15
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	6.6	U H	6.6	0.69	ug/L		10/19/15 09:03	10/20/15 14:37	1
4-Bromophenyl phenyl ether	2.6	U H	2.6	0.46	ug/L		10/19/15 09:03	10/20/15 14:37	1
4-Chloro-3-methylphenol	2.6	U H	2.6	0.37	ug/L		10/19/15 09:03	10/20/15 14:37	1
4-Chloroaniline	2.6	U H *	2.6	0.20	ug/L		10/19/15 09:03	10/20/15 14:37	1
4-Chlorophenyl phenyl ether	2.6	U H	2.6	0.39	ug/L		10/19/15 09:03	10/20/15 14:37	1
4-Nitroaniline	2.6	U H	2.6	0.32	ug/L		10/19/15 09:03	10/20/15 14:37	1
4-Nitrophenol	6.6	U H	6.6	0.77	ug/L		10/19/15 09:03	10/20/15 14:37	1
Acenaphthene	0.26	U H	0.26	0.058	ug/L		10/19/15 09:03	10/20/15 14:37	1
Acenaphthylene	0.26	U H	0.26	0.026	ug/L		10/19/15 09:03	10/20/15 14:37	1
Acetophenone	1.3	U H	1.3	0.18	ug/L		10/19/15 09:03	10/20/15 14:37	1
Anthracene	0.26	U H	0.26	0.041	ug/L		10/19/15 09:03	10/20/15 14:37	1
Atrazine	1.3	U H	1.3	0.15	ug/L		10/19/15 09:03	10/20/15 14:37	1
Benzaldehyde	1.3	U H *	1.3	0.39	ug/L		10/19/15 09:03	10/20/15 14:37	1
Benzo[a]anthracene	0.26	U H	0.26	0.078	ug/L		10/19/15 09:03	10/20/15 14:37	1
Benzo[a]pyrene	0.26	U H	0.26	0.039	ug/L		10/19/15 09:03	10/20/15 14:37	1
Benzo[b]fluoranthene	0.26	U H	0.26	0.078	ug/L		10/19/15 09:03	10/20/15 14:37	1
Benzo[g,h,i]perylene	0.26	U H	0.26	0.066	ug/L		10/19/15 09:03	10/20/15 14:37	1
Benzo[k]fluoranthene	0.26	U H	0.26	0.063	ug/L		10/19/15 09:03	10/20/15 14:37	1
Bis(2-chloroethoxy)methane	1.3	U H	1.3	0.049	ug/L		10/19/15 09:03	10/20/15 14:37	1
Bis(2-chloroethyl)ether	1.3	U H	1.3	0.25	ug/L		10/19/15 09:03	10/20/15 14:37	1
Bis(2-ethylhexyl) phthalate	2.6	U H	2.6	2.0	ug/L		10/19/15 09:03	10/20/15 14:37	1
Butyl benzyl phthalate	1.3	U H	1.3	0.28	ug/L		10/19/15 09:03	10/20/15 14:37	1
Caprolactam	**16**	**H B**	6.6	0.49	ug/L		10/19/15 09:03	10/20/15 14:37	1
Carbazole	1.3	U H	1.3	0.14	ug/L		10/19/15 09:03	10/20/15 14:37	1
Chrysene	0.26	U H	0.26	0.046	ug/L		10/19/15 09:03	10/20/15 14:37	1
Dibenz(a,h)anthracene	0.26	U H	0.26	0.053	ug/L		10/19/15 09:03	10/20/15 14:37	1
Dibenzofuran	1.3	U H	1.3	0.18	ug/L		10/19/15 09:03	10/20/15 14:37	1
Diethyl phthalate	**0.51**	**J H**	1.3	0.16	ug/L		10/19/15 09:03	10/20/15 14:37	1
Dimethyl phthalate	1.3	U H	1.3	0.13	ug/L		10/19/15 09:03	10/20/15 14:37	1
Di-n-butyl phthalate	**0.84**	**J H B**	1.3	0.52	ug/L		10/19/15 09:03	10/20/15 14:37	1
Di-n-octyl phthalate	1.3	U H	1.3	0.48	ug/L		10/19/15 09:03	10/20/15 14:37	1
Fluoranthene	0.26	U H	0.26	0.036	ug/L		10/19/15 09:03	10/20/15 14:37	1
Fluorene	0.26	U H	0.26	0.045	ug/L		10/19/15 09:03	10/20/15 14:37	1
Hexachlorobenzene	1.3	U H	1.3	0.15	ug/L		10/19/15 09:03	10/20/15 14:37	1
Hexachlorobutadiene	1.3	U H	1.3	0.19	ug/L		10/19/15 09:03	10/20/15 14:37	1
Hexachlorocyclopentadiene	13	U H	13	3.3	ug/L		10/19/15 09:03	10/20/15 14:37	1
Hexachloroethane	1.3	U H	1.3	0.29	ug/L		10/19/15 09:03	10/20/15 14:37	1
Indeno[1,2,3-cd]pyrene	0.26	U H	0.26	0.063	ug/L		10/19/15 09:03	10/20/15 14:37	1
Isophorone	1.3	U H	1.3	0.055	ug/L		10/19/15 09:03	10/20/15 14:37	1
Naphthalene	0.26	U H	0.26	0.057	ug/L		10/19/15 09:03	10/20/15 14:37	1
Nitrobenzene	1.3	U H	1.3	0.15	ug/L		10/19/15 09:03	10/20/15 14:37	1
N-Nitrosodi-n-propylamine	1.3	U H	1.3	0.21	ug/L		10/19/15 09:03	10/20/15 14:37	1
N-Nitrosodiphenylamine	1.3	U H	1.3	0.15	ug/L		10/19/15 09:03	10/20/15 14:37	1
Pentachlorophenol	53	U H	53	7.2	ug/L		10/19/15 09:03	10/20/15 14:37	1
Phenol	1.3	U H	1.3	0.20	ug/L		10/19/15 09:03	10/20/15 14:37	1
Phenanthrene	0.26	U H	0.26	0.041	ug/L		10/19/15 09:03	10/20/15 14:37	1
Pyrene	0.26	U H	0.26	0.037	ug/L		10/19/15 09:03	10/20/15 14:37	1
3 & 4 Methylphenol	2.6	U H	2.6	0.44	ug/L		10/19/15 09:03	10/20/15 14:37	1

Client Sample ID: VAP-8-GW(20-21)

Date Collected: 10/08/15 14:40
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-15

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*70*		*29 - 110*	*10/19/15 09:03*	*10/20/15 14:37*	*1*
2-Fluorophenol (Surr)	*57*		*15 - 110*	*10/19/15 09:03*	*10/20/15 14:37*	*1*
2,4,6-Tribromophenol (Surr)	*67*		*21 - 128*	*10/19/15 09:03*	*10/20/15 14:37*	*1*
Nitrobenzene-d5 (Surr)	*67*		*31 - 110*	*10/19/15 09:03*	*10/20/15 14:37*	*1*
Phenol-d5 (Surr)	*39*		*10 - 110*	*10/19/15 09:03*	*10/20/15 14:37*	*1*
Terphenyl-d14 (Surr)	*76*		*31 - 115*	*10/19/15 09:03*	*10/20/15 14:37*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**120**		10	2.9	ug/L		10/12/15 10:21	10/15/15 02:40	1
Barium	**570**	**B**	200	1.0	ug/L		10/12/15 10:21	10/15/15 02:40	1
Cadmium	**0.84**	**J**	2.0	0.14	ug/L		10/12/15 10:21	10/15/15 02:40	1
Chromium	**180**		5.0	0.55	ug/L		10/12/15 10:21	10/15/15 02:40	1
Lead	**77**		3.0	1.9	ug/L		10/12/15 10:21	10/15/15 02:40	1
Selenium	5.0	U	5.0	4.0	ug/L		10/12/15 10:21	10/15/15 02:40	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 10:21	10/15/15 02:40	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/12/15 14:00	10/14/15 11:05	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-8-GW(25-26)
Date Collected: 10/08/15 15:01
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-16
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	20	U	20	1.9	ug/L			10/20/15 13:28	2
Benzene	2.0	U	2.0	0.70	ug/L			10/20/15 13:28	2
Dichlorobromomethane	2.0	U	2.0	0.58	ug/L			10/20/15 13:28	2
Bromoform	2.0	U	2.0	1.1	ug/L			10/20/15 13:28	2
Bromomethane	2.0	U	2.0	0.88	ug/L			10/20/15 13:28	2
2-Butanone (MEK)	20	U	20	1.1	ug/L			10/20/15 13:28	2
Carbon disulfide	2.0	U	2.0	0.76	ug/L			10/20/15 13:28	2
Carbon tetrachloride	2.0	U	2.0	0.86	ug/L			10/20/15 13:28	2
Chlorobenzene	2.0	U	2.0	0.50	ug/L			10/20/15 13:28	2
Chloroethane	2.0	U	2.0	0.64	ug/L			10/20/15 13:28	2
Chloroform	2.0	U	2.0	0.50	ug/L			10/20/15 13:28	2
Chloromethane	2.0	U	2.0	0.88	ug/L			10/20/15 13:28	2
1,1-Dichloroethane	2.0	U	2.0	0.60	ug/L			10/20/15 13:28	2
1,2-Dichloroethane	2.0	U	2.0	0.46	ug/L			10/20/15 13:28	2
1,1-Dichloroethene	2.0	U	2.0	0.90	ug/L			10/20/15 13:28	2
1,2-Dichloropropane	2.0	U	2.0	0.50	ug/L			10/20/15 13:28	2
cis-1,3-Dichloropropene	2.0	U	2.0	0.92	ug/L			10/20/15 13:28	2
trans-1,3-Dichloropropene	2.0	U	2.0	1.1	ug/L			10/20/15 13:28	2
Ethylbenzene	2.0	U	2.0	0.50	ug/L			10/20/15 13:28	2
2-Hexanone	20	U	20	0.96	ug/L			10/20/15 13:28	2
Methylene Chloride	2.0	U	2.0	0.66	ug/L			10/20/15 13:28	2
4-Methyl-2-pentanone (MIBK)	20	U	20	2.0	ug/L			10/20/15 13:28	2
Styrene	2.0	U	2.0	0.90	ug/L			10/20/15 13:28	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.44	ug/L			10/20/15 13:28	2
Tetrachloroethene	2.0	U	2.0	0.62	ug/L			10/20/15 13:28	2
Toluene	2.0	U	2.0	0.46	ug/L			10/20/15 13:28	2
Trichloroethene	**24**		2.0	0.44	ug/L			10/20/15 13:28	2
Vinyl chloride	2.0	U	2.0	0.58	ug/L			10/20/15 13:28	2
Xylenes, Total	4.0	U	4.0	1.0	ug/L			10/20/15 13:28	2
1,1,1-Trichloroethane	2.0	U	2.0	0.88	ug/L			10/20/15 13:28	2
1,1,2-Trichloroethane	2.0	U	2.0	0.48	ug/L			10/20/15 13:28	2
Cyclohexane	2.0	U	2.0	0.90	ug/L			10/20/15 13:28	2
1,2-Dibromo-3-Chloropropane	4.0	U	4.0	1.6	ug/L			10/20/15 13:28	2
Ethylene Dibromide	2.0	U	2.0	0.64	ug/L			10/20/15 13:28	2
Dichlorodifluoromethane	2.0	U	2.0	0.64	ug/L			10/20/15 13:28	2
cis-1,2-Dichloroethene	**54**		2.0	0.52	ug/L			10/20/15 13:28	2
trans-1,2-Dichloroethene	2.0	U	2.0	0.60	ug/L			10/20/15 13:28	2
Isopropylbenzene	2.0	U	2.0	0.70	ug/L			10/20/15 13:28	2
Methyl acetate	20	U	20	4.5	ug/L			10/20/15 13:28	2
Methyl tert-butyl ether	2.0	U	2.0	0.40	ug/L			10/20/15 13:28	2
1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	U	2.0	0.90	ug/L			10/20/15 13:28	2
1,2,4-Trichlorobenzene	2.0	U	2.0	0.64	ug/L			10/20/15 13:28	2
1,2-Dichlorobenzene	2.0	U	2.0	0.50	ug/L			10/20/15 13:28	2
1,3-Dichlorobenzene	2.0	U	2.0	0.38	ug/L			10/20/15 13:28	2
1,4-Dichlorobenzene	2.0	U	2.0	0.54	ug/L			10/20/15 13:28	2
Trichlorofluoromethane	2.0	U	2.0	0.98	ug/L			10/20/15 13:28	2
Chlorodibromomethane	2.0	U	2.0	0.86	ug/L			10/20/15 13:28	2
Methylcyclohexane	2.0	U	2.0	0.86	ug/L			10/20/15 13:28	2

Client Sample ID: VAP-8-GW(25-26)

Date Collected: 10/08/15 15:01
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-16

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*78 - 125*		*10/20/15 13:28*	*2*
4-Bromofluorobenzene (Surr)	*89*		*61 - 120*		*10/20/15 13:28*	*2*
Toluene-d8 (Surr)	*89*		*80 - 120*		*10/20/15 13:28*	*2*
Dibromofluoromethane (Surr)	*106*		*79 - 120*		*10/20/15 13:28*	*2*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/12/15 09:34	10/15/15 12:57	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/12/15 09:34	10/15/15 12:57	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/12/15 09:34	10/15/15 12:57	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/12/15 09:34	10/15/15 12:57	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/12/15 09:34	10/15/15 12:57	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/12/15 09:34	10/15/15 12:57	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/12/15 09:34	10/15/15 12:57	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/12/15 09:34	10/15/15 12:57	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/12/15 09:34	10/15/15 12:57	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 12:57	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/12/15 09:34	10/15/15 12:57	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/12/15 09:34	10/15/15 12:57	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/12/15 09:34	10/15/15 12:57	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/12/15 09:34	10/15/15 12:57	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/12/15 09:34	10/15/15 12:57	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/12/15 09:34	10/15/15 12:57	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/12/15 09:34	10/15/15 12:57	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/12/15 09:34	10/15/15 12:57	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/12/15 09:34	10/15/15 12:57	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/12/15 09:34	10/15/15 12:57	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/12/15 09:34	10/15/15 12:57	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/12/15 09:34	10/15/15 12:57	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/12/15 09:34	10/15/15 12:57	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/12/15 09:34	10/15/15 12:57	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/12/15 09:34	10/15/15 12:57	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/12/15 09:34	10/15/15 12:57	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/12/15 09:34	10/15/15 12:57	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/12/15 09:34	10/15/15 12:57	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 12:57	1
Benzaldehyde	0.96	U	0.96	0.28	ug/L		10/12/15 09:34	10/15/15 12:57	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/12/15 09:34	10/15/15 12:57	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/12/15 09:34	10/15/15 12:57	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/12/15 09:34	10/15/15 12:57	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/12/15 09:34	10/15/15 12:57	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/12/15 09:34	10/15/15 12:57	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/12/15 09:34	10/15/15 12:57	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/12/15 09:34	10/15/15 12:57	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	1.5	ug/L		10/12/15 09:34	10/15/15 12:57	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/12/15 09:34	10/15/15 12:57	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/12/15 09:34	10/15/15 12:57	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/12/15 09:34	10/15/15 12:57	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/12/15 09:34	10/15/15 12:57	1
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/12/15 09:34	10/15/15 12:57	1

Client Sample ID: VAP-8-GW(25-26)
Date Collected: 10/08/15 15:01
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-16
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/12/15 09:34	10/15/15 12:57	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/12/15 09:34	10/15/15 12:57	1
Di-n-butyl phthalate	**0.65**	**J B**	0.96	0.38	ug/L		10/12/15 09:34	10/15/15 12:57	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/12/15 09:34	10/15/15 12:57	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/12/15 09:34	10/15/15 12:57	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/12/15 09:34	10/15/15 12:57	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 12:57	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/12/15 09:34	10/15/15 12:57	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/12/15 09:34	10/15/15 12:57	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/12/15 09:34	10/15/15 12:57	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/12/15 09:34	10/15/15 12:57	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/12/15 09:34	10/15/15 12:57	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/12/15 09:34	10/15/15 12:57	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 12:57	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/12/15 09:34	10/15/15 12:57	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 12:57	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/12/15 09:34	10/15/15 12:57	1
Phenol	0.96	U *	0.96	0.14	ug/L		10/12/15 09:34	10/15/15 12:57	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/12/15 09:34	10/15/15 12:57	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/12/15 09:34	10/15/15 12:57	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/12/15 09:34	10/15/15 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*31*		*29 - 110*	*10/12/15 09:34*	*10/15/15 12:57*	*1*
2-Fluorophenol (Surr)	*37*		*15 - 110*	*10/12/15 09:34*	*10/15/15 12:57*	*1*
2,4,6-Tribromophenol (Surr)	*25*		*21 - 128*	*10/12/15 09:34*	*10/15/15 12:57*	*1*
Nitrobenzene-d5 (Surr)	*38*		*31 - 110*	*10/12/15 09:34*	*10/15/15 12:57*	*1*
Phenol-d5 (Surr)	*29*		*10 - 110*	*10/12/15 09:34*	*10/15/15 12:57*	*1*
Terphenyl-d14 (Surr)	*15*	*X*	*31 - 115*	*10/12/15 09:34*	*10/15/15 12:57*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	**150**	**B**	19	1.4	ug/L		10/12/15 09:34	10/16/15 09:48	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*34*		*29 - 110*	*10/12/15 09:34*	*10/16/15 09:48*	*4*
2-Fluorophenol (Surr)	*39*		*15 - 110*	*10/12/15 09:34*	*10/16/15 09:48*	*4*
2,4,6-Tribromophenol (Surr)	*24*		*21 - 128*	*10/12/15 09:34*	*10/16/15 09:48*	*4*
Nitrobenzene-d5 (Surr)	*40*		*31 - 110*	*10/12/15 09:34*	*10/16/15 09:48*	*4*
Phenol-d5 (Surr)	*30*		*10 - 110*	*10/12/15 09:34*	*10/16/15 09:48*	*4*
Terphenyl-d14 (Surr)	*17*	*X*	*31 - 115*	*10/12/15 09:34*	*10/16/15 09:48*	*4*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**14**		10	2.9	ug/L		10/12/15 10:21	10/15/15 02:44	1
Barium	**920**	**B**	200	1.0	ug/L		10/12/15 10:21	10/15/15 02:44	1
Cadmium	**0.42**	**J**	2.0	0.14	ug/L		10/12/15 10:21	10/15/15 02:44	1
Chromium	**260**		5.0	0.55	ug/L		10/12/15 10:21	10/15/15 02:44	1
Lead	**100**		3.0	1.9	ug/L		10/12/15 10:21	10/15/15 02:44	1
Selenium	**4.5**	**J**	5.0	4.0	ug/L		10/12/15 10:21	10/15/15 07:39	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-8-GW(25-26)
Date Collected: 10/08/15 15:01
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-16
Matrix: Water

Method: 6010B - Metals (ICP) - Total Recoverable (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 10:21	10/15/15 02:44	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.21		0.20	0.090	ug/L		10/12/15 14:00	10/14/15 11:11	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-8-GW(30-31)
Date Collected: 10/08/15 15:27
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-17
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**1.2**	**J**	10	0.94	ug/L			10/20/15 13:51	1
Benzene	1.0	U	1.0	0.35	ug/L			10/20/15 13:51	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/20/15 13:51	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/20/15 13:51	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/20/15 13:51	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/20/15 13:51	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/20/15 13:51	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/20/15 13:51	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 13:51	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/20/15 13:51	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/20/15 13:51	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/20/15 13:51	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/20/15 13:51	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/20/15 13:51	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/20/15 13:51	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/20/15 13:51	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/20/15 13:51	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/20/15 13:51	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/20/15 13:51	1
2-Hexanone	10	U	10	0.48	ug/L			10/20/15 13:51	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/20/15 13:51	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/20/15 13:51	1
Styrene	1.0	U	1.0	0.45	ug/L			10/20/15 13:51	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/20/15 13:51	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/20/15 13:51	1
Toluene	1.0	U	1.0	0.23	ug/L			10/20/15 13:51	1
Trichloroethene	**12**		1.0	0.22	ug/L			10/20/15 13:51	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/20/15 13:51	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/20/15 13:51	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/20/15 13:51	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/20/15 13:51	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/20/15 13:51	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/20/15 13:51	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/20/15 13:51	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/20/15 13:51	1
cis-1,2-Dichloroethene	**24**		1.0	0.26	ug/L			10/20/15 13:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/20/15 13:51	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/20/15 13:51	1
Methyl acetate	10	U	10	2.3	ug/L			10/20/15 13:51	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/20/15 13:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/20/15 13:51	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/20/15 13:51	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 13:51	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/20/15 13:51	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/20/15 13:51	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/20/15 13:51	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/20/15 13:51	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/20/15 13:51	1

Client Sample ID: VAP-8-GW(30-31)

Date Collected: 10/08/15 15:27
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-17

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*78 - 125*		*10/20/15 13:51*	*1*
4-Bromofluorobenzene (Surr)	*99*		*61 - 120*		*10/20/15 13:51*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*10/20/15 13:51*	*1*
Dibromofluoromethane (Surr)	*112*		*79 - 120*		*10/20/15 13:51*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/12/15 09:34	10/15/15 13:20	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/12/15 09:34	10/15/15 13:20	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/12/15 09:34	10/15/15 13:20	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/12/15 09:34	10/15/15 13:20	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/12/15 09:34	10/15/15 13:20	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/12/15 09:34	10/15/15 13:20	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/12/15 09:34	10/15/15 13:20	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/12/15 09:34	10/15/15 13:20	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/12/15 09:34	10/15/15 13:20	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 13:20	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/12/15 09:34	10/15/15 13:20	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/12/15 09:34	10/15/15 13:20	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/12/15 09:34	10/15/15 13:20	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/12/15 09:34	10/15/15 13:20	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/12/15 09:34	10/15/15 13:20	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/12/15 09:34	10/15/15 13:20	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/12/15 09:34	10/15/15 13:20	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/12/15 09:34	10/15/15 13:20	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/12/15 09:34	10/15/15 13:20	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/12/15 09:34	10/15/15 13:20	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/12/15 09:34	10/15/15 13:20	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/12/15 09:34	10/15/15 13:20	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/12/15 09:34	10/15/15 13:20	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/12/15 09:34	10/15/15 13:20	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/12/15 09:34	10/15/15 13:20	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/12/15 09:34	10/15/15 13:20	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/12/15 09:34	10/15/15 13:20	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/12/15 09:34	10/15/15 13:20	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 13:20	1
Benzaldehyde	0.96	U	0.96	0.28	ug/L		10/12/15 09:34	10/15/15 13:20	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/12/15 09:34	10/15/15 13:20	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/12/15 09:34	10/15/15 13:20	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/12/15 09:34	10/15/15 13:20	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/12/15 09:34	10/15/15 13:20	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/12/15 09:34	10/15/15 13:20	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/12/15 09:34	10/15/15 13:20	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/12/15 09:34	10/15/15 13:20	1
Bis(2-ethylhexyl) phthalate	**2.0**	**B**	1.9	1.5	ug/L		10/12/15 09:34	10/15/15 13:20	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/12/15 09:34	10/15/15 13:20	1
Caprolactam	**70**	**B**	4.8	0.36	ug/L		10/12/15 09:34	10/15/15 13:20	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/12/15 09:34	10/15/15 13:20	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/12/15 09:34	10/15/15 13:20	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/12/15 09:34	10/15/15 13:20	1

Client Sample ID: VAP-8-GW(30-31)

Date Collected: 10/08/15 15:27
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-17
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/12/15 09:34	10/15/15 13:20	1
Diethyl phthalate	**0.24**	**J**	0.96	0.12	ug/L		10/12/15 09:34	10/15/15 13:20	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/12/15 09:34	10/15/15 13:20	1
Di-n-butyl phthalate	**1.2**	**B**	0.96	0.38	ug/L		10/12/15 09:34	10/15/15 13:20	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/12/15 09:34	10/15/15 13:20	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/12/15 09:34	10/15/15 13:20	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/12/15 09:34	10/15/15 13:20	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 13:20	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/12/15 09:34	10/15/15 13:20	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/12/15 09:34	10/15/15 13:20	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/12/15 09:34	10/15/15 13:20	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/12/15 09:34	10/15/15 13:20	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/12/15 09:34	10/15/15 13:20	1
Naphthalene	**0.21**		0.19	0.041	ug/L		10/12/15 09:34	10/15/15 13:20	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 13:20	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/12/15 09:34	10/15/15 13:20	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 13:20	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/12/15 09:34	10/15/15 13:20	1
Phenol	0.96	U *	0.96	0.14	ug/L		10/12/15 09:34	10/15/15 13:20	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/12/15 09:34	10/15/15 13:20	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/12/15 09:34	10/15/15 13:20	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/12/15 09:34	10/15/15 13:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*46*		*29 - 110*	*10/12/15 09:34*	*10/15/15 13:20*	*1*
2-Fluorophenol (Surr)	*48*		*15 - 110*	*10/12/15 09:34*	*10/15/15 13:20*	*1*
2,4,6-Tribromophenol (Surr)	*39*		*21 - 128*	*10/12/15 09:34*	*10/15/15 13:20*	*1*
Nitrobenzene-d5 (Surr)	*48*		*31 - 110*	*10/12/15 09:34*	*10/15/15 13:20*	*1*
Phenol-d5 (Surr)	*39*		*10 - 110*	*10/12/15 09:34*	*10/15/15 13:20*	*1*
Terphenyl-d14 (Surr)	*37*		*31 - 115*	*10/12/15 09:34*	*10/15/15 13:20*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**10**		10	2.9	ug/L		10/12/15 10:21	10/15/15 02:48	1
Barium	**520**	**B**	200	1.0	ug/L		10/12/15 10:21	10/15/15 02:48	1
Cadmium	**0.20**	**J**	2.0	0.14	ug/L		10/12/15 10:21	10/15/15 02:48	1
Chromium	**190**		5.0	0.55	ug/L		10/12/15 10:21	10/15/15 02:48	1
Lead	**47**		3.0	1.9	ug/L		10/12/15 10:21	10/15/15 02:48	1
Selenium	5.0	U	5.0	4.0	ug/L		10/12/15 10:21	10/15/15 02:48	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 10:21	10/15/15 02:48	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.17**	**J**	0.20	0.090	ug/L		10/12/15 14:00	10/14/15 11:13	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-8-GW(35-36)
Date Collected: 10/08/15 15:55
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-18
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**3.9**	**J**	10	0.94	ug/L			10/20/15 14:13	1
Benzene	1.0	U	1.0	0.35	ug/L			10/20/15 14:13	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/20/15 14:13	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/20/15 14:13	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/20/15 14:13	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/20/15 14:13	1
Carbon disulfide	**0.75**	**J**	1.0	0.38	ug/L			10/20/15 14:13	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/20/15 14:13	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 14:13	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/20/15 14:13	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/20/15 14:13	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/20/15 14:13	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/20/15 14:13	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/20/15 14:13	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/20/15 14:13	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/20/15 14:13	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/20/15 14:13	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/20/15 14:13	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/20/15 14:13	1
2-Hexanone	10	U	10	0.48	ug/L			10/20/15 14:13	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/20/15 14:13	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/20/15 14:13	1
Styrene	1.0	U	1.0	0.45	ug/L			10/20/15 14:13	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/20/15 14:13	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/20/15 14:13	1
Toluene	1.0	U	1.0	0.23	ug/L			10/20/15 14:13	1
Trichloroethene	**5.0**		1.0	0.22	ug/L			10/20/15 14:13	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/20/15 14:13	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/20/15 14:13	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/20/15 14:13	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/20/15 14:13	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/20/15 14:13	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/20/15 14:13	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/20/15 14:13	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/20/15 14:13	1
cis-1,2-Dichloroethene	**7.5**		1.0	0.26	ug/L			10/20/15 14:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/20/15 14:13	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/20/15 14:13	1
Methyl acetate	10	U	10	2.3	ug/L			10/20/15 14:13	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/20/15 14:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/20/15 14:13	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/20/15 14:13	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 14:13	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/20/15 14:13	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/20/15 14:13	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/20/15 14:13	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/20/15 14:13	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/20/15 14:13	1

Client Sample ID: VAP-8-GW(35-36)

Date Collected: 10/08/15 15:55
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-18

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*78 - 125*		*10/20/15 14:13*	*1*
4-Bromofluorobenzene (Surr)	*98*		*61 - 120*		*10/20/15 14:13*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*10/20/15 14:13*	*1*
Dibromofluoromethane (Surr)	*100*		*79 - 120*		*10/20/15 14:13*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 13:44	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/12/15 09:34	10/15/15 13:44	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/12/15 09:34	10/15/15 13:44	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/12/15 09:34	10/15/15 13:44	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/12/15 09:34	10/15/15 13:44	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/12/15 09:34	10/15/15 13:44	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/12/15 09:34	10/15/15 13:44	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/12/15 09:34	10/15/15 13:44	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/12/15 09:34	10/15/15 13:44	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 13:44	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/12/15 09:34	10/15/15 13:44	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/12/15 09:34	10/15/15 13:44	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/12/15 09:34	10/15/15 13:44	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/12/15 09:34	10/15/15 13:44	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/12/15 09:34	10/15/15 13:44	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/12/15 09:34	10/15/15 13:44	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/12/15 09:34	10/15/15 13:44	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/12/15 09:34	10/15/15 13:44	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/12/15 09:34	10/15/15 13:44	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/12/15 09:34	10/15/15 13:44	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/12/15 09:34	10/15/15 13:44	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/12/15 09:34	10/15/15 13:44	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/12/15 09:34	10/15/15 13:44	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/12/15 09:34	10/15/15 13:44	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/12/15 09:34	10/15/15 13:44	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/12/15 09:34	10/15/15 13:44	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/15/15 13:44	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/12/15 09:34	10/15/15 13:44	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 13:44	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/12/15 09:34	10/15/15 13:44	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/12/15 09:34	10/15/15 13:44	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/12/15 09:34	10/15/15 13:44	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/12/15 09:34	10/15/15 13:44	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/12/15 09:34	10/15/15 13:44	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/12/15 09:34	10/15/15 13:44	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/12/15 09:34	10/15/15 13:44	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/12/15 09:34	10/15/15 13:44	1
Bis(2-ethylhexyl) phthalate	**1.6**	**J B**	2.0	1.5	ug/L		10/12/15 09:34	10/15/15 13:44	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/12/15 09:34	10/15/15 13:44	1
Caprolactam	**75**	**B**	5.0	0.37	ug/L		10/12/15 09:34	10/15/15 13:44	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/12/15 09:34	10/15/15 13:44	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/12/15 09:34	10/15/15 13:44	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/12/15 09:34	10/15/15 13:44	1

Client Sample ID: VAP-8-GW(35-36)

Date Collected: 10/08/15 15:55
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-18
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/15/15 13:44	1
Diethyl phthalate	**0.29**	**J**	1.0	0.13	ug/L		10/12/15 09:34	10/15/15 13:44	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/12/15 09:34	10/15/15 13:44	1
Di-n-butyl phthalate	**1.2**	**B**	1.0	0.40	ug/L		10/12/15 09:34	10/15/15 13:44	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/12/15 09:34	10/15/15 13:44	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/12/15 09:34	10/15/15 13:44	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/12/15 09:34	10/15/15 13:44	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 13:44	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/15/15 13:44	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/12/15 09:34	10/15/15 13:44	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/12/15 09:34	10/15/15 13:44	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/12/15 09:34	10/15/15 13:44	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/12/15 09:34	10/15/15 13:44	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/12/15 09:34	10/15/15 13:44	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 13:44	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/12/15 09:34	10/15/15 13:44	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/12/15 09:34	10/15/15 13:44	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/12/15 09:34	10/15/15 13:44	1
Phenol	1.0	U *	1.0	0.15	ug/L		10/12/15 09:34	10/15/15 13:44	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/12/15 09:34	10/15/15 13:44	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/12/15 09:34	10/15/15 13:44	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/12/15 09:34	10/15/15 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*32*		*29 - 110*	*10/12/15 09:34*	*10/15/15 13:44*	*1*
2-Fluorophenol (Surr)	*39*		*15 - 110*	*10/12/15 09:34*	*10/15/15 13:44*	*1*
2,4,6-Tribromophenol (Surr)	*29*		*21 - 128*	*10/12/15 09:34*	*10/15/15 13:44*	*1*
Nitrobenzene-d5 (Surr)	*37*		*31 - 110*	*10/12/15 09:34*	*10/15/15 13:44*	*1*
Phenol-d5 (Surr)	*34*		*10 - 110*	*10/12/15 09:34*	*10/15/15 13:44*	*1*
Terphenyl-d14 (Surr)	*23*	*X*	*31 - 115*	*10/12/15 09:34*	*10/15/15 13:44*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**17**		10	2.9	ug/L		10/12/15 10:21	10/15/15 02:52	1
Barium	**820**	**B**	200	1.0	ug/L		10/12/15 10:21	10/15/15 02:52	1
Cadmium	**0.41**	**J**	2.0	0.14	ug/L		10/12/15 10:21	10/15/15 02:52	1
Chromium	**480**		5.0	0.55	ug/L		10/12/15 10:21	10/15/15 02:52	1
Lead	**280**		3.0	1.9	ug/L		10/12/15 10:21	10/15/15 02:52	1
Selenium	**13**		5.0	4.0	ug/L		10/12/15 10:21	10/15/15 02:52	1
Silver	5.0	U L	5.0	0.92	ug/L		10/12/15 10:21	10/15/15 02:52	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.35**		0.20	0.090	ug/L		10/12/15 14:00	10/14/15 10:59	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-8-GW(40-41)
Date Collected: 10/08/15 16:38
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-19
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**56**		10	0.94	ug/L			10/20/15 14:36	1
Benzene	1.0	U	1.0	0.35	ug/L			10/20/15 14:36	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/20/15 14:36	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/20/15 14:36	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/20/15 14:36	1
2-Butanone (MEK)	**0.72**	**J**	10	0.53	ug/L			10/20/15 14:36	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/20/15 14:36	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/20/15 14:36	1
Chlorobenzene	**0.53**	**J**	1.0	0.25	ug/L			10/20/15 14:36	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/20/15 14:36	1
Chloroform	**0.37**	**J**	1.0	0.25	ug/L			10/20/15 14:36	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/20/15 14:36	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/20/15 14:36	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/20/15 14:36	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/20/15 14:36	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/20/15 14:36	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/20/15 14:36	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/20/15 14:36	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/20/15 14:36	1
2-Hexanone	10	U	10	0.48	ug/L			10/20/15 14:36	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/20/15 14:36	1
4-Methyl-2-pentanone (MIBK)	**12**		10	0.99	ug/L			10/20/15 14:36	1
Styrene	1.0	U	1.0	0.45	ug/L			10/20/15 14:36	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/20/15 14:36	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/20/15 14:36	1
Toluene	1.0	U	1.0	0.23	ug/L			10/20/15 14:36	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/20/15 14:36	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/20/15 14:36	1
Xylenes, Total	**0.56**	**J**	2.0	0.52	ug/L			10/20/15 14:36	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/20/15 14:36	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/20/15 14:36	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/20/15 14:36	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/20/15 14:36	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/20/15 14:36	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/20/15 14:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/20/15 14:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/20/15 14:36	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/20/15 14:36	1
Methyl acetate	10	U	10	2.3	ug/L			10/20/15 14:36	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/20/15 14:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/20/15 14:36	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/20/15 14:36	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 14:36	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/20/15 14:36	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/20/15 14:36	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/20/15 14:36	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/20/15 14:36	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/20/15 14:36	1

Client Sample ID: VAP-8-GW(40-41)

Date Collected: 10/08/15 16:38
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-19

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*78 - 125*		*10/20/15 14:36*	*1*
4-Bromofluorobenzene (Surr)	*89*		*61 - 120*		*10/20/15 14:36*	*1*
Toluene-d8 (Surr)	*87*		*80 - 120*		*10/20/15 14:36*	*1*
Dibromofluoromethane (Surr)	*101*		*79 - 120*		*10/20/15 14:36*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 14:07	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/12/15 09:34	10/15/15 14:07	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/12/15 09:34	10/15/15 14:07	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/12/15 09:34	10/15/15 14:07	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/12/15 09:34	10/15/15 14:07	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/12/15 09:34	10/15/15 14:07	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/12/15 09:34	10/15/15 14:07	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/12/15 09:34	10/15/15 14:07	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/12/15 09:34	10/15/15 14:07	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 14:07	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/12/15 09:34	10/15/15 14:07	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/12/15 09:34	10/15/15 14:07	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/12/15 09:34	10/15/15 14:07	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/12/15 09:34	10/15/15 14:07	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/12/15 09:34	10/15/15 14:07	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/12/15 09:34	10/15/15 14:07	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/12/15 09:34	10/15/15 14:07	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/12/15 09:34	10/15/15 14:07	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/12/15 09:34	10/15/15 14:07	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/12/15 09:34	10/15/15 14:07	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/12/15 09:34	10/15/15 14:07	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/12/15 09:34	10/15/15 14:07	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/12/15 09:34	10/15/15 14:07	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/12/15 09:34	10/15/15 14:07	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/12/15 09:34	10/15/15 14:07	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/12/15 09:34	10/15/15 14:07	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/15/15 14:07	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/12/15 09:34	10/15/15 14:07	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 14:07	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/12/15 09:34	10/15/15 14:07	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/12/15 09:34	10/15/15 14:07	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/12/15 09:34	10/15/15 14:07	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/12/15 09:34	10/15/15 14:07	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/12/15 09:34	10/15/15 14:07	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/12/15 09:34	10/15/15 14:07	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/12/15 09:34	10/15/15 14:07	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/12/15 09:34	10/15/15 14:07	1
Bis(2-ethylhexyl) phthalate	**1.5**	**J B**	2.0	1.5	ug/L		10/12/15 09:34	10/15/15 14:07	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/12/15 09:34	10/15/15 14:07	1
Caprolactam	**3.3**	**J B**	5.0	0.37	ug/L		10/12/15 09:34	10/15/15 14:07	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/12/15 09:34	10/15/15 14:07	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/12/15 09:34	10/15/15 14:07	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/12/15 09:34	10/15/15 14:07	1

Client Sample ID: VAP-8-GW(40-41)
Date Collected: 10/08/15 16:38
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-19
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/15/15 14:07	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/12/15 09:34	10/15/15 14:07	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/12/15 09:34	10/15/15 14:07	1
Di-n-butyl phthalate	**0.71**	**J B**	1.0	0.40	ug/L		10/12/15 09:34	10/15/15 14:07	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/12/15 09:34	10/15/15 14:07	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/12/15 09:34	10/15/15 14:07	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/12/15 09:34	10/15/15 14:07	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 14:07	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/15/15 14:07	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/12/15 09:34	10/15/15 14:07	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/12/15 09:34	10/15/15 14:07	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/12/15 09:34	10/15/15 14:07	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/12/15 09:34	10/15/15 14:07	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/12/15 09:34	10/15/15 14:07	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 14:07	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/12/15 09:34	10/15/15 14:07	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/12/15 09:34	10/15/15 14:07	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/12/15 09:34	10/15/15 14:07	1
Phenol	1.0	U *	1.0	0.15	ug/L		10/12/15 09:34	10/15/15 14:07	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/12/15 09:34	10/15/15 14:07	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/12/15 09:34	10/15/15 14:07	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/12/15 09:34	10/15/15 14:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*51*		*29 - 110*	*10/12/15 09:34*	*10/15/15 14:07*	*1*
2-Fluorophenol (Surr)	*49*		*15 - 110*	*10/12/15 09:34*	*10/15/15 14:07*	*1*
2,4,6-Tribromophenol (Surr)	*44*		*21 - 128*	*10/12/15 09:34*	*10/15/15 14:07*	*1*
Nitrobenzene-d5 (Surr)	*54*		*31 - 110*	*10/12/15 09:34*	*10/15/15 14:07*	*1*
Phenol-d5 (Surr)	*37*		*10 - 110*	*10/12/15 09:34*	*10/15/15 14:07*	*1*
Terphenyl-d14 (Surr)	*29*	*X*	*31 - 115*	*10/12/15 09:34*	*10/15/15 14:07*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**69**		10	2.9	ug/L		10/12/15 10:21	10/15/15 02:56	1
Barium	**1100**	**B**	200	1.0	ug/L		10/12/15 10:21	10/15/15 02:56	1
Cadmium	**12**		2.0	0.14	ug/L		10/12/15 10:21	10/15/15 02:56	1
Chromium	**500**		5.0	0.55	ug/L		10/12/15 10:21	10/15/15 02:56	1
Lead	**470**		3.0	1.9	ug/L		10/12/15 10:21	10/15/15 02:56	1
Selenium	**190**		5.0	4.0	ug/L		10/12/15 10:21	10/15/15 02:56	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 10:21	10/15/15 02:56	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.91**		0.20	0.090	ug/L		10/12/15 14:00	10/14/15 10:57	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-8-GW(45-46)
Date Collected: 10/08/15 17:08
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-20
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/20/15 14:58	1
Benzene	1.0	U	1.0	0.35	ug/L			10/20/15 14:58	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/20/15 14:58	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/20/15 14:58	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/20/15 14:58	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/20/15 14:58	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/20/15 14:58	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/20/15 14:58	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 14:58	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/20/15 14:58	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/20/15 14:58	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/20/15 14:58	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/20/15 14:58	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/20/15 14:58	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/20/15 14:58	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/20/15 14:58	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/20/15 14:58	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/20/15 14:58	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/20/15 14:58	1
2-Hexanone	10	U	10	0.48	ug/L			10/20/15 14:58	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/20/15 14:58	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/20/15 14:58	1
Styrene	1.0	U	1.0	0.45	ug/L			10/20/15 14:58	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/20/15 14:58	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/20/15 14:58	1
Toluene	1.0	U	1.0	0.23	ug/L			10/20/15 14:58	1
Trichloroethene	**1.4**		1.0	0.22	ug/L			10/20/15 14:58	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/20/15 14:58	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/20/15 14:58	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/20/15 14:58	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/20/15 14:58	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/20/15 14:58	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/20/15 14:58	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/20/15 14:58	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/20/15 14:58	1
cis-1,2-Dichloroethene	**0.83**	**J**	1.0	0.26	ug/L			10/20/15 14:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/20/15 14:58	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/20/15 14:58	1
Methyl acetate	10	U	10	2.3	ug/L			10/20/15 14:58	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/20/15 14:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/20/15 14:58	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/20/15 14:58	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 14:58	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/20/15 14:58	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/20/15 14:58	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/20/15 14:58	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/20/15 14:58	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/20/15 14:58	1

Client Sample ID: VAP-8-GW(45-46)

Date Collected: 10/08/15 17:08
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-20

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*78 - 125*		*10/20/15 14:58*	*1*
4-Bromofluorobenzene (Surr)	*95*		*61 - 120*		*10/20/15 14:58*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*10/20/15 14:58*	*1*
Dibromofluoromethane (Surr)	*106*		*79 - 120*		*10/20/15 14:58*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/12/15 09:34	10/15/15 14:30	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/12/15 09:34	10/15/15 14:30	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/12/15 09:34	10/15/15 14:30	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/12/15 09:34	10/15/15 14:30	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/12/15 09:34	10/15/15 14:30	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/12/15 09:34	10/15/15 14:30	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/12/15 09:34	10/15/15 14:30	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/12/15 09:34	10/15/15 14:30	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/12/15 09:34	10/15/15 14:30	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/12/15 09:34	10/15/15 14:30	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/12/15 09:34	10/15/15 14:30	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/12/15 09:34	10/15/15 14:30	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/12/15 09:34	10/15/15 14:30	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/12/15 09:34	10/15/15 14:30	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/12/15 09:34	10/15/15 14:30	1
3,3'-Dichlorobenzidine	4.6	U	4.6	0.33	ug/L		10/12/15 09:34	10/15/15 14:30	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/12/15 09:34	10/15/15 14:30	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/12/15 09:34	10/15/15 14:30	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/12/15 09:34	10/15/15 14:30	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/12/15 09:34	10/15/15 14:30	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/12/15 09:34	10/15/15 14:30	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/12/15 09:34	10/15/15 14:30	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/12/15 09:34	10/15/15 14:30	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/12/15 09:34	10/15/15 14:30	1
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/12/15 09:34	10/15/15 14:30	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/12/15 09:34	10/15/15 14:30	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/12/15 09:34	10/15/15 14:30	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/12/15 09:34	10/15/15 14:30	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/12/15 09:34	10/15/15 14:30	1
Benzaldehyde	0.93	U	0.93	0.27	ug/L		10/12/15 09:34	10/15/15 14:30	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/12/15 09:34	10/15/15 14:30	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/12/15 09:34	10/15/15 14:30	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/12/15 09:34	10/15/15 14:30	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/12/15 09:34	10/15/15 14:30	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/12/15 09:34	10/15/15 14:30	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/12/15 09:34	10/15/15 14:30	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/12/15 09:34	10/15/15 14:30	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	1.4	ug/L		10/12/15 09:34	10/15/15 14:30	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/12/15 09:34	10/15/15 14:30	1
Caprolactam	**2.3**	**J B**	4.6	0.34	ug/L		10/12/15 09:34	10/15/15 14:30	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/12/15 09:34	10/15/15 14:30	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/12/15 09:34	10/15/15 14:30	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/12/15 09:34	10/15/15 14:30	1

Client Sample ID: VAP-8-GW(45-46)

Date Collected: 10/08/15 17:08
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-20

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/12/15 09:34	10/15/15 14:30	1
Diethyl phthalate	**0.22**	**J**	0.93	0.12	ug/L		10/12/15 09:34	10/15/15 14:30	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/12/15 09:34	10/15/15 14:30	1
Di-n-butyl phthalate	**0.75**	**J B**	0.93	0.37	ug/L		10/12/15 09:34	10/15/15 14:30	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/12/15 09:34	10/15/15 14:30	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/12/15 09:34	10/15/15 14:30	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/12/15 09:34	10/15/15 14:30	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/12/15 09:34	10/15/15 14:30	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/12/15 09:34	10/15/15 14:30	1
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/12/15 09:34	10/15/15 14:30	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/12/15 09:34	10/15/15 14:30	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/12/15 09:34	10/15/15 14:30	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/12/15 09:34	10/15/15 14:30	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/12/15 09:34	10/15/15 14:30	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/12/15 09:34	10/15/15 14:30	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/12/15 09:34	10/15/15 14:30	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/12/15 09:34	10/15/15 14:30	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/12/15 09:34	10/15/15 14:30	1
Phenol	0.93	U *	0.93	0.14	ug/L		10/12/15 09:34	10/15/15 14:30	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/12/15 09:34	10/15/15 14:30	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/12/15 09:34	10/15/15 14:30	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/12/15 09:34	10/15/15 14:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*32*		*29 - 110*	*10/12/15 09:34*	*10/15/15 14:30*	*1*
2-Fluorophenol (Surr)	*41*		*15 - 110*	*10/12/15 09:34*	*10/15/15 14:30*	*1*
2,4,6-Tribromophenol (Surr)	*23*		*21 - 128*	*10/12/15 09:34*	*10/15/15 14:30*	*1*
Nitrobenzene-d5 (Surr)	*32*		*31 - 110*	*10/12/15 09:34*	*10/15/15 14:30*	*1*
Phenol-d5 (Surr)	*34*		*10 - 110*	*10/12/15 09:34*	*10/15/15 14:30*	*1*
Terphenyl-d14 (Surr)	*22*	*X*	*31 - 115*	*10/12/15 09:34*	*10/15/15 14:30*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**84**		10	2.9	ug/L		10/12/15 10:21	10/15/15 03:00	1
Barium	**440**	**B**	200	1.0	ug/L		10/12/15 10:21	10/15/15 03:00	1
Cadmium	**2.5**		2.0	0.14	ug/L		10/12/15 10:21	10/15/15 03:00	1
Chromium	**180**		5.0	0.55	ug/L		10/12/15 10:21	10/15/15 03:00	1
Lead	**80**		3.0	1.9	ug/L		10/12/15 10:21	10/15/15 03:00	1
Selenium	**14**		5.0	4.0	ug/L		10/12/15 10:21	10/15/15 03:00	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 10:21	10/15/15 03:00	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.22**		0.20	0.090	ug/L		10/12/15 14:00	10/14/15 10:49	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-8-GW(49-50)
Date Collected: 10/08/15 17:40
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-21
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/20/15 15:21	1
Benzene	1.0	U	1.0	0.35	ug/L			10/20/15 15:21	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/20/15 15:21	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/20/15 15:21	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/20/15 15:21	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/20/15 15:21	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/20/15 15:21	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/20/15 15:21	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 15:21	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/20/15 15:21	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/20/15 15:21	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/20/15 15:21	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/20/15 15:21	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/20/15 15:21	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/20/15 15:21	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/20/15 15:21	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/20/15 15:21	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/20/15 15:21	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/20/15 15:21	1
2-Hexanone	10	U	10	0.48	ug/L			10/20/15 15:21	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/20/15 15:21	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/20/15 15:21	1
Styrene	1.0	U	1.0	0.45	ug/L			10/20/15 15:21	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/20/15 15:21	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/20/15 15:21	1
Toluene	1.0	U	1.0	0.23	ug/L			10/20/15 15:21	1
Trichloroethene	**0.31**	**J**	1.0	0.22	ug/L			10/20/15 15:21	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/20/15 15:21	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/20/15 15:21	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/20/15 15:21	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/20/15 15:21	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/20/15 15:21	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/20/15 15:21	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/20/15 15:21	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/20/15 15:21	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/20/15 15:21	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/20/15 15:21	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/20/15 15:21	1
Methyl acetate	10	U	10	2.3	ug/L			10/20/15 15:21	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/20/15 15:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/20/15 15:21	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/20/15 15:21	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 15:21	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/20/15 15:21	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/20/15 15:21	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/20/15 15:21	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/20/15 15:21	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/20/15 15:21	1

Client Sample ID: VAP-8-GW(49-50)

Date Collected: 10/08/15 17:40
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-21

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*78 - 125*		*10/20/15 15:21*	*1*
4-Bromofluorobenzene (Surr)	*90*		*61 - 120*		*10/20/15 15:21*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*10/20/15 15:21*	*1*
Dibromofluoromethane (Surr)	*104*		*79 - 120*		*10/20/15 15:21*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/12/15 09:34	10/15/15 14:54	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/12/15 09:34	10/15/15 14:54	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/12/15 09:34	10/15/15 14:54	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/12/15 09:34	10/15/15 14:54	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/12/15 09:34	10/15/15 14:54	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/12/15 09:34	10/15/15 14:54	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/12/15 09:34	10/15/15 14:54	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/12/15 09:34	10/15/15 14:54	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/12/15 09:34	10/15/15 14:54	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 14:54	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/12/15 09:34	10/15/15 14:54	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/12/15 09:34	10/15/15 14:54	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/12/15 09:34	10/15/15 14:54	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/12/15 09:34	10/15/15 14:54	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/12/15 09:34	10/15/15 14:54	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/12/15 09:34	10/15/15 14:54	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/12/15 09:34	10/15/15 14:54	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/12/15 09:34	10/15/15 14:54	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/12/15 09:34	10/15/15 14:54	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/12/15 09:34	10/15/15 14:54	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/12/15 09:34	10/15/15 14:54	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/12/15 09:34	10/15/15 14:54	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/12/15 09:34	10/15/15 14:54	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/12/15 09:34	10/15/15 14:54	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/12/15 09:34	10/15/15 14:54	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/12/15 09:34	10/15/15 14:54	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/12/15 09:34	10/15/15 14:54	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/12/15 09:34	10/15/15 14:54	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 14:54	1
Benzaldehyde	0.96	U	0.96	0.28	ug/L		10/12/15 09:34	10/15/15 14:54	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/12/15 09:34	10/15/15 14:54	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/12/15 09:34	10/15/15 14:54	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/12/15 09:34	10/15/15 14:54	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/12/15 09:34	10/15/15 14:54	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/12/15 09:34	10/15/15 14:54	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/12/15 09:34	10/15/15 14:54	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/12/15 09:34	10/15/15 14:54	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	1.5	ug/L		10/12/15 09:34	10/15/15 14:54	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/12/15 09:34	10/15/15 14:54	1
Caprolactam	**3.5**	**J B**	4.8	0.36	ug/L		10/12/15 09:34	10/15/15 14:54	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/12/15 09:34	10/15/15 14:54	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/12/15 09:34	10/15/15 14:54	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/12/15 09:34	10/15/15 14:54	1

Client Sample ID: VAP-8-GW(49-50)

Date Collected: 10/08/15 17:40
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-21
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/12/15 09:34	10/15/15 14:54	1
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/12/15 09:34	10/15/15 14:54	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/12/15 09:34	10/15/15 14:54	1
Di-n-butyl phthalate	**0.59**	**J B**	0.96	0.38	ug/L		10/12/15 09:34	10/15/15 14:54	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/12/15 09:34	10/15/15 14:54	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/12/15 09:34	10/15/15 14:54	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/12/15 09:34	10/15/15 14:54	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 14:54	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/12/15 09:34	10/15/15 14:54	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/12/15 09:34	10/15/15 14:54	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/12/15 09:34	10/15/15 14:54	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/12/15 09:34	10/15/15 14:54	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/12/15 09:34	10/15/15 14:54	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/12/15 09:34	10/15/15 14:54	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 14:54	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/12/15 09:34	10/15/15 14:54	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 14:54	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/12/15 09:34	10/15/15 14:54	1
Phenol	0.96	U *	0.96	0.14	ug/L		10/12/15 09:34	10/15/15 14:54	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/12/15 09:34	10/15/15 14:54	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/12/15 09:34	10/15/15 14:54	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/12/15 09:34	10/15/15 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*51*		*29 - 110*	*10/12/15 09:34*	*10/15/15 14:54*	*1*
2-Fluorophenol (Surr)	*53*		*15 - 110*	*10/12/15 09:34*	*10/15/15 14:54*	*1*
2,4,6-Tribromophenol (Surr)	*39*		*21 - 128*	*10/12/15 09:34*	*10/15/15 14:54*	*1*
Nitrobenzene-d5 (Surr)	*51*		*31 - 110*	*10/12/15 09:34*	*10/15/15 14:54*	*1*
Phenol-d5 (Surr)	*44*		*10 - 110*	*10/12/15 09:34*	*10/15/15 14:54*	*1*
Terphenyl-d14 (Surr)	*54*		*31 - 115*	*10/12/15 09:34*	*10/15/15 14:54*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.0**	**J**	10	2.9	ug/L		10/12/15 10:21	10/15/15 03:12	1
Barium	**250**	**B**	200	1.0	ug/L		10/12/15 10:21	10/15/15 03:12	1
Cadmium	**0.17**	**J**	2.0	0.14	ug/L		10/12/15 10:21	10/15/15 03:12	1
Chromium	**39**		5.0	0.55	ug/L		10/12/15 10:21	10/15/15 03:12	1
Lead	**13**		3.0	1.9	ug/L		10/12/15 10:21	10/15/15 03:12	1
Selenium	5.0	U	5.0	4.0	ug/L		10/12/15 10:21	10/15/15 03:12	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 10:21	10/15/15 03:12	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/12/15 14:00	10/14/15 10:51	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: TB-06(100815)
Date Collected: 10/08/15 00:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-22
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/20/15 15:44	1
Benzene	1.0	U	1.0	0.35	ug/L			10/20/15 15:44	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/20/15 15:44	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/20/15 15:44	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/20/15 15:44	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/20/15 15:44	1
Carbon disulfide	**0.63**	**J**	1.0	0.38	ug/L			10/20/15 15:44	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/20/15 15:44	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 15:44	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/20/15 15:44	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/20/15 15:44	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/20/15 15:44	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/20/15 15:44	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/20/15 15:44	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/20/15 15:44	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/20/15 15:44	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/20/15 15:44	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/20/15 15:44	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/20/15 15:44	1
2-Hexanone	10	U	10	0.48	ug/L			10/20/15 15:44	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/20/15 15:44	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/20/15 15:44	1
Styrene	1.0	U	1.0	0.45	ug/L			10/20/15 15:44	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/20/15 15:44	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/20/15 15:44	1
Toluene	1.0	U	1.0	0.23	ug/L			10/20/15 15:44	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/20/15 15:44	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/20/15 15:44	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/20/15 15:44	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/20/15 15:44	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/20/15 15:44	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/20/15 15:44	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/20/15 15:44	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/20/15 15:44	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/20/15 15:44	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/20/15 15:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/20/15 15:44	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/20/15 15:44	1
Methyl acetate	10	U	10	2.3	ug/L			10/20/15 15:44	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/20/15 15:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/20/15 15:44	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/20/15 15:44	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 15:44	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/20/15 15:44	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/20/15 15:44	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/20/15 15:44	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/20/15 15:44	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/20/15 15:44	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: TB-06(100815)
Date Collected: 10/08/15 00:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-22
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		78 - 125		10/20/15 15:44	1
4-Bromofluorobenzene (Surr)	89		61 - 120		10/20/15 15:44	1
Toluene-d8 (Surr)	85		80 - 120		10/20/15 15:44	1
Dibromofluoromethane (Surr)	106		79 - 120		10/20/15 15:44	1

Client Sample ID: VAP-7(2-4)
Date Collected: 10/09/15 08:07
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-23
Matrix: Solid
Percent Solids: 80.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	18	U *	18	1.4	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Benzene	4.5	U	4.5	0.22	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Dichlorobromomethane	4.5	U	4.5	0.19	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Bromoform	4.5	U	4.5	0.34	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Bromomethane	4.5	U	4.5	0.64	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
2-Butanone (MEK)	**0.78**	**J B**	18	0.43	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Carbon disulfide	4.5	U	4.5	0.31	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Carbon tetrachloride	4.5	U	4.5	0.30	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Chlorobenzene	4.5	U	4.5	0.26	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Chloroethane	4.5	U	4.5	0.31	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Chloroform	4.5	U	4.5	0.19	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Chloromethane	4.5	U	4.5	1.2	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
1,1-Dichloroethane	4.5	U	4.5	1.1	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
1,2-Dichloroethane	4.5	U	4.5	0.18	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
1,1-Dichloroethene	4.5	U	4.5	0.44	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
1,2-Dichloropropane	4.5	U	4.5	0.25	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
cis-1,3-Dichloropropene	4.5	U	4.5	0.24	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
trans-1,3-Dichloropropene	4.5	U	4.5	0.19	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Ethylbenzene	4.5	U	4.5	0.29	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
2-Hexanone	18	U	18	0.63	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Methylene Chloride	4.5	U	4.5	0.96	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
4-Methyl-2-pentanone (MIBK)	18	U	18	0.26	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Styrene	4.5	U	4.5	0.24	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
1,1,2,2-Tetrachloroethane	4.5	U	4.5	0.14	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Tetrachloroethene	4.5	U	4.5	0.30	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Toluene	4.5	U	4.5	0.24	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Trichloroethene	4.5	U	4.5	0.24	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Vinyl chloride	4.5	U	4.5	0.35	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Xylenes, Total	9.0	U	9.0	0.57	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
1,1,1-Trichloroethane	4.5	U	4.5	0.24	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
1,1,2-Trichloroethane	4.5	U	4.5	0.44	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Cyclohexane	9.0	U	9.0	0.26	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
1,2-Dibromo-3-Chloropropane	9.0	U	9.0	1.7	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Ethylene Dibromide	4.5	U	4.5	0.23	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Dichlorodifluoromethane	4.5	U	4.5	0.36	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
cis-1,2-Dichloroethene	4.5	U	4.5	0.25	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
trans-1,2-Dichloroethene	4.5	U	4.5	0.33	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Isopropylbenzene	4.5	U	4.5	0.27	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Methyl acetate	9.0	U *	9.0	2.1	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Methyl tert-butyl ether	4.5	U	4.5	0.14	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	4.5	U	4.5	0.35	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
1,2,4-Trichlorobenzene	4.5	U	4.5	0.35	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
1,2-Dichlorobenzene	4.5	U	4.5	0.34	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
1,3-Dichlorobenzene	4.5	U	4.5	0.36	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
1,4-Dichlorobenzene	4.5	U	4.5	0.37	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Trichlorofluoromethane	4.5	U	4.5	0.24	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Chlorodibromomethane	4.5	U	4.5	0.14	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1
Methylcyclohexane	9.0	U	9.0	0.30	ug/Kg	☼	10/13/15 12:14	10/14/15 09:12	1

Client Sample ID: VAP-7(2-4)
Date Collected: 10/09/15 08:07
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-23
Matrix: Solid
Percent Solids: 80.9

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*64 - 120*	*10/13/15 12:14*	*10/14/15 09:12*	*1*
4-Bromofluorobenzene (Surr)	*117*		*64 - 130*	*10/13/15 12:14*	*10/14/15 09:12*	*1*
Toluene-d8 (Surr)	*104*		*69 - 128*	*10/13/15 12:14*	*10/14/15 09:12*	*1*
Dibromofluoromethane (Surr)	*99*		*68 - 120*	*10/13/15 12:14*	*10/14/15 09:12*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	61	U	61	4.3	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
bis (2-chloroisopropyl) ether	120	U	120	12	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
2,4,5-Trichlorophenol	180	U	180	30	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
2,4,6-Trichlorophenol	180	U	180	11	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
2,4-Dichlorophenol	180	U	180	24	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
2,4-Dimethylphenol	180	U	180	24	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
2,4-Dinitrophenol	400	U	400	26	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
2,4-Dinitrotoluene	240	U	240	21	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
2,6-Dinitrotoluene	240	U	240	26	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
2-Chloronaphthalene	61	U	61	0.55	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
2-Chlorophenol	61	U	61	10	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
2-Methylnaphthalene	8.1	U	8.1	0.61	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
2-Methylphenol	240	U	240	13	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
2-Nitroaniline	240	U	240	11	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
2-Nitrophenol	61	U	61	10	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
3,3'-Dichlorobenzidine	120	U	120	22	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
3-Nitroaniline	240	U	240	20	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
4,6-Dinitro-2-methylphenol	180	U	180	11	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
4-Bromophenyl phenyl ether	61	U	61	16	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
4-Chloro-3-methylphenol	180	U	180	26	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
4-Chloroaniline	180	U	180	21	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
4-Chlorophenyl phenyl ether	61	U	61	16	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
4-Nitroaniline	240	U	240	32	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
4-Nitrophenol	400	U	400	21	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Acenaphthene	8.1	U	8.1	0.93	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Acenaphthylene	8.1	U	8.1	0.43	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Acetophenone	120	U	120	11	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Anthracene	8.1	U	8.1	0.95	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Atrazine	240	U	240	11	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Benzaldehyde	120	U	120	15	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Benzo[a]anthracene	8.1	U	8.1	0.77	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Benzo[a]pyrene	8.1	U	8.1	0.78	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Benzo[b]fluoranthene	8.1	U	8.1	0.72	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Benzo[g,h,i]perylene	8.1	U	8.1	0.43	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Benzo[k]fluoranthene	8.1	U	8.1	0.83	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Bis(2-chloroethoxy)methane	120	U	120	27	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Bis(2-chloroethyl)ether	120	U	120	2.4	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Bis(2-ethylhexyl) phthalate	85	U	85	23	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Butyl benzyl phthalate	85	U	85	12	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Caprolactam	400	U	400	45	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Carbazole	61	U	61	33	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Chrysene	8.1	U	8.1	1.3	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Dibenz(a,h)anthracene	8.1	U	8.1	0.81	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1

Client Sample ID: VAP-7(2-4)

Date Collected: 10/09/15 08:07
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-23

Matrix: Solid
Percent Solids: 80.9

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	61	U	61	0.81	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Diethyl phthalate	85	U	85	20	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Dimethyl phthalate	85	U	85	21	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Di-n-butyl phthalate	85	U	85	18	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Di-n-octyl phthalate	85	U	85	9.6	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Fluoranthene	8.1	U	8.1	0.67	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Fluorene	8.1	U	8.1	0.65	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Hexachlorobenzene	8.1	U	8.1	2.6	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Hexachlorobutadiene	61	U	61	6.8	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Hexachlorocyclopentadiene	400	U	400	9.9	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Hexachloroethane	61	U	61	11	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Indeno[1,2,3-cd]pyrene	8.1	U	8.1	0.43	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Isophorone	61	U	61	16	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Naphthalene	8.1	U	8.1	1.0	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Nitrobenzene	120	U	120	2.7	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
N-Nitrosodi-n-propylamine	61	U	61	7.7	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
N-Nitrosodiphenylamine	61	U	61	26	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Pentachlorophenol	180	U	180	11	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Phenol	61	U	61	8.9	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Phenanthrene	8.1	U	8.1	0.89	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
Pyrene	8.1	U	8.1	0.54	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1
3 & 4 Methylphenol	490	U	490	24	ug/Kg	☼	10/13/15 08:07	10/16/15 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*72*		*24 - 110*	*10/13/15 08:07*	*10/16/15 17:22*	*1*
2-Fluorophenol (Surr)	*70*		*24 - 110*	*10/13/15 08:07*	*10/16/15 17:22*	*1*
2,4,6-Tribromophenol (Surr)	*29*		*10 - 110*	*10/13/15 08:07*	*10/16/15 17:22*	*1*
Nitrobenzene-d5 (Surr)	*65*		*20 - 110*	*10/13/15 08:07*	*10/16/15 17:22*	*1*
Phenol-d5 (Surr)	*70*		*26 - 110*	*10/13/15 08:07*	*10/16/15 17:22*	*1*
Terphenyl-d14 (Surr)	*81*		*36 - 110*	*10/13/15 08:07*	*10/16/15 17:22*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**8.2**		1.1	0.47	mg/Kg	☼	10/12/15 11:32	10/13/15 18:54	1
Barium	**73**		23	0.47	mg/Kg	☼	10/12/15 11:32	10/13/15 18:54	1
Cadmium	**0.066**	**J B**	0.23	0.024	mg/Kg	☼	10/12/15 11:32	10/13/15 18:54	1
Chromium	**12**	**B**	0.57	0.085	mg/Kg	☼	10/12/15 11:32	10/13/15 18:54	1
Lead	**9.6**	**B**	0.34	0.23	mg/Kg	☼	10/12/15 11:32	10/13/15 18:54	1
Selenium	0.57	U	0.57	0.39	mg/Kg	☼	10/12/15 11:32	10/13/15 18:54	1
Silver	0.57	U	0.57	0.071	mg/Kg	☼	10/12/15 11:32	10/13/15 18:54	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.022**	**J**	0.15	0.021	mg/Kg	☼	10/12/15 17:25	10/13/15 09:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.99	U	0.99	0.32	mg/Kg	☼	10/19/15 11:20	10/20/15 11:24	1
Percent Solids	**81**		0.10	0.10	%			10/12/15 10:38	1
Percent Moisture	**19**		0.10	0.10	%			10/12/15 10:38	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-7-GW(13-14)
Date Collected: 10/09/15 08:45
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-24
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	20	U	20	1.9	ug/L			10/21/15 18:38	2
Benzene	2.0	U	2.0	0.70	ug/L			10/21/15 18:38	2
Dichlorobromomethane	2.0	U	2.0	0.58	ug/L			10/21/15 18:38	2
Bromoform	2.0	U	2.0	1.1	ug/L			10/21/15 18:38	2
Bromomethane	2.0	U	2.0	0.88	ug/L			10/21/15 18:38	2
2-Butanone (MEK)	20	U	20	1.1	ug/L			10/21/15 18:38	2
Carbon disulfide	2.0	U	2.0	0.76	ug/L			10/21/15 18:38	2
Carbon tetrachloride	2.0	U	2.0	0.86	ug/L			10/21/15 18:38	2
Chlorobenzene	2.0	U	2.0	0.50	ug/L			10/21/15 18:38	2
Chloroethane	2.0	U	2.0	0.64	ug/L			10/21/15 18:38	2
Chloroform	2.0	U	2.0	0.50	ug/L			10/21/15 18:38	2
Chloromethane	2.0	U	2.0	0.88	ug/L			10/21/15 18:38	2
1,1-Dichloroethane	2.0	U	2.0	0.60	ug/L			10/21/15 18:38	2
1,2-Dichloroethane	2.0	U	2.0	0.46	ug/L			10/21/15 18:38	2
1,1-Dichloroethene	2.0	U	2.0	0.90	ug/L			10/21/15 18:38	2
1,2-Dichloropropane	2.0	U	2.0	0.50	ug/L			10/21/15 18:38	2
cis-1,3-Dichloropropene	2.0	U	2.0	0.92	ug/L			10/21/15 18:38	2
trans-1,3-Dichloropropene	2.0	U	2.0	1.1	ug/L			10/21/15 18:38	2
Ethylbenzene	2.0	U	2.0	0.50	ug/L			10/21/15 18:38	2
2-Hexanone	20	U	20	0.96	ug/L			10/21/15 18:38	2
Methylene Chloride	2.0	U	2.0	0.66	ug/L			10/21/15 18:38	2
4-Methyl-2-pentanone (MIBK)	20	U	20	2.0	ug/L			10/21/15 18:38	2
Styrene	2.0	U	2.0	0.90	ug/L			10/21/15 18:38	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.44	ug/L			10/21/15 18:38	2
Tetrachloroethene	2.0	U	2.0	0.62	ug/L			10/21/15 18:38	2
Toluene	2.0	U	2.0	0.46	ug/L			10/21/15 18:38	2
Trichloroethene	**21**		2.0	0.44	ug/L			10/21/15 18:38	2
Vinyl chloride	2.0	U	2.0	0.58	ug/L			10/21/15 18:38	2
Xylenes, Total	4.0	U	4.0	1.0	ug/L			10/21/15 18:38	2
1,1,1-Trichloroethane	2.0	U	2.0	0.88	ug/L			10/21/15 18:38	2
1,1,2-Trichloroethane	2.0	U	2.0	0.48	ug/L			10/21/15 18:38	2
Cyclohexane	2.0	U	2.0	0.90	ug/L			10/21/15 18:38	2
1,2-Dibromo-3-Chloropropane	4.0	U	4.0	1.6	ug/L			10/21/15 18:38	2
Ethylene Dibromide	2.0	U	2.0	0.64	ug/L			10/21/15 18:38	2
Dichlorodifluoromethane	2.0	U	2.0	0.64	ug/L			10/21/15 18:38	2
cis-1,2-Dichloroethene	**44**		2.0	0.52	ug/L			10/21/15 18:38	2
trans-1,2-Dichloroethene	2.0	U	2.0	0.60	ug/L			10/21/15 18:38	2
Isopropylbenzene	2.0	U	2.0	0.70	ug/L			10/21/15 18:38	2
Methyl acetate	20	U	20	4.5	ug/L			10/21/15 18:38	2
Methyl tert-butyl ether	2.0	U	2.0	0.40	ug/L			10/21/15 18:38	2
1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	U	2.0	0.90	ug/L			10/21/15 18:38	2
1,2,4-Trichlorobenzene	2.0	U	2.0	0.64	ug/L			10/21/15 18:38	2
1,2-Dichlorobenzene	2.0	U	2.0	0.50	ug/L			10/21/15 18:38	2
1,3-Dichlorobenzene	2.0	U	2.0	0.38	ug/L			10/21/15 18:38	2
1,4-Dichlorobenzene	2.0	U	2.0	0.54	ug/L			10/21/15 18:38	2
Trichlorofluoromethane	2.0	U	2.0	0.98	ug/L			10/21/15 18:38	2
Chlorodibromomethane	2.0	U	2.0	0.86	ug/L			10/21/15 18:38	2
Methylcyclohexane	2.0	U	2.0	0.86	ug/L			10/21/15 18:38	2

Client Sample ID: VAP-7-GW(13-14)

Date Collected: 10/09/15 08:45
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-24

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*78 - 125*		*10/21/15 18:38*	*2*
4-Bromofluorobenzene (Surr)	*91*		*61 - 120*		*10/21/15 18:38*	*2*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/21/15 18:38*	*2*
Dibromofluoromethane (Surr)	*109*		*79 - 120*		*10/21/15 18:38*	*2*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/12/15 09:34	10/15/15 15:17	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/12/15 09:34	10/15/15 15:17	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/12/15 09:34	10/15/15 15:17	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/12/15 09:34	10/15/15 15:17	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/12/15 09:34	10/15/15 15:17	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/12/15 09:34	10/15/15 15:17	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/12/15 09:34	10/15/15 15:17	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/12/15 09:34	10/15/15 15:17	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/12/15 09:34	10/15/15 15:17	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 15:17	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/12/15 09:34	10/15/15 15:17	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/12/15 09:34	10/15/15 15:17	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/12/15 09:34	10/15/15 15:17	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/12/15 09:34	10/15/15 15:17	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/12/15 09:34	10/15/15 15:17	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/12/15 09:34	10/15/15 15:17	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/12/15 09:34	10/15/15 15:17	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/12/15 09:34	10/15/15 15:17	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/12/15 09:34	10/15/15 15:17	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/12/15 09:34	10/15/15 15:17	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/12/15 09:34	10/15/15 15:17	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/12/15 09:34	10/15/15 15:17	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/12/15 09:34	10/15/15 15:17	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/12/15 09:34	10/15/15 15:17	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/12/15 09:34	10/15/15 15:17	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/12/15 09:34	10/15/15 15:17	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/12/15 09:34	10/15/15 15:17	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/12/15 09:34	10/15/15 15:17	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 15:17	1
Benzaldehyde	0.96	U	0.96	0.28	ug/L		10/12/15 09:34	10/15/15 15:17	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/12/15 09:34	10/15/15 15:17	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/12/15 09:34	10/15/15 15:17	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/12/15 09:34	10/15/15 15:17	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/12/15 09:34	10/15/15 15:17	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/12/15 09:34	10/15/15 15:17	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/12/15 09:34	10/15/15 15:17	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/12/15 09:34	10/15/15 15:17	1
Bis(2-ethylhexyl) phthalate	**1.7**	**J B**	1.9	1.5	ug/L		10/12/15 09:34	10/15/15 15:17	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/12/15 09:34	10/15/15 15:17	1
Caprolactam	**1.5**	**J B**	4.8	0.36	ug/L		10/12/15 09:34	10/15/15 15:17	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/12/15 09:34	10/15/15 15:17	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/12/15 09:34	10/15/15 15:17	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/12/15 09:34	10/15/15 15:17	1

Client Sample ID: VAP-7-GW(13-14)

Date Collected: 10/09/15 08:45
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-24

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/12/15 09:34	10/15/15 15:17	1
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/12/15 09:34	10/15/15 15:17	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/12/15 09:34	10/15/15 15:17	1
Di-n-butyl phthalate	**0.63**	**J B**	0.96	0.38	ug/L		10/12/15 09:34	10/15/15 15:17	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/12/15 09:34	10/15/15 15:17	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/12/15 09:34	10/15/15 15:17	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/12/15 09:34	10/15/15 15:17	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 15:17	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/12/15 09:34	10/15/15 15:17	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/12/15 09:34	10/15/15 15:17	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/12/15 09:34	10/15/15 15:17	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/12/15 09:34	10/15/15 15:17	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/12/15 09:34	10/15/15 15:17	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/12/15 09:34	10/15/15 15:17	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 15:17	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/12/15 09:34	10/15/15 15:17	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 15:17	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/12/15 09:34	10/15/15 15:17	1
Phenol	0.96	U *	0.96	0.14	ug/L		10/12/15 09:34	10/15/15 15:17	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/12/15 09:34	10/15/15 15:17	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/12/15 09:34	10/15/15 15:17	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/12/15 09:34	10/15/15 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*41*		*29 - 110*	*10/12/15 09:34*	*10/15/15 15:17*	*1*
2-Fluorophenol (Surr)	*48*		*15 - 110*	*10/12/15 09:34*	*10/15/15 15:17*	*1*
2,4,6-Tribromophenol (Surr)	*36*		*21 - 128*	*10/12/15 09:34*	*10/15/15 15:17*	*1*
Nitrobenzene-d5 (Surr)	*43*		*31 - 110*	*10/12/15 09:34*	*10/15/15 15:17*	*1*
Phenol-d5 (Surr)	*39*		*10 - 110*	*10/12/15 09:34*	*10/15/15 15:17*	*1*
Terphenyl-d14 (Surr)	*35*		*31 - 115*	*10/12/15 09:34*	*10/15/15 15:17*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**18**		10	2.9	ug/L		10/12/15 10:21	10/15/15 03:16	1
Barium	**350**	**B**	200	1.0	ug/L		10/12/15 10:21	10/15/15 03:16	1
Cadmium	**0.32**	**J**	2.0	0.14	ug/L		10/12/15 10:21	10/15/15 03:16	1
Chromium	**130**		5.0	0.55	ug/L		10/12/15 10:21	10/15/15 03:16	1
Lead	**33**		3.0	1.9	ug/L		10/12/15 10:21	10/15/15 03:16	1
Selenium	**8.3**		5.0	4.0	ug/L		10/12/15 10:21	10/15/15 03:16	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 10:21	10/15/15 03:16	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.11**	**J**	0.20	0.090	ug/L		10/12/15 14:00	10/14/15 11:03	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-7-GW(15-16)
Date Collected: 10/09/15 09:30
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-25
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	50	U	50	4.7	ug/L			10/20/15 12:01	5
Benzene	5.0	U	5.0	1.8	ug/L			10/20/15 12:01	5
Dichlorobromomethane	5.0	U	5.0	1.5	ug/L			10/20/15 12:01	5
Bromoform	5.0	U	5.0	2.8	ug/L			10/20/15 12:01	5
Bromomethane	5.0	U	5.0	2.2	ug/L			10/20/15 12:01	5
2-Butanone (MEK)	50	U	50	2.7	ug/L			10/20/15 12:01	5
Carbon disulfide	5.0	U	5.0	1.9	ug/L			10/20/15 12:01	5
Carbon tetrachloride	5.0	U	5.0	2.2	ug/L			10/20/15 12:01	5
Chlorobenzene	5.0	U	5.0	1.3	ug/L			10/20/15 12:01	5
Chloroethane	5.0	U	5.0	1.6	ug/L			10/20/15 12:01	5
Chloroform	5.0	U	5.0	1.3	ug/L			10/20/15 12:01	5
Chloromethane	5.0	U	5.0	2.2	ug/L			10/20/15 12:01	5
1,1-Dichloroethane	5.0	U	5.0	1.5	ug/L			10/20/15 12:01	5
1,2-Dichloroethane	5.0	U	5.0	1.2	ug/L			10/20/15 12:01	5
1,1-Dichloroethene	5.0	U	5.0	2.3	ug/L			10/20/15 12:01	5
1,2-Dichloropropane	5.0	U	5.0	1.3	ug/L			10/20/15 12:01	5
cis-1,3-Dichloropropene	5.0	U	5.0	2.3	ug/L			10/20/15 12:01	5
trans-1,3-Dichloropropene	5.0	U	5.0	2.8	ug/L			10/20/15 12:01	5
Ethylbenzene	5.0	U	5.0	1.3	ug/L			10/20/15 12:01	5
2-Hexanone	50	U	50	2.4	ug/L			10/20/15 12:01	5
Methylene Chloride	5.0	U	5.0	1.7	ug/L			10/20/15 12:01	5
4-Methyl-2-pentanone (MIBK)	50	U	50	5.0	ug/L			10/20/15 12:01	5
Styrene	5.0	U	5.0	2.3	ug/L			10/20/15 12:01	5
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1.1	ug/L			10/20/15 12:01	5
Tetrachloroethene	5.0	U	5.0	1.6	ug/L			10/20/15 12:01	5
Toluene	5.0	U	5.0	1.2	ug/L			10/20/15 12:01	5
Trichloroethene	**62**		5.0	1.1	ug/L			10/20/15 12:01	5
Vinyl chloride	5.0	U	5.0	1.5	ug/L			10/20/15 12:01	5
Xylenes, Total	10	U	10	2.6	ug/L			10/20/15 12:01	5
1,1,1-Trichloroethane	5.0	U	5.0	2.2	ug/L			10/20/15 12:01	5
1,1,2-Trichloroethane	5.0	U	5.0	1.2	ug/L			10/20/15 12:01	5
Cyclohexane	5.0	U	5.0	2.3	ug/L			10/20/15 12:01	5
1,2-Dibromo-3-Chloropropane	10	U	10	4.1	ug/L			10/20/15 12:01	5
Ethylene Dibromide	5.0	U	5.0	1.6	ug/L			10/20/15 12:01	5
Dichlorodifluoromethane	5.0	U	5.0	1.6	ug/L			10/20/15 12:01	5
cis-1,2-Dichloroethene	**130**		5.0	1.3	ug/L			10/20/15 12:01	5
trans-1,2-Dichloroethene	5.0	U	5.0	1.5	ug/L			10/20/15 12:01	5
Isopropylbenzene	5.0	U	5.0	1.8	ug/L			10/20/15 12:01	5
Methyl acetate	50	U	50	11	ug/L			10/20/15 12:01	5
Methyl tert-butyl ether	5.0	U	5.0	1.0	ug/L			10/20/15 12:01	5
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	2.3	ug/L			10/20/15 12:01	5
1,2,4-Trichlorobenzene	5.0	U	5.0	1.6	ug/L			10/20/15 12:01	5
1,2-Dichlorobenzene	5.0	U	5.0	1.3	ug/L			10/20/15 12:01	5
1,3-Dichlorobenzene	5.0	U	5.0	0.95	ug/L			10/20/15 12:01	5
1,4-Dichlorobenzene	5.0	U	5.0	1.4	ug/L			10/20/15 12:01	5
Trichlorofluoromethane	5.0	U	5.0	2.5	ug/L			10/20/15 12:01	5
Chlorodibromomethane	5.0	U	5.0	2.2	ug/L			10/20/15 12:01	5
Methylcyclohexane	5.0	U	5.0	2.2	ug/L			10/20/15 12:01	5

Client Sample ID: VAP-7-GW(15-16)

Date Collected: 10/09/15 09:30
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-25

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*78 - 125*		*10/20/15 12:01*	*5*
4-Bromofluorobenzene (Surr)	*101*		*61 - 120*		*10/20/15 12:01*	*5*
Toluene-d8 (Surr)	*93*		*80 - 120*		*10/20/15 12:01*	*5*
Dibromofluoromethane (Surr)	*95*		*79 - 120*		*10/20/15 12:01*	*5*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 15:40	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/12/15 09:34	10/15/15 15:40	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/12/15 09:34	10/15/15 15:40	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/12/15 09:34	10/15/15 15:40	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/12/15 09:34	10/15/15 15:40	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/12/15 09:34	10/15/15 15:40	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/12/15 09:34	10/15/15 15:40	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/12/15 09:34	10/15/15 15:40	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/12/15 09:34	10/15/15 15:40	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 15:40	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/12/15 09:34	10/15/15 15:40	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/12/15 09:34	10/15/15 15:40	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/12/15 09:34	10/15/15 15:40	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/12/15 09:34	10/15/15 15:40	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/12/15 09:34	10/15/15 15:40	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/12/15 09:34	10/15/15 15:40	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/12/15 09:34	10/15/15 15:40	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/12/15 09:34	10/15/15 15:40	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/12/15 09:34	10/15/15 15:40	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/12/15 09:34	10/15/15 15:40	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/12/15 09:34	10/15/15 15:40	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/12/15 09:34	10/15/15 15:40	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/12/15 09:34	10/15/15 15:40	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/12/15 09:34	10/15/15 15:40	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/12/15 09:34	10/15/15 15:40	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/12/15 09:34	10/15/15 15:40	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/15/15 15:40	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/12/15 09:34	10/15/15 15:40	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 15:40	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/12/15 09:34	10/15/15 15:40	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/12/15 09:34	10/15/15 15:40	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/12/15 09:34	10/15/15 15:40	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/12/15 09:34	10/15/15 15:40	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/12/15 09:34	10/15/15 15:40	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/12/15 09:34	10/15/15 15:40	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/12/15 09:34	10/15/15 15:40	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/12/15 09:34	10/15/15 15:40	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	1.5	ug/L		10/12/15 09:34	10/15/15 15:40	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/12/15 09:34	10/15/15 15:40	1
Caprolactam	**1.1**	**J B**	5.0	0.37	ug/L		10/12/15 09:34	10/15/15 15:40	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/12/15 09:34	10/15/15 15:40	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/12/15 09:34	10/15/15 15:40	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/12/15 09:34	10/15/15 15:40	1

Client Sample ID: VAP-7-GW(15-16)
Date Collected: 10/09/15 09:30
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-25
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/15/15 15:40	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/12/15 09:34	10/15/15 15:40	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/12/15 09:34	10/15/15 15:40	1
Di-n-butyl phthalate	**0.56**	**J B**	1.0	0.40	ug/L		10/12/15 09:34	10/15/15 15:40	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/12/15 09:34	10/15/15 15:40	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/12/15 09:34	10/15/15 15:40	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/12/15 09:34	10/15/15 15:40	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 15:40	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/15/15 15:40	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/12/15 09:34	10/15/15 15:40	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/12/15 09:34	10/15/15 15:40	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/12/15 09:34	10/15/15 15:40	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/12/15 09:34	10/15/15 15:40	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/12/15 09:34	10/15/15 15:40	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 15:40	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/12/15 09:34	10/15/15 15:40	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/12/15 09:34	10/15/15 15:40	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/12/15 09:34	10/15/15 15:40	1
Phenol	1.0	U *	1.0	0.15	ug/L		10/12/15 09:34	10/15/15 15:40	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/12/15 09:34	10/15/15 15:40	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/12/15 09:34	10/15/15 15:40	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/12/15 09:34	10/15/15 15:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*31*		*29 - 110*	*10/12/15 09:34*	*10/15/15 15:40*	*1*
2-Fluorophenol (Surr)	*47*		*15 - 110*	*10/12/15 09:34*	*10/15/15 15:40*	*1*
2,4,6-Tribromophenol (Surr)	*21*		*21 - 128*	*10/12/15 09:34*	*10/15/15 15:40*	*1*
Nitrobenzene-d5 (Surr)	*37*		*31 - 110*	*10/12/15 09:34*	*10/15/15 15:40*	*1*
Phenol-d5 (Surr)	*42*		*10 - 110*	*10/12/15 09:34*	*10/15/15 15:40*	*1*
Terphenyl-d14 (Surr)	*28*	*X*	*31 - 115*	*10/12/15 09:34*	*10/15/15 15:40*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**18**		10	2.9	ug/L		10/12/15 10:21	10/15/15 03:20	1
Barium	**320**	**B**	200	1.0	ug/L		10/12/15 10:21	10/15/15 03:20	1
Cadmium	**0.50**	**J**	2.0	0.14	ug/L		10/12/15 10:21	10/15/15 03:20	1
Chromium	**120**		5.0	0.55	ug/L		10/12/15 10:21	10/15/15 03:20	1
Lead	**33**		3.0	1.9	ug/L		10/12/15 10:21	10/15/15 03:20	1
Selenium	5.0	U	5.0	4.0	ug/L		10/12/15 10:21	10/15/15 03:20	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 10:21	10/15/15 03:20	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.14**	**J**	0.20	0.090	ug/L		10/12/15 14:00	10/14/15 10:53	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-7-GW(20-21)
Date Collected: 10/09/15 10:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-26
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	50	U	50	4.7	ug/L			10/20/15 12:23	5
Benzene	5.0	U	5.0	1.8	ug/L			10/20/15 12:23	5
Dichlorobromomethane	5.0	U	5.0	1.5	ug/L			10/20/15 12:23	5
Bromoform	5.0	U	5.0	2.8	ug/L			10/20/15 12:23	5
Bromomethane	5.0	U	5.0	2.2	ug/L			10/20/15 12:23	5
2-Butanone (MEK)	50	U	50	2.7	ug/L			10/20/15 12:23	5
Carbon disulfide	5.0	U	5.0	1.9	ug/L			10/20/15 12:23	5
Carbon tetrachloride	5.0	U	5.0	2.2	ug/L			10/20/15 12:23	5
Chlorobenzene	5.0	U	5.0	1.3	ug/L			10/20/15 12:23	5
Chloroethane	5.0	U	5.0	1.6	ug/L			10/20/15 12:23	5
Chloroform	5.0	U	5.0	1.3	ug/L			10/20/15 12:23	5
Chloromethane	5.0	U	5.0	2.2	ug/L			10/20/15 12:23	5
1,1-Dichloroethane	5.0	U	5.0	1.5	ug/L			10/20/15 12:23	5
1,2-Dichloroethane	5.0	U	5.0	1.2	ug/L			10/20/15 12:23	5
1,1-Dichloroethene	5.0	U	5.0	2.3	ug/L			10/20/15 12:23	5
1,2-Dichloropropane	5.0	U	5.0	1.3	ug/L			10/20/15 12:23	5
cis-1,3-Dichloropropene	5.0	U	5.0	2.3	ug/L			10/20/15 12:23	5
trans-1,3-Dichloropropene	5.0	U	5.0	2.8	ug/L			10/20/15 12:23	5
Ethylbenzene	5.0	U	5.0	1.3	ug/L			10/20/15 12:23	5
2-Hexanone	50	U	50	2.4	ug/L			10/20/15 12:23	5
Methylene Chloride	5.0	U	5.0	1.7	ug/L			10/20/15 12:23	5
4-Methyl-2-pentanone (MIBK)	50	U	50	5.0	ug/L			10/20/15 12:23	5
Styrene	5.0	U	5.0	2.3	ug/L			10/20/15 12:23	5
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1.1	ug/L			10/20/15 12:23	5
Tetrachloroethene	5.0	U	5.0	1.6	ug/L			10/20/15 12:23	5
Toluene	5.0	U	5.0	1.2	ug/L			10/20/15 12:23	5
Trichloroethene	**79**		5.0	1.1	ug/L			10/20/15 12:23	5
Vinyl chloride	5.0	U	5.0	1.5	ug/L			10/20/15 12:23	5
Xylenes, Total	10	U	10	2.6	ug/L			10/20/15 12:23	5
1,1,1-Trichloroethane	5.0	U	5.0	2.2	ug/L			10/20/15 12:23	5
1,1,2-Trichloroethane	5.0	U	5.0	1.2	ug/L			10/20/15 12:23	5
Cyclohexane	5.0	U	5.0	2.3	ug/L			10/20/15 12:23	5
1,2-Dibromo-3-Chloropropane	10	U	10	4.1	ug/L			10/20/15 12:23	5
Ethylene Dibromide	5.0	U	5.0	1.6	ug/L			10/20/15 12:23	5
Dichlorodifluoromethane	5.0	U	5.0	1.6	ug/L			10/20/15 12:23	5
cis-1,2-Dichloroethene	**140**		5.0	1.3	ug/L			10/20/15 12:23	5
trans-1,2-Dichloroethene	5.0	U	5.0	1.5	ug/L			10/20/15 12:23	5
Isopropylbenzene	5.0	U	5.0	1.8	ug/L			10/20/15 12:23	5
Methyl acetate	50	U	50	11	ug/L			10/20/15 12:23	5
Methyl tert-butyl ether	5.0	U	5.0	1.0	ug/L			10/20/15 12:23	5
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	2.3	ug/L			10/20/15 12:23	5
1,2,4-Trichlorobenzene	5.0	U	5.0	1.6	ug/L			10/20/15 12:23	5
1,2-Dichlorobenzene	5.0	U	5.0	1.3	ug/L			10/20/15 12:23	5
1,3-Dichlorobenzene	5.0	U	5.0	0.95	ug/L			10/20/15 12:23	5
1,4-Dichlorobenzene	5.0	U	5.0	1.4	ug/L			10/20/15 12:23	5
Trichlorofluoromethane	5.0	U	5.0	2.5	ug/L			10/20/15 12:23	5
Chlorodibromomethane	5.0	U	5.0	2.2	ug/L			10/20/15 12:23	5
Methylcyclohexane	5.0	U	5.0	2.2	ug/L			10/20/15 12:23	5

Client Sample ID: VAP-7-GW(20-21)

Date Collected: 10/09/15 10:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-26

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*78 - 125*		*10/20/15 12:23*	*5*
4-Bromofluorobenzene (Surr)	*94*		*61 - 120*		*10/20/15 12:23*	*5*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/20/15 12:23*	*5*
Dibromofluoromethane (Surr)	*95*		*79 - 120*		*10/20/15 12:23*	*5*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/12/15 09:34	10/15/15 16:04	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/12/15 09:34	10/15/15 16:04	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/12/15 09:34	10/15/15 16:04	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/12/15 09:34	10/15/15 16:04	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/12/15 09:34	10/15/15 16:04	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/12/15 09:34	10/15/15 16:04	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/12/15 09:34	10/15/15 16:04	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/12/15 09:34	10/15/15 16:04	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/12/15 09:34	10/15/15 16:04	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/12/15 09:34	10/15/15 16:04	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/12/15 09:34	10/15/15 16:04	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/12/15 09:34	10/15/15 16:04	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/12/15 09:34	10/15/15 16:04	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/12/15 09:34	10/15/15 16:04	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/12/15 09:34	10/15/15 16:04	1
3,3'-Dichlorobenzidine	4.6	U	4.6	0.33	ug/L		10/12/15 09:34	10/15/15 16:04	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/12/15 09:34	10/15/15 16:04	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/12/15 09:34	10/15/15 16:04	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/12/15 09:34	10/15/15 16:04	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/12/15 09:34	10/15/15 16:04	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/12/15 09:34	10/15/15 16:04	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/12/15 09:34	10/15/15 16:04	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/12/15 09:34	10/15/15 16:04	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/12/15 09:34	10/15/15 16:04	1
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/12/15 09:34	10/15/15 16:04	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/12/15 09:34	10/15/15 16:04	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/12/15 09:34	10/15/15 16:04	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/12/15 09:34	10/15/15 16:04	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/12/15 09:34	10/15/15 16:04	1
Benzaldehyde	0.93	U	0.93	0.27	ug/L		10/12/15 09:34	10/15/15 16:04	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/12/15 09:34	10/15/15 16:04	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/12/15 09:34	10/15/15 16:04	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/12/15 09:34	10/15/15 16:04	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/12/15 09:34	10/15/15 16:04	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/12/15 09:34	10/15/15 16:04	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/12/15 09:34	10/15/15 16:04	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/12/15 09:34	10/15/15 16:04	1
Bis(2-ethylhexyl) phthalate	**1.8**	**J B**	1.9	1.4	ug/L		10/12/15 09:34	10/15/15 16:04	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/12/15 09:34	10/15/15 16:04	1
Caprolactam	**1.8**	**J B**	4.6	0.34	ug/L		10/12/15 09:34	10/15/15 16:04	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/12/15 09:34	10/15/15 16:04	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/12/15 09:34	10/15/15 16:04	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/12/15 09:34	10/15/15 16:04	1

Client Sample ID: VAP-7-GW(20-21)

Date Collected: 10/09/15 10:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-26

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/12/15 09:34	10/15/15 16:04	1
Diethyl phthalate	**0.21**	**J**	0.93	0.12	ug/L		10/12/15 09:34	10/15/15 16:04	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/12/15 09:34	10/15/15 16:04	1
Di-n-butyl phthalate	**0.74**	**J B**	0.93	0.37	ug/L		10/12/15 09:34	10/15/15 16:04	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/12/15 09:34	10/15/15 16:04	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/12/15 09:34	10/15/15 16:04	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/12/15 09:34	10/15/15 16:04	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/12/15 09:34	10/15/15 16:04	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/12/15 09:34	10/15/15 16:04	1
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/12/15 09:34	10/15/15 16:04	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/12/15 09:34	10/15/15 16:04	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/12/15 09:34	10/15/15 16:04	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/12/15 09:34	10/15/15 16:04	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/12/15 09:34	10/15/15 16:04	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/12/15 09:34	10/15/15 16:04	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/12/15 09:34	10/15/15 16:04	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/12/15 09:34	10/15/15 16:04	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/12/15 09:34	10/15/15 16:04	1
Phenol	0.93	U *	0.93	0.14	ug/L		10/12/15 09:34	10/15/15 16:04	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/12/15 09:34	10/15/15 16:04	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/12/15 09:34	10/15/15 16:04	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/12/15 09:34	10/15/15 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*48*		*29 - 110*	*10/12/15 09:34*	*10/15/15 16:04*	*1*
2-Fluorophenol (Surr)	*50*		*15 - 110*	*10/12/15 09:34*	*10/15/15 16:04*	*1*
2,4,6-Tribromophenol (Surr)	*38*		*21 - 128*	*10/12/15 09:34*	*10/15/15 16:04*	*1*
Nitrobenzene-d5 (Surr)	*48*		*31 - 110*	*10/12/15 09:34*	*10/15/15 16:04*	*1*
Phenol-d5 (Surr)	*42*		*10 - 110*	*10/12/15 09:34*	*10/15/15 16:04*	*1*
Terphenyl-d14 (Surr)	*52*		*31 - 115*	*10/12/15 09:34*	*10/15/15 16:04*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**6.4**	**J**	10	2.9	ug/L		10/12/15 10:21	10/15/15 03:24	1
Barium	**190**	**J B**	200	1.0	ug/L		10/12/15 10:21	10/15/15 03:24	1
Cadmium	2.0	U	2.0	0.14	ug/L		10/12/15 10:21	10/15/15 03:24	1
Chromium	**43**		5.0	0.55	ug/L		10/12/15 10:21	10/15/15 03:24	1
Lead	**11**		3.0	1.9	ug/L		10/12/15 10:21	10/15/15 03:24	1
Selenium	5.0	U	5.0	4.0	ug/L		10/12/15 10:21	10/15/15 03:24	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 10:21	10/15/15 03:24	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/12/15 14:00	10/14/15 10:55	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-7-GW(25-26)
Date Collected: 10/09/15 10:34
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-27
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	33	U	33	3.1	ug/L			10/20/15 13:22	3.33
Benzene	3.3	U	3.3	1.2	ug/L			10/20/15 13:22	3.33
Dichlorobromomethane	3.3	U	3.3	0.97	ug/L			10/20/15 13:22	3.33
Bromoform	3.3	U	3.3	1.9	ug/L			10/20/15 13:22	3.33
Bromomethane	3.3	U	3.3	1.5	ug/L			10/20/15 13:22	3.33
2-Butanone (MEK)	33	U	33	1.8	ug/L			10/20/15 13:22	3.33
Carbon disulfide	3.3	U	3.3	1.3	ug/L			10/20/15 13:22	3.33
Carbon tetrachloride	3.3	U	3.3	1.4	ug/L			10/20/15 13:22	3.33
Chlorobenzene	3.3	U	3.3	0.83	ug/L			10/20/15 13:22	3.33
Chloroethane	3.3	U	3.3	1.1	ug/L			10/20/15 13:22	3.33
Chloroform	3.3	U	3.3	0.83	ug/L			10/20/15 13:22	3.33
Chloromethane	3.3	U	3.3	1.5	ug/L			10/20/15 13:22	3.33
1,1-Dichloroethane	3.3	U	3.3	1.0	ug/L			10/20/15 13:22	3.33
1,2-Dichloroethane	3.3	U	3.3	0.77	ug/L			10/20/15 13:22	3.33
1,1-Dichloroethene	3.3	U	3.3	1.5	ug/L			10/20/15 13:22	3.33
1,2-Dichloropropane	3.3	U	3.3	0.83	ug/L			10/20/15 13:22	3.33
cis-1,3-Dichloropropene	3.3	U	3.3	1.5	ug/L			10/20/15 13:22	3.33
trans-1,3-Dichloropropene	3.3	U	3.3	1.9	ug/L			10/20/15 13:22	3.33
Ethylbenzene	3.3	U	3.3	0.83	ug/L			10/20/15 13:22	3.33
2-Hexanone	33	U	33	1.6	ug/L			10/20/15 13:22	3.33
Methylene Chloride	3.3	U	3.3	1.1	ug/L			10/20/15 13:22	3.33
4-Methyl-2-pentanone (MIBK)	33	U	33	3.3	ug/L			10/20/15 13:22	3.33
Styrene	3.3	U	3.3	1.5	ug/L			10/20/15 13:22	3.33
1,1,2,2-Tetrachloroethane	3.3	U	3.3	0.73	ug/L			10/20/15 13:22	3.33
Tetrachloroethene	3.3	U	3.3	1.0	ug/L			10/20/15 13:22	3.33
Toluene	3.3	U	3.3	0.77	ug/L			10/20/15 13:22	3.33
Trichloroethene	**76**		3.3	0.73	ug/L			10/20/15 13:22	3.33
Vinyl chloride	3.3	U	3.3	0.97	ug/L			10/20/15 13:22	3.33
Xylenes, Total	6.7	U	6.7	1.7	ug/L			10/20/15 13:22	3.33
1,1,1-Trichloroethane	3.3	U	3.3	1.5	ug/L			10/20/15 13:22	3.33
1,1,2-Trichloroethane	3.3	U	3.3	0.80	ug/L			10/20/15 13:22	3.33
Cyclohexane	3.3	U	3.3	1.5	ug/L			10/20/15 13:22	3.33
1,2-Dibromo-3-Chloropropane	6.7	U	6.7	2.7	ug/L			10/20/15 13:22	3.33
Ethylene Dibromide	3.3	U	3.3	1.1	ug/L			10/20/15 13:22	3.33
Dichlorodifluoromethane	3.3	U	3.3	1.1	ug/L			10/20/15 13:22	3.33
cis-1,2-Dichloroethene	**100**		3.3	0.87	ug/L			10/20/15 13:22	3.33
trans-1,2-Dichloroethene	3.3	U	3.3	1.0	ug/L			10/20/15 13:22	3.33
Isopropylbenzene	3.3	U	3.3	1.2	ug/L			10/20/15 13:22	3.33
Methyl acetate	33	U	33	7.6	ug/L			10/20/15 13:22	3.33
Methyl tert-butyl ether	3.3	U	3.3	0.67	ug/L			10/20/15 13:22	3.33
1,1,2-Trichloro-1,2,2-trifluoroethane	3.3	U	3.3	1.5	ug/L			10/20/15 13:22	3.33
1,2,4-Trichlorobenzene	3.3	U	3.3	1.1	ug/L			10/20/15 13:22	3.33
1,2-Dichlorobenzene	3.3	U	3.3	0.83	ug/L			10/20/15 13:22	3.33
1,3-Dichlorobenzene	3.3	U	3.3	0.63	ug/L			10/20/15 13:22	3.33
1,4-Dichlorobenzene	3.3	U	3.3	0.90	ug/L			10/20/15 13:22	3.33
Trichlorofluoromethane	3.3	U	3.3	1.6	ug/L			10/20/15 13:22	3.33
Chlorodibromomethane	3.3	U	3.3	1.4	ug/L			10/20/15 13:22	3.33
Methylcyclohexane	3.3	U	3.3	1.4	ug/L			10/20/15 13:22	3.33

Client Sample ID: VAP-7-GW(25-26)

Date Collected: 10/09/15 10:34
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-27

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*78 - 125*		*10/20/15 13:22*	*3.33*
4-Bromofluorobenzene (Surr)	*99*		*61 - 120*		*10/20/15 13:22*	*3.33*
Toluene-d8 (Surr)	*93*		*80 - 120*		*10/20/15 13:22*	*3.33*
Dibromofluoromethane (Surr)	*98*		*79 - 120*		*10/20/15 13:22*	*3.33*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/12/15 09:34	10/15/15 16:27	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/12/15 09:34	10/15/15 16:27	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/12/15 09:34	10/15/15 16:27	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/12/15 09:34	10/15/15 16:27	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/12/15 09:34	10/15/15 16:27	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/12/15 09:34	10/15/15 16:27	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/12/15 09:34	10/15/15 16:27	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/12/15 09:34	10/15/15 16:27	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/12/15 09:34	10/15/15 16:27	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 16:27	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/12/15 09:34	10/15/15 16:27	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/12/15 09:34	10/15/15 16:27	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/12/15 09:34	10/15/15 16:27	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/12/15 09:34	10/15/15 16:27	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/12/15 09:34	10/15/15 16:27	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/12/15 09:34	10/15/15 16:27	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/12/15 09:34	10/15/15 16:27	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/12/15 09:34	10/15/15 16:27	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/12/15 09:34	10/15/15 16:27	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/12/15 09:34	10/15/15 16:27	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/12/15 09:34	10/15/15 16:27	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/12/15 09:34	10/15/15 16:27	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/12/15 09:34	10/15/15 16:27	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/12/15 09:34	10/15/15 16:27	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/12/15 09:34	10/15/15 16:27	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/12/15 09:34	10/15/15 16:27	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/12/15 09:34	10/15/15 16:27	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/12/15 09:34	10/15/15 16:27	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 16:27	1
Benzaldehyde	0.96	U	0.96	0.28	ug/L		10/12/15 09:34	10/15/15 16:27	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/12/15 09:34	10/15/15 16:27	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/12/15 09:34	10/15/15 16:27	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/12/15 09:34	10/15/15 16:27	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/12/15 09:34	10/15/15 16:27	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/12/15 09:34	10/15/15 16:27	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/12/15 09:34	10/15/15 16:27	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/12/15 09:34	10/15/15 16:27	1
Bis(2-ethylhexyl) phthalate	**1.5**	**J B**	1.9	1.5	ug/L		10/12/15 09:34	10/15/15 16:27	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/12/15 09:34	10/15/15 16:27	1
Caprolactam	4.8	U	4.8	0.36	ug/L		10/12/15 09:34	10/15/15 16:27	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/12/15 09:34	10/15/15 16:27	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/12/15 09:34	10/15/15 16:27	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/12/15 09:34	10/15/15 16:27	1

Client Sample ID: VAP-7-GW(25-26)

Date Collected: 10/09/15 10:34
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-27

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/12/15 09:34	10/15/15 16:27	1
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/12/15 09:34	10/15/15 16:27	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/12/15 09:34	10/15/15 16:27	1
Di-n-butyl phthalate	**0.71**	**J B**	0.96	0.38	ug/L		10/12/15 09:34	10/15/15 16:27	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/12/15 09:34	10/15/15 16:27	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/12/15 09:34	10/15/15 16:27	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/12/15 09:34	10/15/15 16:27	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 16:27	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/12/15 09:34	10/15/15 16:27	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/12/15 09:34	10/15/15 16:27	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/12/15 09:34	10/15/15 16:27	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/12/15 09:34	10/15/15 16:27	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/12/15 09:34	10/15/15 16:27	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/12/15 09:34	10/15/15 16:27	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 16:27	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/12/15 09:34	10/15/15 16:27	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 16:27	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/12/15 09:34	10/15/15 16:27	1
Phenol	0.96	U *	0.96	0.14	ug/L		10/12/15 09:34	10/15/15 16:27	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/12/15 09:34	10/15/15 16:27	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/12/15 09:34	10/15/15 16:27	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/12/15 09:34	10/15/15 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*34*		*29 - 110*	*10/12/15 09:34*	*10/15/15 16:27*	*1*
2-Fluorophenol (Surr)	*35*		*15 - 110*	*10/12/15 09:34*	*10/15/15 16:27*	*1*
2,4,6-Tribromophenol (Surr)	*25*		*21 - 128*	*10/12/15 09:34*	*10/15/15 16:27*	*1*
Nitrobenzene-d5 (Surr)	*34*		*31 - 110*	*10/12/15 09:34*	*10/15/15 16:27*	*1*
Phenol-d5 (Surr)	*29*		*10 - 110*	*10/12/15 09:34*	*10/15/15 16:27*	*1*
Terphenyl-d14 (Surr)	*33*		*31 - 115*	*10/12/15 09:34*	*10/15/15 16:27*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**12**		10	2.9	ug/L		10/12/15 08:36	10/13/15 23:01	1
Barium	**390**	**B**	200	1.0	ug/L		10/12/15 08:36	10/13/15 23:01	1
Cadmium	**0.44**	**J**	2.0	0.14	ug/L		10/12/15 08:36	10/13/15 23:01	1
Chromium	**140**		5.0	0.55	ug/L		10/12/15 08:36	10/13/15 23:01	1
Lead	**47**		3.0	1.9	ug/L		10/12/15 08:36	10/13/15 23:01	1
Selenium	5.0	U	5.0	4.0	ug/L		10/12/15 08:36	10/13/15 23:01	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 08:36	10/13/15 23:01	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.093**	**J**	0.20	0.090	ug/L		10/12/15 14:00	10/14/15 07:31	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-7-GW(30-31)
Date Collected: 10/09/15 10:57
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-28
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	20	U	20	1.9	ug/L			10/14/15 21:31	2
Benzene	2.0	U	2.0	0.70	ug/L			10/14/15 21:31	2
Dichlorobromomethane	2.0	U	2.0	0.58	ug/L			10/14/15 21:31	2
Bromoform	2.0	U	2.0	1.1	ug/L			10/14/15 21:31	2
Bromomethane	2.0	U F2	2.0	0.88	ug/L			10/14/15 21:31	2
2-Butanone (MEK)	20	U	20	1.1	ug/L			10/14/15 21:31	2
Carbon disulfide	2.0	U	2.0	0.76	ug/L			10/14/15 21:31	2
Carbon tetrachloride	2.0	U	2.0	0.86	ug/L			10/14/15 21:31	2
Chlorobenzene	2.0	U	2.0	0.50	ug/L			10/14/15 21:31	2
Chloroethane	2.0	U F2	2.0	0.64	ug/L			10/14/15 21:31	2
Chloroform	2.0	U	2.0	0.50	ug/L			10/14/15 21:31	2
Chloromethane	2.0	U F2 F1	2.0	0.88	ug/L			10/14/15 21:31	2
1,1-Dichloroethane	2.0	U	2.0	0.60	ug/L			10/14/15 21:31	2
1,2-Dichloroethane	2.0	U	2.0	0.46	ug/L			10/14/15 21:31	2
1,1-Dichloroethene	2.0	U	2.0	0.90	ug/L			10/14/15 21:31	2
1,2-Dichloropropane	2.0	U	2.0	0.50	ug/L			10/14/15 21:31	2
cis-1,3-Dichloropropene	2.0	U	2.0	0.92	ug/L			10/14/15 21:31	2
trans-1,3-Dichloropropene	2.0	U	2.0	1.1	ug/L			10/14/15 21:31	2
Ethylbenzene	2.0	U	2.0	0.50	ug/L			10/14/15 21:31	2
2-Hexanone	20	U	20	0.96	ug/L			10/14/15 21:31	2
Methylene Chloride	2.0	U	2.0	0.66	ug/L			10/14/15 21:31	2
4-Methyl-2-pentanone (MIBK)	20	U	20	2.0	ug/L			10/14/15 21:31	2
Styrene	2.0	U	2.0	0.90	ug/L			10/14/15 21:31	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.44	ug/L			10/14/15 21:31	2
Tetrachloroethene	2.0	U	2.0	0.62	ug/L			10/14/15 21:31	2
Toluene	2.0	U	2.0	0.46	ug/L			10/14/15 21:31	2
Trichloroethene	**33**	**F1**	2.0	0.44	ug/L			10/14/15 21:31	2
Vinyl chloride	2.0	U	2.0	0.58	ug/L			10/14/15 21:31	2
Xylenes, Total	4.0	U	4.0	1.0	ug/L			10/14/15 21:31	2
1,1,1-Trichloroethane	2.0	U F2	2.0	0.88	ug/L			10/14/15 21:31	2
1,1,2-Trichloroethane	2.0	U	2.0	0.48	ug/L			10/14/15 21:31	2
Cyclohexane	2.0	U	2.0	0.90	ug/L			10/14/15 21:31	2
1,2-Dibromo-3-Chloropropane	4.0	U	4.0	1.6	ug/L			10/14/15 21:31	2
Ethylene Dibromide	2.0	U	2.0	0.64	ug/L			10/14/15 21:31	2
Dichlorodifluoromethane	2.0	U	2.0	0.64	ug/L			10/14/15 21:31	2
cis-1,2-Dichloroethene	**54**		2.0	0.52	ug/L			10/14/15 21:31	2
trans-1,2-Dichloroethene	2.0	U	2.0	0.60	ug/L			10/14/15 21:31	2
Isopropylbenzene	2.0	U	2.0	0.70	ug/L			10/14/15 21:31	2
Methyl acetate	20	U	20	4.5	ug/L			10/14/15 21:31	2
Methyl tert-butyl ether	2.0	U	2.0	0.40	ug/L			10/14/15 21:31	2
1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	U	2.0	0.90	ug/L			10/14/15 21:31	2
1,2,4-Trichlorobenzene	2.0	U	2.0	0.64	ug/L			10/14/15 21:31	2
1,2-Dichlorobenzene	2.0	U	2.0	0.50	ug/L			10/14/15 21:31	2
1,3-Dichlorobenzene	2.0	U	2.0	0.38	ug/L			10/14/15 21:31	2
1,4-Dichlorobenzene	2.0	U	2.0	0.54	ug/L			10/14/15 21:31	2
Trichlorofluoromethane	2.0	U	2.0	0.98	ug/L			10/14/15 21:31	2
Chlorodibromomethane	2.0	U	2.0	0.86	ug/L			10/14/15 21:31	2
Methylcyclohexane	2.0	U	2.0	0.86	ug/L			10/14/15 21:31	2

Client Sample ID: VAP-7-GW(30-31)

Date Collected: 10/09/15 10:57
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-28

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*78 - 125*		*10/14/15 21:31*	*2*
4-Bromofluorobenzene (Surr)	*96*		*61 - 120*		*10/14/15 21:31*	*2*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/14/15 21:31*	*2*
Dibromofluoromethane (Surr)	*96*		*79 - 120*		*10/14/15 21:31*	*2*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/12/15 09:34	10/15/15 16:51	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/12/15 09:34	10/15/15 16:51	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/12/15 09:34	10/15/15 16:51	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/12/15 09:34	10/15/15 16:51	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/12/15 09:34	10/15/15 16:51	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/12/15 09:34	10/15/15 16:51	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/12/15 09:34	10/15/15 16:51	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/12/15 09:34	10/15/15 16:51	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/12/15 09:34	10/15/15 16:51	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 16:51	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/12/15 09:34	10/15/15 16:51	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/12/15 09:34	10/15/15 16:51	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/12/15 09:34	10/15/15 16:51	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/12/15 09:34	10/15/15 16:51	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/12/15 09:34	10/15/15 16:51	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/12/15 09:34	10/15/15 16:51	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/12/15 09:34	10/15/15 16:51	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/12/15 09:34	10/15/15 16:51	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/12/15 09:34	10/15/15 16:51	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/12/15 09:34	10/15/15 16:51	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/12/15 09:34	10/15/15 16:51	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/12/15 09:34	10/15/15 16:51	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/12/15 09:34	10/15/15 16:51	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/12/15 09:34	10/15/15 16:51	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/12/15 09:34	10/15/15 16:51	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/12/15 09:34	10/15/15 16:51	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/12/15 09:34	10/15/15 16:51	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/12/15 09:34	10/15/15 16:51	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 16:51	1
Benzaldehyde	0.96	U	0.96	0.28	ug/L		10/12/15 09:34	10/15/15 16:51	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/12/15 09:34	10/15/15 16:51	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/12/15 09:34	10/15/15 16:51	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/12/15 09:34	10/15/15 16:51	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/12/15 09:34	10/15/15 16:51	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/12/15 09:34	10/15/15 16:51	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/12/15 09:34	10/15/15 16:51	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/12/15 09:34	10/15/15 16:51	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	1.5	ug/L		10/12/15 09:34	10/15/15 16:51	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/12/15 09:34	10/15/15 16:51	1
Caprolactam	**0.68**	**J B**	4.8	0.36	ug/L		10/12/15 09:34	10/15/15 16:51	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/12/15 09:34	10/15/15 16:51	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/12/15 09:34	10/15/15 16:51	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/12/15 09:34	10/15/15 16:51	1

Client Sample ID: VAP-7-GW(30-31)

Date Collected: 10/09/15 10:57
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-28
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/12/15 09:34	10/15/15 16:51	1
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/12/15 09:34	10/15/15 16:51	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/12/15 09:34	10/15/15 16:51	1
Di-n-butyl phthalate	**0.51**	**J B**	0.96	0.38	ug/L		10/12/15 09:34	10/15/15 16:51	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/12/15 09:34	10/15/15 16:51	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/12/15 09:34	10/15/15 16:51	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/12/15 09:34	10/15/15 16:51	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 16:51	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/12/15 09:34	10/15/15 16:51	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/12/15 09:34	10/15/15 16:51	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/12/15 09:34	10/15/15 16:51	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/12/15 09:34	10/15/15 16:51	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/12/15 09:34	10/15/15 16:51	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/12/15 09:34	10/15/15 16:51	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 16:51	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/12/15 09:34	10/15/15 16:51	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 16:51	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/12/15 09:34	10/15/15 16:51	1
Phenol	0.96	U *	0.96	0.14	ug/L		10/12/15 09:34	10/15/15 16:51	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/12/15 09:34	10/15/15 16:51	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/12/15 09:34	10/15/15 16:51	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/12/15 09:34	10/15/15 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*28*	*X*	*29 - 110*	*10/12/15 09:34*	*10/15/15 16:51*	*1*
2-Fluorophenol (Surr)	*34*		*15 - 110*	*10/12/15 09:34*	*10/15/15 16:51*	*1*
2,4,6-Tribromophenol (Surr)	*22*		*21 - 128*	*10/12/15 09:34*	*10/15/15 16:51*	*1*
Nitrobenzene-d5 (Surr)	*31*		*31 - 110*	*10/12/15 09:34*	*10/15/15 16:51*	*1*
Phenol-d5 (Surr)	*29*		*10 - 110*	*10/12/15 09:34*	*10/15/15 16:51*	*1*
Terphenyl-d14 (Surr)	*31*		*31 - 115*	*10/12/15 09:34*	*10/15/15 16:51*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**9.4**	**J**	10	2.9	ug/L		10/12/15 08:36	10/13/15 23:05	1
Barium	**280**	**B**	200	1.0	ug/L		10/12/15 08:36	10/13/15 23:05	1
Cadmium	**0.40**	**J**	2.0	0.14	ug/L		10/12/15 08:36	10/13/15 23:05	1
Chromium	**93**		5.0	0.55	ug/L		10/12/15 08:36	10/13/15 23:05	1
Lead	**38**		3.0	1.9	ug/L		10/12/15 08:36	10/13/15 23:05	1
Selenium	**4.9**	**J**	5.0	4.0	ug/L		10/12/15 08:36	10/13/15 23:05	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 08:36	10/13/15 23:05	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.099**	**J**	0.20	0.090	ug/L		10/12/15 14:00	10/14/15 07:37	1

Client Sample ID: VAP-7-GW(35-36)
Date Collected: 10/09/15 11:34
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-29
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/20/15 13:45	1
Benzene	1.0	U	1.0	0.35	ug/L			10/20/15 13:45	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/20/15 13:45	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/20/15 13:45	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/20/15 13:45	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/20/15 13:45	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/20/15 13:45	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/20/15 13:45	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 13:45	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/20/15 13:45	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/20/15 13:45	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/20/15 13:45	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/20/15 13:45	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/20/15 13:45	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/20/15 13:45	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/20/15 13:45	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/20/15 13:45	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/20/15 13:45	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/20/15 13:45	1
2-Hexanone	10	U	10	0.48	ug/L			10/20/15 13:45	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/20/15 13:45	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/20/15 13:45	1
Styrene	1.0	U	1.0	0.45	ug/L			10/20/15 13:45	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/20/15 13:45	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/20/15 13:45	1
Toluene	1.0	U	1.0	0.23	ug/L			10/20/15 13:45	1
Trichloroethene	**10**		1.0	0.22	ug/L			10/20/15 13:45	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/20/15 13:45	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/20/15 13:45	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/20/15 13:45	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/20/15 13:45	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/20/15 13:45	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/20/15 13:45	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/20/15 13:45	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/20/15 13:45	1
cis-1,2-Dichloroethene	**14**		1.0	0.26	ug/L			10/20/15 13:45	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/20/15 13:45	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/20/15 13:45	1
Methyl acetate	10	U	10	2.3	ug/L			10/20/15 13:45	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/20/15 13:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/20/15 13:45	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/20/15 13:45	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 13:45	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/20/15 13:45	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/20/15 13:45	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/20/15 13:45	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/20/15 13:45	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/20/15 13:45	1

Client Sample ID: VAP-7-GW(35-36)

Lab Sample ID: 240-56464-29

Date Collected: 10/09/15 11:34

Matrix: Water

Date Received: 10/10/15 09:45

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*96*		*78 - 125*		*10/20/15 13:45*	*1*
4-Bromofluorobenzene (Surr)	*97*		*61 - 120*		*10/20/15 13:45*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/20/15 13:45*	*1*
Dibromofluoromethane (Surr)	*93*		*79 - 120*		*10/20/15 13:45*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/12/15 09:34	10/15/15 17:14	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/12/15 09:34	10/15/15 17:14	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/12/15 09:34	10/15/15 17:14	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/12/15 09:34	10/15/15 17:14	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/12/15 09:34	10/15/15 17:14	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/12/15 09:34	10/15/15 17:14	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/12/15 09:34	10/15/15 17:14	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/12/15 09:34	10/15/15 17:14	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/12/15 09:34	10/15/15 17:14	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/12/15 09:34	10/15/15 17:14	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/12/15 09:34	10/15/15 17:14	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/12/15 09:34	10/15/15 17:14	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/12/15 09:34	10/15/15 17:14	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/12/15 09:34	10/15/15 17:14	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/12/15 09:34	10/15/15 17:14	1
3,3'-Dichlorobenzidine	4.6	U	4.6	0.33	ug/L		10/12/15 09:34	10/15/15 17:14	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/12/15 09:34	10/15/15 17:14	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/12/15 09:34	10/15/15 17:14	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/12/15 09:34	10/15/15 17:14	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/12/15 09:34	10/15/15 17:14	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/12/15 09:34	10/15/15 17:14	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/12/15 09:34	10/15/15 17:14	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/12/15 09:34	10/15/15 17:14	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/12/15 09:34	10/15/15 17:14	1
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/12/15 09:34	10/15/15 17:14	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/12/15 09:34	10/15/15 17:14	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/12/15 09:34	10/15/15 17:14	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/12/15 09:34	10/15/15 17:14	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/12/15 09:34	10/15/15 17:14	1
Benzaldehyde	0.93	U	0.93	0.27	ug/L		10/12/15 09:34	10/15/15 17:14	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/12/15 09:34	10/15/15 17:14	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/12/15 09:34	10/15/15 17:14	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/12/15 09:34	10/15/15 17:14	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/12/15 09:34	10/15/15 17:14	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/12/15 09:34	10/15/15 17:14	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/12/15 09:34	10/15/15 17:14	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/12/15 09:34	10/15/15 17:14	1
Bis(2-ethylhexyl) phthalate	**1.6**	**J B**	1.9	1.4	ug/L		10/12/15 09:34	10/15/15 17:14	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/12/15 09:34	10/15/15 17:14	1
Caprolactam	**0.80**	**J B**	4.6	0.34	ug/L		10/12/15 09:34	10/15/15 17:14	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/12/15 09:34	10/15/15 17:14	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/12/15 09:34	10/15/15 17:14	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/12/15 09:34	10/15/15 17:14	1

Client Sample ID: VAP-7-GW(35-36)
Date Collected: 10/09/15 11:34
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-29
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/12/15 09:34	10/15/15 17:14	1
Diethyl phthalate	**0.23**	**J**	0.93	0.12	ug/L		10/12/15 09:34	10/15/15 17:14	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/12/15 09:34	10/15/15 17:14	1
Di-n-butyl phthalate	**0.85**	**J B**	0.93	0.37	ug/L		10/12/15 09:34	10/15/15 17:14	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/12/15 09:34	10/15/15 17:14	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/12/15 09:34	10/15/15 17:14	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/12/15 09:34	10/15/15 17:14	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/12/15 09:34	10/15/15 17:14	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/12/15 09:34	10/15/15 17:14	1
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/12/15 09:34	10/15/15 17:14	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/12/15 09:34	10/15/15 17:14	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/12/15 09:34	10/15/15 17:14	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/12/15 09:34	10/15/15 17:14	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/12/15 09:34	10/15/15 17:14	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/12/15 09:34	10/15/15 17:14	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/12/15 09:34	10/15/15 17:14	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/12/15 09:34	10/15/15 17:14	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/12/15 09:34	10/15/15 17:14	1
Phenol	0.93	U *	0.93	0.14	ug/L		10/12/15 09:34	10/15/15 17:14	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/12/15 09:34	10/15/15 17:14	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/12/15 09:34	10/15/15 17:14	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/12/15 09:34	10/15/15 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*16*	*X*	*29 - 110*	*10/12/15 09:34*	*10/15/15 17:14*	*1*
2-Fluorophenol (Surr)	*25*		*15 - 110*	*10/12/15 09:34*	*10/15/15 17:14*	*1*
2,4,6-Tribromophenol (Surr)	*12*	*X*	*21 - 128*	*10/12/15 09:34*	*10/15/15 17:14*	*1*
Nitrobenzene-d5 (Surr)	*18*	*X*	*31 - 110*	*10/12/15 09:34*	*10/15/15 17:14*	*1*
Phenol-d5 (Surr)	*23*		*10 - 110*	*10/12/15 09:34*	*10/15/15 17:14*	*1*
Terphenyl-d14 (Surr)	*12*	*X*	*31 - 115*	*10/12/15 09:34*	*10/15/15 17:14*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.1	U H	1.1	0.13	ug/L		10/19/15 09:03	10/20/15 15:00	1
bis (2-chloroisopropyl) ether	1.1	U H	1.1	0.20	ug/L		10/19/15 09:03	10/20/15 15:00	1
2,4,5-Trichlorophenol	5.4	U H	5.4	0.40	ug/L		10/19/15 09:03	10/20/15 15:00	1
2,4,6-Trichlorophenol	5.4	U H	5.4	0.28	ug/L		10/19/15 09:03	10/20/15 15:00	1
2,4-Dichlorophenol	2.2	U H	2.2	0.32	ug/L		10/19/15 09:03	10/20/15 15:00	1
2,4-Dimethylphenol	2.2	U H	2.2	0.34	ug/L		10/19/15 09:03	10/20/15 15:00	1
2,4-Dinitrophenol	43	U H	43	6.7	ug/L		10/19/15 09:03	10/20/15 15:00	1
2,4-Dinitrotoluene	5.4	U H	5.4	0.28	ug/L		10/19/15 09:03	10/20/15 15:00	1
2,6-Dinitrotoluene	5.4	U H	5.4	0.26	ug/L		10/19/15 09:03	10/20/15 15:00	1
2-Chloronaphthalene	1.1	U H	1.1	0.13	ug/L		10/19/15 09:03	10/20/15 15:00	1
2-Chlorophenol	1.1	U H	1.1	0.14	ug/L		10/19/15 09:03	10/20/15 15:00	1
2-Methylnaphthalene	0.22	U H	0.22	0.040	ug/L		10/19/15 09:03	10/20/15 15:00	1
2-Methylphenol	1.1	U H	1.1	0.20	ug/L		10/19/15 09:03	10/20/15 15:00	1
2-Nitroaniline	2.2	U H	2.2	0.33	ug/L		10/19/15 09:03	10/20/15 15:00	1
2-Nitrophenol	2.2	U H	2.2	0.23	ug/L		10/19/15 09:03	10/20/15 15:00	1
3,3'-Dichlorobenzidine	5.4	U H *	5.4	0.38	ug/L		10/19/15 09:03	10/20/15 15:00	1
3-Nitroaniline	2.2	U H	2.2	0.29	ug/L		10/19/15 09:03	10/20/15 15:00	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-7-GW(35-36)
Date Collected: 10/09/15 11:34
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-29
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	5.4	U H	5.4	0.57	ug/L		10/19/15 09:03	10/20/15 15:00	1
4-Bromophenyl phenyl ether	2.2	U H	2.2	0.38	ug/L		10/19/15 09:03	10/20/15 15:00	1
4-Chloro-3-methylphenol	2.2	U H	2.2	0.30	ug/L		10/19/15 09:03	10/20/15 15:00	1
4-Chloroaniline	2.2	U H *	2.2	0.16	ug/L		10/19/15 09:03	10/20/15 15:00	1
4-Chlorophenyl phenyl ether	2.2	U H	2.2	0.32	ug/L		10/19/15 09:03	10/20/15 15:00	1
4-Nitroaniline	2.2	U H	2.2	0.26	ug/L		10/19/15 09:03	10/20/15 15:00	1
4-Nitrophenol	5.4	U H	5.4	0.64	ug/L		10/19/15 09:03	10/20/15 15:00	1
Acenaphthene	0.22	U H	0.22	0.048	ug/L		10/19/15 09:03	10/20/15 15:00	1
Acenaphthylene	0.22	U H	0.22	0.022	ug/L		10/19/15 09:03	10/20/15 15:00	1
Acetophenone	1.1	U H	1.1	0.15	ug/L		10/19/15 09:03	10/20/15 15:00	1
Anthracene	0.22	U H	0.22	0.034	ug/L		10/19/15 09:03	10/20/15 15:00	1
Atrazine	1.1	U H	1.1	0.13	ug/L		10/19/15 09:03	10/20/15 15:00	1
Benzaldehyde	1.1	U H *	1.1	0.32	ug/L		10/19/15 09:03	10/20/15 15:00	1
Benzo[a]anthracene	0.22	U H	0.22	0.064	ug/L		10/19/15 09:03	10/20/15 15:00	1
Benzo[a]pyrene	0.22	U H	0.22	0.033	ug/L		10/19/15 09:03	10/20/15 15:00	1
Benzo[b]fluoranthene	0.22	U H	0.22	0.064	ug/L		10/19/15 09:03	10/20/15 15:00	1
Benzo[g,h,i]perylene	0.22	U H	0.22	0.054	ug/L		10/19/15 09:03	10/20/15 15:00	1
Benzo[k]fluoranthene	0.22	U H	0.22	0.052	ug/L		10/19/15 09:03	10/20/15 15:00	1
Bis(2-chloroethoxy)methane	1.1	U H	1.1	0.040	ug/L		10/19/15 09:03	10/20/15 15:00	1
Bis(2-chloroethyl)ether	1.1	U H	1.1	0.21	ug/L		10/19/15 09:03	10/20/15 15:00	1
Bis(2-ethylhexyl) phthalate	2.2	U H	2.2	1.7	ug/L		10/19/15 09:03	10/20/15 15:00	1
Butyl benzyl phthalate	1.1	U H	1.1	0.23	ug/L		10/19/15 09:03	10/20/15 15:00	1
Caprolactam	**2.0**	**J H B**	5.4	0.40	ug/L		10/19/15 09:03	10/20/15 15:00	1
Carbazole	1.1	U H	1.1	0.11	ug/L		10/19/15 09:03	10/20/15 15:00	1
Chrysene	0.22	U H	0.22	0.038	ug/L		10/19/15 09:03	10/20/15 15:00	1
Dibenz(a,h)anthracene	0.22	U H	0.22	0.043	ug/L		10/19/15 09:03	10/20/15 15:00	1
Dibenzofuran	1.1	U H	1.1	0.15	ug/L		10/19/15 09:03	10/20/15 15:00	1
Diethyl phthalate	1.1	U H	1.1	0.14	ug/L		10/19/15 09:03	10/20/15 15:00	1
Dimethyl phthalate	1.1	U H	1.1	0.11	ug/L		10/19/15 09:03	10/20/15 15:00	1
Di-n-butyl phthalate	**0.62**	**J H B**	1.1	0.43	ug/L		10/19/15 09:03	10/20/15 15:00	1
Di-n-octyl phthalate	1.1	U H	1.1	0.40	ug/L		10/19/15 09:03	10/20/15 15:00	1
Fluoranthene	0.22	U H	0.22	0.029	ug/L		10/19/15 09:03	10/20/15 15:00	1
Fluorene	0.22	U H	0.22	0.037	ug/L		10/19/15 09:03	10/20/15 15:00	1
Hexachlorobenzene	1.1	U H	1.1	0.13	ug/L		10/19/15 09:03	10/20/15 15:00	1
Hexachlorobutadiene	1.1	U H	1.1	0.15	ug/L		10/19/15 09:03	10/20/15 15:00	1
Hexachlorocyclopentadiene	11	U H	11	2.7	ug/L		10/19/15 09:03	10/20/15 15:00	1
Hexachloroethane	1.1	U H	1.1	0.24	ug/L		10/19/15 09:03	10/20/15 15:00	1
Indeno[1,2,3-cd]pyrene	0.22	U H	0.22	0.052	ug/L		10/19/15 09:03	10/20/15 15:00	1
Isophorone	1.1	U H	1.1	0.046	ug/L		10/19/15 09:03	10/20/15 15:00	1
Naphthalene	0.22	U H	0.22	0.047	ug/L		10/19/15 09:03	10/20/15 15:00	1
Nitrobenzene	1.1	U H	1.1	0.13	ug/L		10/19/15 09:03	10/20/15 15:00	1
N-Nitrosodi-n-propylamine	1.1	U H	1.1	0.17	ug/L		10/19/15 09:03	10/20/15 15:00	1
N-Nitrosodiphenylamine	1.1	U H	1.1	0.12	ug/L		10/19/15 09:03	10/20/15 15:00	1
Pentachlorophenol	43	U H	43	5.9	ug/L		10/19/15 09:03	10/20/15 15:00	1
Phenol	1.1	U H	1.1	0.16	ug/L		10/19/15 09:03	10/20/15 15:00	1
Phenanthrene	0.22	U H	0.22	0.034	ug/L		10/19/15 09:03	10/20/15 15:00	1
Pyrene	0.22	U H	0.22	0.030	ug/L		10/19/15 09:03	10/20/15 15:00	1
3 & 4 Methylphenol	2.2	U H	2.2	0.37	ug/L		10/19/15 09:03	10/20/15 15:00	1

Client Sample ID: VAP-7-GW(35-36)
Date Collected: 10/09/15 11:34
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-29
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*64*		*29 - 110*	*10/19/15 09:03*	*10/20/15 15:00*	*1*
2-Fluorophenol (Surr)	*58*		*15 - 110*	*10/19/15 09:03*	*10/20/15 15:00*	*1*
2,4,6-Tribromophenol (Surr)	*53*		*21 - 128*	*10/19/15 09:03*	*10/20/15 15:00*	*1*
Nitrobenzene-d5 (Surr)	*64*		*31 - 110*	*10/19/15 09:03*	*10/20/15 15:00*	*1*
Phenol-d5 (Surr)	*45*		*10 - 110*	*10/19/15 09:03*	*10/20/15 15:00*	*1*
Terphenyl-d14 (Surr)	*53*		*31 - 115*	*10/19/15 09:03*	*10/20/15 15:00*	*1*

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**35**		10	2.9	ug/L		10/12/15 08:36	10/13/15 23:17	1
Barium	**790**	**B**	200	1.0	ug/L		10/12/15 08:36	10/13/15 23:17	1
Cadmium	**1.5**	**J**	2.0	0.14	ug/L		10/12/15 08:36	10/13/15 23:17	1
Chromium	**380**		5.0	0.55	ug/L		10/12/15 08:36	10/13/15 23:17	1
Lead	**390**		3.0	1.9	ug/L		10/12/15 08:36	10/13/15 23:17	1
Selenium	**51**		5.0	4.0	ug/L		10/12/15 08:36	10/13/15 23:17	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 08:36	10/13/15 23:17	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.2**		0.20	0.090	ug/L		10/12/15 14:00	10/14/15 07:39	1

Client Sample ID: VAP-7-GW(43-44)
Date Collected: 10/09/15 11:57
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-30
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/20/15 14:08	1
Benzene	1.0	U	1.0	0.35	ug/L			10/20/15 14:08	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/20/15 14:08	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/20/15 14:08	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/20/15 14:08	1
2-Butanone (MEK)	**1.7**	**J**	10	0.53	ug/L			10/20/15 14:08	1
Carbon disulfide	**0.45**	**J**	1.0	0.38	ug/L			10/20/15 14:08	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/20/15 14:08	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 14:08	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/20/15 14:08	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/20/15 14:08	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/20/15 14:08	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/20/15 14:08	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/20/15 14:08	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/20/15 14:08	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/20/15 14:08	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/20/15 14:08	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/20/15 14:08	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/20/15 14:08	1
2-Hexanone	10	U	10	0.48	ug/L			10/20/15 14:08	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/20/15 14:08	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/20/15 14:08	1
Styrene	1.0	U	1.0	0.45	ug/L			10/20/15 14:08	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/20/15 14:08	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/20/15 14:08	1
Toluene	1.0	U	1.0	0.23	ug/L			10/20/15 14:08	1
Trichloroethene	**11**		1.0	0.22	ug/L			10/20/15 14:08	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/20/15 14:08	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/20/15 14:08	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/20/15 14:08	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/20/15 14:08	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/20/15 14:08	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/20/15 14:08	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/20/15 14:08	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/20/15 14:08	1
cis-1,2-Dichloroethene	**10**		1.0	0.26	ug/L			10/20/15 14:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/20/15 14:08	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/20/15 14:08	1
Methyl acetate	10	U	10	2.3	ug/L			10/20/15 14:08	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/20/15 14:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/20/15 14:08	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/20/15 14:08	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 14:08	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/20/15 14:08	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/20/15 14:08	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/20/15 14:08	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/20/15 14:08	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/20/15 14:08	1

Client Sample ID: VAP-7-GW(43-44)

Date Collected: 10/09/15 11:57
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-30

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*78 - 125*		*10/20/15 14:08*	*1*
4-Bromofluorobenzene (Surr)	*101*		*61 - 120*		*10/20/15 14:08*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*10/20/15 14:08*	*1*
Dibromofluoromethane (Surr)	*97*		*79 - 120*		*10/20/15 14:08*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/12/15 09:34	10/15/15 17:37	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/12/15 09:34	10/15/15 17:37	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/12/15 09:34	10/15/15 17:37	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/12/15 09:34	10/15/15 17:37	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/12/15 09:34	10/15/15 17:37	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/12/15 09:34	10/15/15 17:37	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/12/15 09:34	10/15/15 17:37	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/12/15 09:34	10/15/15 17:37	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/12/15 09:34	10/15/15 17:37	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 17:37	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/12/15 09:34	10/15/15 17:37	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/12/15 09:34	10/15/15 17:37	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/12/15 09:34	10/15/15 17:37	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/12/15 09:34	10/15/15 17:37	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/12/15 09:34	10/15/15 17:37	1
3,3'-Dichlorobenzidine	4.8	U	4.8	0.34	ug/L		10/12/15 09:34	10/15/15 17:37	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/12/15 09:34	10/15/15 17:37	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/12/15 09:34	10/15/15 17:37	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/12/15 09:34	10/15/15 17:37	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/12/15 09:34	10/15/15 17:37	1
4-Chloroaniline	1.9	U	1.9	0.14	ug/L		10/12/15 09:34	10/15/15 17:37	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/12/15 09:34	10/15/15 17:37	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/12/15 09:34	10/15/15 17:37	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/12/15 09:34	10/15/15 17:37	1
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/12/15 09:34	10/15/15 17:37	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/12/15 09:34	10/15/15 17:37	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/12/15 09:34	10/15/15 17:37	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/12/15 09:34	10/15/15 17:37	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 17:37	1
Benzaldehyde	0.96	U	0.96	0.28	ug/L		10/12/15 09:34	10/15/15 17:37	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/12/15 09:34	10/15/15 17:37	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/12/15 09:34	10/15/15 17:37	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/12/15 09:34	10/15/15 17:37	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/12/15 09:34	10/15/15 17:37	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/12/15 09:34	10/15/15 17:37	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/12/15 09:34	10/15/15 17:37	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/12/15 09:34	10/15/15 17:37	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	1.5	ug/L		10/12/15 09:34	10/15/15 17:37	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/12/15 09:34	10/15/15 17:37	1
Caprolactam	4.8	U	4.8	0.36	ug/L		10/12/15 09:34	10/15/15 17:37	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/12/15 09:34	10/15/15 17:37	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/12/15 09:34	10/15/15 17:37	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/12/15 09:34	10/15/15 17:37	1

Client Sample ID: VAP-7-GW(43-44)

Date Collected: 10/09/15 11:57
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-30

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/12/15 09:34	10/15/15 17:37	1
Diethyl phthalate	0.96	U	0.96	0.12	ug/L		10/12/15 09:34	10/15/15 17:37	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/12/15 09:34	10/15/15 17:37	1
Di-n-butyl phthalate	**0.46**	**J B**	0.96	0.38	ug/L		10/12/15 09:34	10/15/15 17:37	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/12/15 09:34	10/15/15 17:37	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/12/15 09:34	10/15/15 17:37	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/12/15 09:34	10/15/15 17:37	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 17:37	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/12/15 09:34	10/15/15 17:37	1
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/12/15 09:34	10/15/15 17:37	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/12/15 09:34	10/15/15 17:37	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/12/15 09:34	10/15/15 17:37	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/12/15 09:34	10/15/15 17:37	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/12/15 09:34	10/15/15 17:37	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 17:37	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/12/15 09:34	10/15/15 17:37	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/12/15 09:34	10/15/15 17:37	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/12/15 09:34	10/15/15 17:37	1
Phenol	0.96	U *	0.96	0.14	ug/L		10/12/15 09:34	10/15/15 17:37	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/12/15 09:34	10/15/15 17:37	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/12/15 09:34	10/15/15 17:37	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/12/15 09:34	10/15/15 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*18*	*X*	*29 - 110*	*10/12/15 09:34*	*10/15/15 17:37*	*1*
2-Fluorophenol (Surr)	*26*		*15 - 110*	*10/12/15 09:34*	*10/15/15 17:37*	*1*
2,4,6-Tribromophenol (Surr)	*13*	*X*	*21 - 128*	*10/12/15 09:34*	*10/15/15 17:37*	*1*
Nitrobenzene-d5 (Surr)	*22*	*X*	*31 - 110*	*10/12/15 09:34*	*10/15/15 17:37*	*1*
Phenol-d5 (Surr)	*23*		*10 - 110*	*10/12/15 09:34*	*10/15/15 17:37*	*1*
Terphenyl-d14 (Surr)	*17*	*X*	*31 - 115*	*10/12/15 09:34*	*10/15/15 17:37*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U H	1.0	0.12	ug/L		10/19/15 09:03	10/20/15 15:23	1
bis (2-chloroisopropyl) ether	1.0	U H	1.0	0.18	ug/L		10/19/15 09:03	10/20/15 15:23	1
2,4,5-Trichlorophenol	5.0	U H	5.0	0.37	ug/L		10/19/15 09:03	10/20/15 15:23	1
2,4,6-Trichlorophenol	5.0	U H	5.0	0.26	ug/L		10/19/15 09:03	10/20/15 15:23	1
2,4-Dichlorophenol	2.0	U H	2.0	0.29	ug/L		10/19/15 09:03	10/20/15 15:23	1
2,4-Dimethylphenol	2.0	U H	2.0	0.31	ug/L		10/19/15 09:03	10/20/15 15:23	1
2,4-Dinitrophenol	40	U H	40	6.1	ug/L		10/19/15 09:03	10/20/15 15:23	1
2,4-Dinitrotoluene	5.0	U H	5.0	0.26	ug/L		10/19/15 09:03	10/20/15 15:23	1
2,6-Dinitrotoluene	5.0	U H	5.0	0.24	ug/L		10/19/15 09:03	10/20/15 15:23	1
2-Chloronaphthalene	1.0	U H	1.0	0.12	ug/L		10/19/15 09:03	10/20/15 15:23	1
2-Chlorophenol	1.0	U H	1.0	0.13	ug/L		10/19/15 09:03	10/20/15 15:23	1
2-Methylnaphthalene	0.20	U H	0.20	0.037	ug/L		10/19/15 09:03	10/20/15 15:23	1
2-Methylphenol	1.0	U H	1.0	0.19	ug/L		10/19/15 09:03	10/20/15 15:23	1
2-Nitroaniline	2.0	U H	2.0	0.31	ug/L		10/19/15 09:03	10/20/15 15:23	1
2-Nitrophenol	2.0	U H	2.0	0.21	ug/L		10/19/15 09:03	10/20/15 15:23	1
3,3'-Dichlorobenzidine	5.0	U H *	5.0	0.35	ug/L		10/19/15 09:03	10/20/15 15:23	1
3-Nitroaniline	2.0	U H	2.0	0.27	ug/L		10/19/15 09:03	10/20/15 15:23	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-7-GW(43-44)
Date Collected: 10/09/15 11:57
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-30
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	5.0	U H	5.0	0.53	ug/L		10/19/15 09:03	10/20/15 15:23	1
4-Bromophenyl phenyl ether	2.0	U H	2.0	0.35	ug/L		10/19/15 09:03	10/20/15 15:23	1
4-Chloro-3-methylphenol	2.0	U H	2.0	0.28	ug/L		10/19/15 09:03	10/20/15 15:23	1
4-Chloroaniline	2.0	U H *	2.0	0.15	ug/L		10/19/15 09:03	10/20/15 15:23	1
4-Chlorophenyl phenyl ether	2.0	U H	2.0	0.29	ug/L		10/19/15 09:03	10/20/15 15:23	1
4-Nitroaniline	2.0	U H	2.0	0.24	ug/L		10/19/15 09:03	10/20/15 15:23	1
4-Nitrophenol	5.0	U H	5.0	0.59	ug/L		10/19/15 09:03	10/20/15 15:23	1
Acenaphthene	0.20	U H	0.20	0.044	ug/L		10/19/15 09:03	10/20/15 15:23	1
Acenaphthylene	0.20	U H	0.20	0.020	ug/L		10/19/15 09:03	10/20/15 15:23	1
Acetophenone	1.0	U H	1.0	0.14	ug/L		10/19/15 09:03	10/20/15 15:23	1
Anthracene	0.20	U H	0.20	0.031	ug/L		10/19/15 09:03	10/20/15 15:23	1
Atrazine	1.0	U H	1.0	0.12	ug/L		10/19/15 09:03	10/20/15 15:23	1
Benzaldehyde	1.0	U H *	1.0	0.30	ug/L		10/19/15 09:03	10/20/15 15:23	1
Benzo[a]anthracene	0.20	U H	0.20	0.059	ug/L		10/19/15 09:03	10/20/15 15:23	1
Benzo[a]pyrene	0.20	U H	0.20	0.030	ug/L		10/19/15 09:03	10/20/15 15:23	1
Benzo[b]fluoranthene	0.20	U H	0.20	0.059	ug/L		10/19/15 09:03	10/20/15 15:23	1
Benzo[g,h,i]perylene	0.20	U H	0.20	0.050	ug/L		10/19/15 09:03	10/20/15 15:23	1
Benzo[k]fluoranthene	0.20	U H	0.20	0.048	ug/L		10/19/15 09:03	10/20/15 15:23	1
Bis(2-chloroethoxy)methane	1.0	U H	1.0	0.037	ug/L		10/19/15 09:03	10/20/15 15:23	1
Bis(2-chloroethyl)ether	1.0	U H	1.0	0.19	ug/L		10/19/15 09:03	10/20/15 15:23	1
Bis(2-ethylhexyl) phthalate	2.0	U H	2.0	1.5	ug/L		10/19/15 09:03	10/20/15 15:23	1
Butyl benzyl phthalate	1.0	U H	1.0	0.22	ug/L		10/19/15 09:03	10/20/15 15:23	1
Caprolactam	**3.9**	**J H B**	5.0	0.37	ug/L		10/19/15 09:03	10/20/15 15:23	1
Carbazole	1.0	U H	1.0	0.11	ug/L		10/19/15 09:03	10/20/15 15:23	1
Chrysene	0.20	U H	0.20	0.035	ug/L		10/19/15 09:03	10/20/15 15:23	1
Dibenz(a,h)anthracene	0.20	U H	0.20	0.040	ug/L		10/19/15 09:03	10/20/15 15:23	1
Dibenzofuran	1.0	U H	1.0	0.14	ug/L		10/19/15 09:03	10/20/15 15:23	1
Diethyl phthalate	**0.22**	**J H**	1.0	0.13	ug/L		10/19/15 09:03	10/20/15 15:23	1
Dimethyl phthalate	1.0	U H	1.0	0.10	ug/L		10/19/15 09:03	10/20/15 15:23	1
Di-n-butyl phthalate	**0.55**	**J H B**	1.0	0.40	ug/L		10/19/15 09:03	10/20/15 15:23	1
Di-n-octyl phthalate	1.0	U H	1.0	0.37	ug/L		10/19/15 09:03	10/20/15 15:23	1
Fluoranthene	0.20	U H	0.20	0.027	ug/L		10/19/15 09:03	10/20/15 15:23	1
Fluorene	0.20	U H	0.20	0.034	ug/L		10/19/15 09:03	10/20/15 15:23	1
Hexachlorobenzene	1.0	U H	1.0	0.12	ug/L		10/19/15 09:03	10/20/15 15:23	1
Hexachlorobutadiene	1.0	U H	1.0	0.14	ug/L		10/19/15 09:03	10/20/15 15:23	1
Hexachlorocyclopentadiene	10	U H	10	2.5	ug/L		10/19/15 09:03	10/20/15 15:23	1
Hexachloroethane	1.0	U H	1.0	0.22	ug/L		10/19/15 09:03	10/20/15 15:23	1
Indeno[1,2,3-cd]pyrene	0.20	U H	0.20	0.048	ug/L		10/19/15 09:03	10/20/15 15:23	1
Isophorone	1.0	U H	1.0	0.042	ug/L		10/19/15 09:03	10/20/15 15:23	1
Naphthalene	0.20	U H	0.20	0.043	ug/L		10/19/15 09:03	10/20/15 15:23	1
Nitrobenzene	1.0	U H	1.0	0.12	ug/L		10/19/15 09:03	10/20/15 15:23	1
N-Nitrosodi-n-propylamine	1.0	U H	1.0	0.16	ug/L		10/19/15 09:03	10/20/15 15:23	1
N-Nitrosodiphenylamine	1.0	U H	1.0	0.11	ug/L		10/19/15 09:03	10/20/15 15:23	1
Pentachlorophenol	40	U H	40	5.5	ug/L		10/19/15 09:03	10/20/15 15:23	1
Phenol	1.0	U H	1.0	0.15	ug/L		10/19/15 09:03	10/20/15 15:23	1
Phenanthrene	0.20	U H	0.20	0.031	ug/L		10/19/15 09:03	10/20/15 15:23	1
Pyrene	0.20	U H	0.20	0.028	ug/L		10/19/15 09:03	10/20/15 15:23	1
3 & 4 Methylphenol	2.0	U H	2.0	0.34	ug/L		10/19/15 09:03	10/20/15 15:23	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-7-GW(43-44)
Date Collected: 10/09/15 11:57
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-30
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	70		29 - 110	10/19/15 09:03	10/20/15 15:23	1
2-Fluorophenol (Surr)	66		15 - 110	10/19/15 09:03	10/20/15 15:23	1
2,4,6-Tribromophenol (Surr)	62		21 - 128	10/19/15 09:03	10/20/15 15:23	1
Nitrobenzene-d5 (Surr)	72		31 - 110	10/19/15 09:03	10/20/15 15:23	1
Phenol-d5 (Surr)	52		10 - 110	10/19/15 09:03	10/20/15 15:23	1
Terphenyl-d14 (Surr)	71		31 - 115	10/19/15 09:03	10/20/15 15:23	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**46**		10	2.9	ug/L		10/12/15 08:36	10/13/15 23:21	1
Barium	**330**	**B**	200	1.0	ug/L		10/12/15 08:36	10/13/15 23:21	1
Cadmium	**0.73**	**J**	2.0	0.14	ug/L		10/12/15 08:36	10/13/15 23:21	1
Chromium	**180**		5.0	0.55	ug/L		10/12/15 08:36	10/13/15 23:21	1
Lead	**39**		3.0	1.9	ug/L		10/12/15 08:36	10/13/15 23:21	1
Selenium	5.0	U	5.0	4.0	ug/L		10/12/15 08:36	10/13/15 23:21	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 08:36	10/13/15 23:21	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.17**	**J**	0.20	0.090	ug/L		10/12/15 14:00	10/14/15 07:41	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-7-GW(48-49)
Date Collected: 10/09/15 12:26
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-31
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/20/15 14:30	1
Benzene	1.0	U	1.0	0.35	ug/L			10/20/15 14:30	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/20/15 14:30	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/20/15 14:30	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/20/15 14:30	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/20/15 14:30	1
Carbon disulfide	**0.40**	**J**	1.0	0.38	ug/L			10/20/15 14:30	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/20/15 14:30	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 14:30	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/20/15 14:30	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/20/15 14:30	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/20/15 14:30	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/20/15 14:30	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/20/15 14:30	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/20/15 14:30	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/20/15 14:30	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/20/15 14:30	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/20/15 14:30	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/20/15 14:30	1
2-Hexanone	10	U	10	0.48	ug/L			10/20/15 14:30	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/20/15 14:30	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/20/15 14:30	1
Styrene	1.0	U	1.0	0.45	ug/L			10/20/15 14:30	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/20/15 14:30	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/20/15 14:30	1
Toluene	1.0	U	1.0	0.23	ug/L			10/20/15 14:30	1
Trichloroethene	**6.6**		1.0	0.22	ug/L			10/20/15 14:30	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/20/15 14:30	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/20/15 14:30	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/20/15 14:30	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/20/15 14:30	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/20/15 14:30	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/20/15 14:30	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/20/15 14:30	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/20/15 14:30	1
cis-1,2-Dichloroethene	**3.9**		1.0	0.26	ug/L			10/20/15 14:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/20/15 14:30	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/20/15 14:30	1
Methyl acetate	10	U	10	2.3	ug/L			10/20/15 14:30	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/20/15 14:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/20/15 14:30	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/20/15 14:30	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 14:30	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/20/15 14:30	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/20/15 14:30	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/20/15 14:30	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/20/15 14:30	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/20/15 14:30	1

Client Sample ID: VAP-7-GW(48-49)

Date Collected: 10/09/15 12:26
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-31

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*78 - 125*		*10/20/15 14:30*	*1*
4-Bromofluorobenzene (Surr)	*98*		*61 - 120*		*10/20/15 14:30*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*10/20/15 14:30*	*1*
Dibromofluoromethane (Surr)	*96*		*79 - 120*		*10/20/15 14:30*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	0.89	U	0.89	0.11	ug/L		10/12/15 09:34	10/15/15 18:01	1
bis (2-chloroisopropyl) ether	0.89	U	0.89	0.16	ug/L		10/12/15 09:34	10/15/15 18:01	1
2,4,5-Trichlorophenol	4.5	U	4.5	0.33	ug/L		10/12/15 09:34	10/15/15 18:01	1
2,4,6-Trichlorophenol	4.5	U	4.5	0.23	ug/L		10/12/15 09:34	10/15/15 18:01	1
2,4-Dichlorophenol	1.8	U	1.8	0.26	ug/L		10/12/15 09:34	10/15/15 18:01	1
2,4-Dimethylphenol	1.8	U	1.8	0.28	ug/L		10/12/15 09:34	10/15/15 18:01	1
2,4-Dinitrophenol	36	U	36	5.5	ug/L		10/12/15 09:34	10/15/15 18:01	1
2,4-Dinitrotoluene	4.5	U	4.5	0.23	ug/L		10/12/15 09:34	10/15/15 18:01	1
2,6-Dinitrotoluene	4.5	U	4.5	0.21	ug/L		10/12/15 09:34	10/15/15 18:01	1
2-Chloronaphthalene	0.89	U	0.89	0.10	ug/L		10/12/15 09:34	10/15/15 18:01	1
2-Chlorophenol	0.89	U	0.89	0.12	ug/L		10/12/15 09:34	10/15/15 18:01	1
2-Methylnaphthalene	0.18	U	0.18	0.033	ug/L		10/12/15 09:34	10/15/15 18:01	1
2-Methylphenol	0.89	U	0.89	0.17	ug/L		10/12/15 09:34	10/15/15 18:01	1
2-Nitroaniline	1.8	U	1.8	0.28	ug/L		10/12/15 09:34	10/15/15 18:01	1
2-Nitrophenol	1.8	U	1.8	0.18	ug/L		10/12/15 09:34	10/15/15 18:01	1
3,3'-Dichlorobenzidine	4.5	U	4.5	0.32	ug/L		10/12/15 09:34	10/15/15 18:01	1
3-Nitroaniline	1.8	U	1.8	0.24	ug/L		10/12/15 09:34	10/15/15 18:01	1
4,6-Dinitro-2-methylphenol	4.5	U	4.5	0.47	ug/L		10/12/15 09:34	10/15/15 18:01	1
4-Bromophenyl phenyl ether	1.8	U	1.8	0.31	ug/L		10/12/15 09:34	10/15/15 18:01	1
4-Chloro-3-methylphenol	1.8	U	1.8	0.25	ug/L		10/12/15 09:34	10/15/15 18:01	1
4-Chloroaniline	1.8	U	1.8	0.13	ug/L		10/12/15 09:34	10/15/15 18:01	1
4-Chlorophenyl phenyl ether	1.8	U	1.8	0.26	ug/L		10/12/15 09:34	10/15/15 18:01	1
4-Nitroaniline	1.8	U	1.8	0.22	ug/L		10/12/15 09:34	10/15/15 18:01	1
4-Nitrophenol	4.5	U	4.5	0.52	ug/L		10/12/15 09:34	10/15/15 18:01	1
Acenaphthene	0.18	U	0.18	0.039	ug/L		10/12/15 09:34	10/15/15 18:01	1
Acenaphthylene	0.18	U	0.18	0.018	ug/L		10/12/15 09:34	10/15/15 18:01	1
Acetophenone	0.89	U	0.89	0.13	ug/L		10/12/15 09:34	10/15/15 18:01	1
Anthracene	0.18	U	0.18	0.028	ug/L		10/12/15 09:34	10/15/15 18:01	1
Atrazine	0.89	U	0.89	0.10	ug/L		10/12/15 09:34	10/15/15 18:01	1
Benzaldehyde	0.89	U	0.89	0.26	ug/L		10/12/15 09:34	10/15/15 18:01	1
Benzo[a]anthracene	0.18	U	0.18	0.053	ug/L		10/12/15 09:34	10/15/15 18:01	1
Benzo[a]pyrene	0.18	U	0.18	0.027	ug/L		10/12/15 09:34	10/15/15 18:01	1
Benzo[b]fluoranthene	0.18	U	0.18	0.053	ug/L		10/12/15 09:34	10/15/15 18:01	1
Benzo[g,h,i]perylene	0.18	U	0.18	0.045	ug/L		10/12/15 09:34	10/15/15 18:01	1
Benzo[k]fluoranthene	0.18	U	0.18	0.043	ug/L		10/12/15 09:34	10/15/15 18:01	1
Bis(2-chloroethoxy)methane	0.89	U	0.89	0.033	ug/L		10/12/15 09:34	10/15/15 18:01	1
Bis(2-chloroethyl)ether	0.89	U	0.89	0.17	ug/L		10/12/15 09:34	10/15/15 18:01	1
Bis(2-ethylhexyl) phthalate	**1.7**	**J B**	1.8	1.4	ug/L		10/12/15 09:34	10/15/15 18:01	1
Butyl benzyl phthalate	0.89	U	0.89	0.19	ug/L		10/12/15 09:34	10/15/15 18:01	1
Caprolactam	**1.2**	**J B**	4.5	0.33	ug/L		10/12/15 09:34	10/15/15 18:01	1
Carbazole	0.89	U	0.89	0.094	ug/L		10/12/15 09:34	10/15/15 18:01	1
Chrysene	0.18	U	0.18	0.031	ug/L		10/12/15 09:34	10/15/15 18:01	1
Dibenz(a,h)anthracene	0.18	U	0.18	0.036	ug/L		10/12/15 09:34	10/15/15 18:01	1

Client Sample ID: VAP-7-GW(48-49)

Date Collected: 10/09/15 12:26
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-31

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	0.89	U	0.89	0.12	ug/L		10/12/15 09:34	10/15/15 18:01	1
Diethyl phthalate	**0.23**	**J**	0.89	0.11	ug/L		10/12/15 09:34	10/15/15 18:01	1
Dimethyl phthalate	0.89	U	0.89	0.090	ug/L		10/12/15 09:34	10/15/15 18:01	1
Di-n-butyl phthalate	**0.78**	**J B**	0.89	0.36	ug/L		10/12/15 09:34	10/15/15 18:01	1
Di-n-octyl phthalate	0.89	U	0.89	0.33	ug/L		10/12/15 09:34	10/15/15 18:01	1
Fluoranthene	0.18	U	0.18	0.024	ug/L		10/12/15 09:34	10/15/15 18:01	1
Fluorene	0.18	U	0.18	0.030	ug/L		10/12/15 09:34	10/15/15 18:01	1
Hexachlorobenzene	0.89	U	0.89	0.10	ug/L		10/12/15 09:34	10/15/15 18:01	1
Hexachlorobutadiene	0.89	U	0.89	0.13	ug/L		10/12/15 09:34	10/15/15 18:01	1
Hexachlorocyclopentadiene	8.9	U	8.9	2.2	ug/L		10/12/15 09:34	10/15/15 18:01	1
Hexachloroethane	0.89	U	0.89	0.20	ug/L		10/12/15 09:34	10/15/15 18:01	1
Indeno[1,2,3-cd]pyrene	0.18	U	0.18	0.043	ug/L		10/12/15 09:34	10/15/15 18:01	1
Isophorone	0.89	U	0.89	0.038	ug/L		10/12/15 09:34	10/15/15 18:01	1
Naphthalene	0.18	U	0.18	0.038	ug/L		10/12/15 09:34	10/15/15 18:01	1
Nitrobenzene	0.89	U	0.89	0.10	ug/L		10/12/15 09:34	10/15/15 18:01	1
N-Nitrosodi-n-propylamine	0.89	U	0.89	0.14	ug/L		10/12/15 09:34	10/15/15 18:01	1
N-Nitrosodiphenylamine	0.89	U	0.89	0.10	ug/L		10/12/15 09:34	10/15/15 18:01	1
Pentachlorophenol	36	U	36	4.9	ug/L		10/12/15 09:34	10/15/15 18:01	1
Phenol	0.89	U *	0.89	0.13	ug/L		10/12/15 09:34	10/15/15 18:01	1
Phenanthrene	0.18	U	0.18	0.028	ug/L		10/12/15 09:34	10/15/15 18:01	1
Pyrene	0.18	U	0.18	0.025	ug/L		10/12/15 09:34	10/15/15 18:01	1
3 & 4 Methylphenol	1.8	U	1.8	0.30	ug/L		10/12/15 09:34	10/15/15 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*11*	*X*	*29 - 110*	*10/12/15 09:34*	*10/15/15 18:01*	*1*
2-Fluorophenol (Surr)	*27*		*15 - 110*	*10/12/15 09:34*	*10/15/15 18:01*	*1*
2,4,6-Tribromophenol (Surr)	*11*	*X*	*21 - 128*	*10/12/15 09:34*	*10/15/15 18:01*	*1*
Nitrobenzene-d5 (Surr)	*10*	*X*	*31 - 110*	*10/12/15 09:34*	*10/15/15 18:01*	*1*
Phenol-d5 (Surr)	*23*		*10 - 110*	*10/12/15 09:34*	*10/15/15 18:01*	*1*
Terphenyl-d14 (Surr)	*9*	*X*	*31 - 115*	*10/12/15 09:34*	*10/15/15 18:01*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.2	U H	1.2	0.15	ug/L		10/19/15 09:03	10/20/15 15:47	1
bis (2-chloroisopropyl) ether	1.2	U H	1.2	0.22	ug/L		10/19/15 09:03	10/20/15 15:47	1
2,4,5-Trichlorophenol	6.0	U H	6.0	0.44	ug/L		10/19/15 09:03	10/20/15 15:47	1
2,4,6-Trichlorophenol	6.0	U H	6.0	0.31	ug/L		10/19/15 09:03	10/20/15 15:47	1
2,4-Dichlorophenol	2.4	U H	2.4	0.35	ug/L		10/19/15 09:03	10/20/15 15:47	1
2,4-Dimethylphenol	2.4	U H	2.4	0.37	ug/L		10/19/15 09:03	10/20/15 15:47	1
2,4-Dinitrophenol	48	U H	48	7.3	ug/L		10/19/15 09:03	10/20/15 15:47	1
2,4-Dinitrotoluene	6.0	U H	6.0	0.30	ug/L		10/19/15 09:03	10/20/15 15:47	1
2,6-Dinitrotoluene	6.0	U H	6.0	0.28	ug/L		10/19/15 09:03	10/20/15 15:47	1
2-Chloronaphthalene	1.2	U H	1.2	0.14	ug/L		10/19/15 09:03	10/20/15 15:47	1
2-Chlorophenol	1.2	U H	1.2	0.16	ug/L		10/19/15 09:03	10/20/15 15:47	1
2-Methylnaphthalene	0.24	U H	0.24	0.044	ug/L		10/19/15 09:03	10/20/15 15:47	1
2-Methylphenol	1.2	U H	1.2	0.22	ug/L		10/19/15 09:03	10/20/15 15:47	1
2-Nitroaniline	2.4	U H	2.4	0.37	ug/L		10/19/15 09:03	10/20/15 15:47	1
2-Nitrophenol	2.4	U H	2.4	0.25	ug/L		10/19/15 09:03	10/20/15 15:47	1
3,3'-Dichlorobenzidine	6.0	U H *	6.0	0.42	ug/L		10/19/15 09:03	10/20/15 15:47	1
3-Nitroaniline	2.4	U H	2.4	0.32	ug/L		10/19/15 09:03	10/20/15 15:47	1

Client Sample ID: VAP-7-GW(48-49)
Date Collected: 10/09/15 12:26
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-31
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	6.0	U H	6.0	0.63	ug/L		10/19/15 09:03	10/20/15 15:47	1
4-Bromophenyl phenyl ether	2.4	U H	2.4	0.41	ug/L		10/19/15 09:03	10/20/15 15:47	1
4-Chloro-3-methylphenol	2.4	U H	2.4	0.33	ug/L		10/19/15 09:03	10/20/15 15:47	1
4-Chloroaniline	2.4	U H *	2.4	0.18	ug/L		10/19/15 09:03	10/20/15 15:47	1
4-Chlorophenyl phenyl ether	2.4	U H	2.4	0.35	ug/L		10/19/15 09:03	10/20/15 15:47	1
4-Nitroaniline	2.4	U H	2.4	0.29	ug/L		10/19/15 09:03	10/20/15 15:47	1
4-Nitrophenol	6.0	U H	6.0	0.70	ug/L		10/19/15 09:03	10/20/15 15:47	1
Acenaphthene	0.24	U H	0.24	0.052	ug/L		10/19/15 09:03	10/20/15 15:47	1
Acenaphthylene	0.24	U H	0.24	0.024	ug/L		10/19/15 09:03	10/20/15 15:47	1
Acetophenone	1.2	U H	1.2	0.17	ug/L		10/19/15 09:03	10/20/15 15:47	1
Anthracene	0.24	U H	0.24	0.037	ug/L		10/19/15 09:03	10/20/15 15:47	1
Atrazine	1.2	U H	1.2	0.14	ug/L		10/19/15 09:03	10/20/15 15:47	1
Benzaldehyde	1.2	U H *	1.2	0.35	ug/L		10/19/15 09:03	10/20/15 15:47	1
Benzo[a]anthracene	0.24	U H	0.24	0.070	ug/L		10/19/15 09:03	10/20/15 15:47	1
Benzo[a]pyrene	0.24	U H	0.24	0.036	ug/L		10/19/15 09:03	10/20/15 15:47	1
Benzo[b]fluoranthene	0.24	U H	0.24	0.070	ug/L		10/19/15 09:03	10/20/15 15:47	1
Benzo[g,h,i]perylene	0.24	U H	0.24	0.060	ug/L		10/19/15 09:03	10/20/15 15:47	1
Benzo[k]fluoranthene	0.24	U H	0.24	0.057	ug/L		10/19/15 09:03	10/20/15 15:47	1
Bis(2-chloroethoxy)methane	1.2	U H	1.2	0.044	ug/L		10/19/15 09:03	10/20/15 15:47	1
Bis(2-chloroethyl)ether	1.2	U H	1.2	0.23	ug/L		10/19/15 09:03	10/20/15 15:47	1
Bis(2-ethylhexyl) phthalate	2.4	U H	2.4	1.8	ug/L		10/19/15 09:03	10/20/15 15:47	1
Butyl benzyl phthalate	1.2	U H	1.2	0.26	ug/L		10/19/15 09:03	10/20/15 15:47	1
Caprolactam	**2.3**	**J H B**	6.0	0.44	ug/L		10/19/15 09:03	10/20/15 15:47	1
Carbazole	1.2	U H	1.2	0.13	ug/L		10/19/15 09:03	10/20/15 15:47	1
Chrysene	0.24	U H	0.24	0.042	ug/L		10/19/15 09:03	10/20/15 15:47	1
Dibenz(a,h)anthracene	0.24	U H	0.24	0.048	ug/L		10/19/15 09:03	10/20/15 15:47	1
Dibenzofuran	1.2	U H	1.2	0.16	ug/L		10/19/15 09:03	10/20/15 15:47	1
Diethyl phthalate	1.2	U H	1.2	0.15	ug/L		10/19/15 09:03	10/20/15 15:47	1
Dimethyl phthalate	1.2	U H	1.2	0.12	ug/L		10/19/15 09:03	10/20/15 15:47	1
Di-n-butyl phthalate	1.2	U H	1.2	0.47	ug/L		10/19/15 09:03	10/20/15 15:47	1
Di-n-octyl phthalate	1.2	U H	1.2	0.43	ug/L		10/19/15 09:03	10/20/15 15:47	1
Fluoranthene	0.24	U H	0.24	0.032	ug/L		10/19/15 09:03	10/20/15 15:47	1
Fluorene	0.24	U H	0.24	0.040	ug/L		10/19/15 09:03	10/20/15 15:47	1
Hexachlorobenzene	1.2	U H	1.2	0.14	ug/L		10/19/15 09:03	10/20/15 15:47	1
Hexachlorobutadiene	1.2	U H	1.2	0.17	ug/L		10/19/15 09:03	10/20/15 15:47	1
Hexachlorocyclopentadiene	12	U H	12	2.9	ug/L		10/19/15 09:03	10/20/15 15:47	1
Hexachloroethane	1.2	U H	1.2	0.26	ug/L		10/19/15 09:03	10/20/15 15:47	1
Indeno[1,2,3-cd]pyrene	0.24	U H	0.24	0.057	ug/L		10/19/15 09:03	10/20/15 15:47	1
Isophorone	1.2	U H	1.2	0.050	ug/L		10/19/15 09:03	10/20/15 15:47	1
Naphthalene	0.24	U H	0.24	0.051	ug/L		10/19/15 09:03	10/20/15 15:47	1
Nitrobenzene	1.2	U H	1.2	0.14	ug/L		10/19/15 09:03	10/20/15 15:47	1
N-Nitrosodi-n-propylamine	1.2	U H	1.2	0.19	ug/L		10/19/15 09:03	10/20/15 15:47	1
N-Nitrosodiphenylamine	1.2	U H	1.2	0.13	ug/L		10/19/15 09:03	10/20/15 15:47	1
Pentachlorophenol	48	U H	48	6.5	ug/L		10/19/15 09:03	10/20/15 15:47	1
Phenol	1.2	U H	1.2	0.18	ug/L		10/19/15 09:03	10/20/15 15:47	1
Phenanthrene	0.24	U H	0.24	0.037	ug/L		10/19/15 09:03	10/20/15 15:47	1
Pyrene	0.24	U H	0.24	0.033	ug/L		10/19/15 09:03	10/20/15 15:47	1
3 & 4 Methylphenol	2.4	U H	2.4	0.40	ug/L		10/19/15 09:03	10/20/15 15:47	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-7-GW(48-49)
Date Collected: 10/09/15 12:26
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-31
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	67		29 - 110	10/19/15 09:03	10/20/15 15:47	1
2-Fluorophenol (Surr)	64		15 - 110	10/19/15 09:03	10/20/15 15:47	1
2,4,6-Tribromophenol (Surr)	58		21 - 128	10/19/15 09:03	10/20/15 15:47	1
Nitrobenzene-d5 (Surr)	66		31 - 110	10/19/15 09:03	10/20/15 15:47	1
Phenol-d5 (Surr)	52		10 - 110	10/19/15 09:03	10/20/15 15:47	1
Terphenyl-d14 (Surr)	67		31 - 115	10/19/15 09:03	10/20/15 15:47	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	28		10	2.9	ug/L		10/12/15 08:36	10/13/15 23:25	1
Barium	250	B	200	1.0	ug/L		10/12/15 08:36	10/13/15 23:25	1
Cadmium	0.31	J	2.0	0.14	ug/L		10/12/15 08:36	10/13/15 23:25	1
Chromium	86		5.0	0.55	ug/L		10/12/15 08:36	10/13/15 23:25	1
Lead	27		3.0	1.9	ug/L		10/12/15 08:36	10/13/15 23:25	1
Selenium	5.0	U	5.0	4.0	ug/L		10/12/15 08:36	10/13/15 23:25	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 08:36	10/13/15 23:25	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.18	J	0.20	0.090	ug/L		10/12/15 14:00	10/14/15 07:43	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: TB-07(100915)
Date Collected: 10/09/15 00:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-32
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	3.3	J	10	0.94	ug/L			10/20/15 14:53	1
Benzene	1.0	U	1.0	0.35	ug/L			10/20/15 14:53	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/20/15 14:53	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/20/15 14:53	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/20/15 14:53	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/20/15 14:53	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/20/15 14:53	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/20/15 14:53	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 14:53	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/20/15 14:53	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/20/15 14:53	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/20/15 14:53	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/20/15 14:53	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/20/15 14:53	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/20/15 14:53	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/20/15 14:53	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/20/15 14:53	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/20/15 14:53	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/20/15 14:53	1
2-Hexanone	10	U	10	0.48	ug/L			10/20/15 14:53	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/20/15 14:53	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/20/15 14:53	1
Styrene	1.0	U	1.0	0.45	ug/L			10/20/15 14:53	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/20/15 14:53	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/20/15 14:53	1
Toluene	1.0	U	1.0	0.23	ug/L			10/20/15 14:53	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/20/15 14:53	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/20/15 14:53	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/20/15 14:53	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/20/15 14:53	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/20/15 14:53	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/20/15 14:53	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/20/15 14:53	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/20/15 14:53	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/20/15 14:53	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/20/15 14:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/20/15 14:53	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/20/15 14:53	1
Methyl acetate	10	U	10	2.3	ug/L			10/20/15 14:53	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/20/15 14:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/20/15 14:53	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/20/15 14:53	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 14:53	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/20/15 14:53	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/20/15 14:53	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/20/15 14:53	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/20/15 14:53	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/20/15 14:53	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: TB-07(100915)
Date Collected: 10/09/15 00:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-32
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		78 - 125		10/20/15 14:53	1
4-Bromofluorobenzene (Surr)	98		61 - 120		10/20/15 14:53	1
Toluene-d8 (Surr)	95		80 - 120		10/20/15 14:53	1
Dibromofluoromethane (Surr)	96		79 - 120		10/20/15 14:53	1

Client Sample ID: DUP-3
Date Collected: 10/09/15 00:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-35
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	20	U	20	1.9	ug/L			10/20/15 15:16	2
Benzene	2.0	U	2.0	0.70	ug/L			10/20/15 15:16	2
Dichlorobromomethane	2.0	U	2.0	0.58	ug/L			10/20/15 15:16	2
Bromoform	2.0	U	2.0	1.1	ug/L			10/20/15 15:16	2
Bromomethane	2.0	U	2.0	0.88	ug/L			10/20/15 15:16	2
2-Butanone (MEK)	20	U	20	1.1	ug/L			10/20/15 15:16	2
Carbon disulfide	2.0	U	2.0	0.76	ug/L			10/20/15 15:16	2
Carbon tetrachloride	2.0	U	2.0	0.86	ug/L			10/20/15 15:16	2
Chlorobenzene	2.0	U	2.0	0.50	ug/L			10/20/15 15:16	2
Chloroethane	2.0	U	2.0	0.64	ug/L			10/20/15 15:16	2
Chloroform	2.0	U	2.0	0.50	ug/L			10/20/15 15:16	2
Chloromethane	2.0	U	2.0	0.88	ug/L			10/20/15 15:16	2
1,1-Dichloroethane	2.0	U	2.0	0.60	ug/L			10/20/15 15:16	2
1,2-Dichloroethane	2.0	U	2.0	0.46	ug/L			10/20/15 15:16	2
1,1-Dichloroethene	2.0	U	2.0	0.90	ug/L			10/20/15 15:16	2
1,2-Dichloropropane	2.0	U	2.0	0.50	ug/L			10/20/15 15:16	2
cis-1,3-Dichloropropene	2.0	U	2.0	0.92	ug/L			10/20/15 15:16	2
trans-1,3-Dichloropropene	2.0	U	2.0	1.1	ug/L			10/20/15 15:16	2
Ethylbenzene	2.0	U	2.0	0.50	ug/L			10/20/15 15:16	2
2-Hexanone	20	U	20	0.96	ug/L			10/20/15 15:16	2
Methylene Chloride	2.0	U	2.0	0.66	ug/L			10/20/15 15:16	2
4-Methyl-2-pentanone (MIBK)	20	U	20	2.0	ug/L			10/20/15 15:16	2
Styrene	2.0	U	2.0	0.90	ug/L			10/20/15 15:16	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0	0.44	ug/L			10/20/15 15:16	2
Tetrachloroethene	2.0	U	2.0	0.62	ug/L			10/20/15 15:16	2
Toluene	2.0	U	2.0	0.46	ug/L			10/20/15 15:16	2
Trichloroethene	**37**		2.0	0.44	ug/L			10/20/15 15:16	2
Vinyl chloride	2.0	U	2.0	0.58	ug/L			10/20/15 15:16	2
Xylenes, Total	4.0	U	4.0	1.0	ug/L			10/20/15 15:16	2
1,1,1-Trichloroethane	2.0	U	2.0	0.88	ug/L			10/20/15 15:16	2
1,1,2-Trichloroethane	2.0	U	2.0	0.48	ug/L			10/20/15 15:16	2
Cyclohexane	2.0	U	2.0	0.90	ug/L			10/20/15 15:16	2
1,2-Dibromo-3-Chloropropane	4.0	U	4.0	1.6	ug/L			10/20/15 15:16	2
Ethylene Dibromide	2.0	U	2.0	0.64	ug/L			10/20/15 15:16	2
Dichlorodifluoromethane	2.0	U	2.0	0.64	ug/L			10/20/15 15:16	2
cis-1,2-Dichloroethene	**55**		2.0	0.52	ug/L			10/20/15 15:16	2
trans-1,2-Dichloroethene	2.0	U	2.0	0.60	ug/L			10/20/15 15:16	2
Isopropylbenzene	2.0	U	2.0	0.70	ug/L			10/20/15 15:16	2
Methyl acetate	20	U	20	4.5	ug/L			10/20/15 15:16	2
Methyl tert-butyl ether	2.0	U	2.0	0.40	ug/L			10/20/15 15:16	2
1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	U	2.0	0.90	ug/L			10/20/15 15:16	2
1,2,4-Trichlorobenzene	2.0	U	2.0	0.64	ug/L			10/20/15 15:16	2
1,2-Dichlorobenzene	2.0	U	2.0	0.50	ug/L			10/20/15 15:16	2
1,3-Dichlorobenzene	2.0	U	2.0	0.38	ug/L			10/20/15 15:16	2
1,4-Dichlorobenzene	2.0	U	2.0	0.54	ug/L			10/20/15 15:16	2
Trichlorofluoromethane	2.0	U	2.0	0.98	ug/L			10/20/15 15:16	2
Chlorodibromomethane	2.0	U	2.0	0.86	ug/L			10/20/15 15:16	2
Methylcyclohexane	2.0	U	2.0	0.86	ug/L			10/20/15 15:16	2

Client Sample ID: DUP-3
Date Collected: 10/09/15 00:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-35
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*78 - 125*		*10/20/15 15:16*	*2*
4-Bromofluorobenzene (Surr)	*100*		*61 - 120*		*10/20/15 15:16*	*2*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/20/15 15:16*	*2*
Dibromofluoromethane (Surr)	*95*		*79 - 120*		*10/20/15 15:16*	*2*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 18:24	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/12/15 09:34	10/15/15 18:24	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/12/15 09:34	10/15/15 18:24	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/12/15 09:34	10/15/15 18:24	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/12/15 09:34	10/15/15 18:24	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/12/15 09:34	10/15/15 18:24	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/12/15 09:34	10/15/15 18:24	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/12/15 09:34	10/15/15 18:24	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/12/15 09:34	10/15/15 18:24	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 18:24	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/12/15 09:34	10/15/15 18:24	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/12/15 09:34	10/15/15 18:24	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/12/15 09:34	10/15/15 18:24	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/12/15 09:34	10/15/15 18:24	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/12/15 09:34	10/15/15 18:24	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/12/15 09:34	10/15/15 18:24	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/12/15 09:34	10/15/15 18:24	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/12/15 09:34	10/15/15 18:24	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/12/15 09:34	10/15/15 18:24	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/12/15 09:34	10/15/15 18:24	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/12/15 09:34	10/15/15 18:24	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/12/15 09:34	10/15/15 18:24	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/12/15 09:34	10/15/15 18:24	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/12/15 09:34	10/15/15 18:24	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/12/15 09:34	10/15/15 18:24	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/12/15 09:34	10/15/15 18:24	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/15/15 18:24	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/12/15 09:34	10/15/15 18:24	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 18:24	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/12/15 09:34	10/15/15 18:24	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/12/15 09:34	10/15/15 18:24	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/12/15 09:34	10/15/15 18:24	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/12/15 09:34	10/15/15 18:24	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/12/15 09:34	10/15/15 18:24	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/12/15 09:34	10/15/15 18:24	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/12/15 09:34	10/15/15 18:24	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/12/15 09:34	10/15/15 18:24	1
Bis(2-ethylhexyl) phthalate	**3.8**	**B**	2.0	1.5	ug/L		10/12/15 09:34	10/15/15 18:24	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/12/15 09:34	10/15/15 18:24	1
Caprolactam	**1.7**	**J B**	5.0	0.37	ug/L		10/12/15 09:34	10/15/15 18:24	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/12/15 09:34	10/15/15 18:24	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/12/15 09:34	10/15/15 18:24	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/12/15 09:34	10/15/15 18:24	1

Client Sample ID: DUP-3
Date Collected: 10/09/15 00:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-35
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/15/15 18:24	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/12/15 09:34	10/15/15 18:24	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/12/15 09:34	10/15/15 18:24	1
Di-n-butyl phthalate	**1.7**	**B**	1.0	0.40	ug/L		10/12/15 09:34	10/15/15 18:24	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/12/15 09:34	10/15/15 18:24	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/12/15 09:34	10/15/15 18:24	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/12/15 09:34	10/15/15 18:24	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 18:24	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/15/15 18:24	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/12/15 09:34	10/15/15 18:24	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/12/15 09:34	10/15/15 18:24	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/12/15 09:34	10/15/15 18:24	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/12/15 09:34	10/15/15 18:24	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/12/15 09:34	10/15/15 18:24	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/15/15 18:24	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/12/15 09:34	10/15/15 18:24	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/12/15 09:34	10/15/15 18:24	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/12/15 09:34	10/15/15 18:24	1
Phenol	1.0	U *	1.0	0.15	ug/L		10/12/15 09:34	10/15/15 18:24	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/12/15 09:34	10/15/15 18:24	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/12/15 09:34	10/15/15 18:24	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/12/15 09:34	10/15/15 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*25*	*X*	*29 - 110*	*10/12/15 09:34*	*10/15/15 18:24*	*1*
2-Fluorophenol (Surr)	*31*		*15 - 110*	*10/12/15 09:34*	*10/15/15 18:24*	*1*
2,4,6-Tribromophenol (Surr)	*22*		*21 - 128*	*10/12/15 09:34*	*10/15/15 18:24*	*1*
Nitrobenzene-d5 (Surr)	*30*	*X*	*31 - 110*	*10/12/15 09:34*	*10/15/15 18:24*	*1*
Phenol-d5 (Surr)	*28*		*10 - 110*	*10/12/15 09:34*	*10/15/15 18:24*	*1*
Terphenyl-d14 (Surr)	*29*	*X*	*31 - 115*	*10/12/15 09:34*	*10/15/15 18:24*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U H	1.0	0.12	ug/L		10/19/15 09:03	10/20/15 16:10	1
bis (2-chloroisopropyl) ether	1.0	U H	1.0	0.18	ug/L		10/19/15 09:03	10/20/15 16:10	1
2,4,5-Trichlorophenol	5.0	U H	5.0	0.37	ug/L		10/19/15 09:03	10/20/15 16:10	1
2,4,6-Trichlorophenol	5.0	U H	5.0	0.26	ug/L		10/19/15 09:03	10/20/15 16:10	1
2,4-Dichlorophenol	2.0	U H	2.0	0.29	ug/L		10/19/15 09:03	10/20/15 16:10	1
2,4-Dimethylphenol	2.0	U H	2.0	0.31	ug/L		10/19/15 09:03	10/20/15 16:10	1
2,4-Dinitrophenol	40	U H	40	6.1	ug/L		10/19/15 09:03	10/20/15 16:10	1
2,4-Dinitrotoluene	5.0	U H	5.0	0.26	ug/L		10/19/15 09:03	10/20/15 16:10	1
2,6-Dinitrotoluene	5.0	U H	5.0	0.24	ug/L		10/19/15 09:03	10/20/15 16:10	1
2-Chloronaphthalene	1.0	U H	1.0	0.12	ug/L		10/19/15 09:03	10/20/15 16:10	1
2-Chlorophenol	1.0	U H	1.0	0.13	ug/L		10/19/15 09:03	10/20/15 16:10	1
2-Methylnaphthalene	0.20	U H	0.20	0.037	ug/L		10/19/15 09:03	10/20/15 16:10	1
2-Methylphenol	1.0	U H	1.0	0.19	ug/L		10/19/15 09:03	10/20/15 16:10	1
2-Nitroaniline	2.0	U H	2.0	0.31	ug/L		10/19/15 09:03	10/20/15 16:10	1
2-Nitrophenol	2.0	U H	2.0	0.21	ug/L		10/19/15 09:03	10/20/15 16:10	1
3,3'-Dichlorobenzidine	5.0	U H *	5.0	0.35	ug/L		10/19/15 09:03	10/20/15 16:10	1
3-Nitroaniline	2.0	U H	2.0	0.27	ug/L		10/19/15 09:03	10/20/15 16:10	1

Client Sample ID: DUP-3
Date Collected: 10/09/15 00:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-35
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	5.0	U H	5.0	0.53	ug/L		10/19/15 09:03	10/20/15 16:10	1
4-Bromophenyl phenyl ether	2.0	U H	2.0	0.35	ug/L		10/19/15 09:03	10/20/15 16:10	1
4-Chloro-3-methylphenol	2.0	U H	2.0	0.28	ug/L		10/19/15 09:03	10/20/15 16:10	1
4-Chloroaniline	2.0	U H *	2.0	0.15	ug/L		10/19/15 09:03	10/20/15 16:10	1
4-Chlorophenyl phenyl ether	2.0	U H	2.0	0.29	ug/L		10/19/15 09:03	10/20/15 16:10	1
4-Nitroaniline	2.0	U H	2.0	0.24	ug/L		10/19/15 09:03	10/20/15 16:10	1
4-Nitrophenol	5.0	U H	5.0	0.59	ug/L		10/19/15 09:03	10/20/15 16:10	1
Acenaphthene	0.20	U H	0.20	0.044	ug/L		10/19/15 09:03	10/20/15 16:10	1
Acenaphthylene	0.20	U H	0.20	0.020	ug/L		10/19/15 09:03	10/20/15 16:10	1
Acetophenone	1.0	U H	1.0	0.14	ug/L		10/19/15 09:03	10/20/15 16:10	1
Anthracene	0.20	U H	0.20	0.031	ug/L		10/19/15 09:03	10/20/15 16:10	1
Atrazine	1.0	U H	1.0	0.12	ug/L		10/19/15 09:03	10/20/15 16:10	1
Benzaldehyde	1.0	U H *	1.0	0.30	ug/L		10/19/15 09:03	10/20/15 16:10	1
Benzo[a]anthracene	0.20	U H	0.20	0.059	ug/L		10/19/15 09:03	10/20/15 16:10	1
Benzo[a]pyrene	0.20	U H	0.20	0.030	ug/L		10/19/15 09:03	10/20/15 16:10	1
Benzo[b]fluoranthene	0.20	U H	0.20	0.059	ug/L		10/19/15 09:03	10/20/15 16:10	1
Benzo[g,h,i]perylene	0.20	U H	0.20	0.050	ug/L		10/19/15 09:03	10/20/15 16:10	1
Benzo[k]fluoranthene	0.20	U H	0.20	0.048	ug/L		10/19/15 09:03	10/20/15 16:10	1
Bis(2-chloroethoxy)methane	1.0	U H	1.0	0.037	ug/L		10/19/15 09:03	10/20/15 16:10	1
Bis(2-chloroethyl)ether	1.0	U H	1.0	0.19	ug/L		10/19/15 09:03	10/20/15 16:10	1
Bis(2-ethylhexyl) phthalate	2.0	U H	2.0	1.5	ug/L		10/19/15 09:03	10/20/15 16:10	1
Butyl benzyl phthalate	1.0	U H	1.0	0.22	ug/L		10/19/15 09:03	10/20/15 16:10	1
Caprolactam	**1.3**	**J H B**	5.0	0.37	ug/L		10/19/15 09:03	10/20/15 16:10	1
Carbazole	1.0	U H	1.0	0.11	ug/L		10/19/15 09:03	10/20/15 16:10	1
Chrysene	0.20	U H	0.20	0.035	ug/L		10/19/15 09:03	10/20/15 16:10	1
Dibenz(a,h)anthracene	0.20	U H	0.20	0.040	ug/L		10/19/15 09:03	10/20/15 16:10	1
Dibenzofuran	1.0	U H	1.0	0.14	ug/L		10/19/15 09:03	10/20/15 16:10	1
Diethyl phthalate	1.0	U H	1.0	0.13	ug/L		10/19/15 09:03	10/20/15 16:10	1
Dimethyl phthalate	1.0	U H	1.0	0.10	ug/L		10/19/15 09:03	10/20/15 16:10	1
Di-n-butyl phthalate	1.0	U H	1.0	0.40	ug/L		10/19/15 09:03	10/20/15 16:10	1
Di-n-octyl phthalate	1.0	U H	1.0	0.37	ug/L		10/19/15 09:03	10/20/15 16:10	1
Fluoranthene	0.20	U H	0.20	0.027	ug/L		10/19/15 09:03	10/20/15 16:10	1
Fluorene	0.20	U H	0.20	0.034	ug/L		10/19/15 09:03	10/20/15 16:10	1
Hexachlorobenzene	1.0	U H	1.0	0.12	ug/L		10/19/15 09:03	10/20/15 16:10	1
Hexachlorobutadiene	1.0	U H	1.0	0.14	ug/L		10/19/15 09:03	10/20/15 16:10	1
Hexachlorocyclopentadiene	10	U H	10	2.5	ug/L		10/19/15 09:03	10/20/15 16:10	1
Hexachloroethane	1.0	U H	1.0	0.22	ug/L		10/19/15 09:03	10/20/15 16:10	1
Indeno[1,2,3-cd]pyrene	0.20	U H	0.20	0.048	ug/L		10/19/15 09:03	10/20/15 16:10	1
Isophorone	1.0	U H	1.0	0.042	ug/L		10/19/15 09:03	10/20/15 16:10	1
Naphthalene	0.20	U H	0.20	0.043	ug/L		10/19/15 09:03	10/20/15 16:10	1
Nitrobenzene	1.0	U H	1.0	0.12	ug/L		10/19/15 09:03	10/20/15 16:10	1
N-Nitrosodi-n-propylamine	1.0	U H	1.0	0.16	ug/L		10/19/15 09:03	10/20/15 16:10	1
N-Nitrosodiphenylamine	1.0	U H	1.0	0.11	ug/L		10/19/15 09:03	10/20/15 16:10	1
Pentachlorophenol	40	U H	40	5.5	ug/L		10/19/15 09:03	10/20/15 16:10	1
Phenol	1.0	U H	1.0	0.15	ug/L		10/19/15 09:03	10/20/15 16:10	1
Phenanthrene	0.20	U H	0.20	0.031	ug/L		10/19/15 09:03	10/20/15 16:10	1
Pyrene	0.20	U H	0.20	0.028	ug/L		10/19/15 09:03	10/20/15 16:10	1
3 & 4 Methylphenol	2.0	U H	2.0	0.34	ug/L		10/19/15 09:03	10/20/15 16:10	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: DUP-3
Date Collected: 10/09/15 00:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-35
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	62		29 - 110	10/19/15 09:03	10/20/15 16:10	1
2-Fluorophenol (Surr)	56		15 - 110	10/19/15 09:03	10/20/15 16:10	1
2,4,6-Tribromophenol (Surr)	50		21 - 128	10/19/15 09:03	10/20/15 16:10	1
Nitrobenzene-d5 (Surr)	62		31 - 110	10/19/15 09:03	10/20/15 16:10	1
Phenol-d5 (Surr)	44		10 - 110	10/19/15 09:03	10/20/15 16:10	1
Terphenyl-d14 (Surr)	63		31 - 115	10/19/15 09:03	10/20/15 16:10	1

Method: 6010B - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	11		10	2.9	ug/L		10/12/15 08:37	10/13/15 23:29	1
Barium	310	B	200	1.0	ug/L		10/12/15 08:37	10/13/15 23:29	1
Cadmium	0.40	J	2.0	0.14	ug/L		10/12/15 08:37	10/13/15 23:29	1
Chromium	110		5.0	0.55	ug/L		10/12/15 08:37	10/13/15 23:29	1
Lead	46		3.0	1.9	ug/L		10/12/15 08:37	10/13/15 23:29	1
Selenium	4.0	J	5.0	4.0	ug/L		10/12/15 08:37	10/13/15 23:29	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 08:37	10/13/15 23:29	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19	J	0.20	0.090	ug/L		10/12/15 14:00	10/14/15 07:45	1

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(64-120)	(64-130)	(69-128)	(68-120)
240-56464-2	VAP-6(2-4)	107	120	103	100
240-56464-13	VAP-8-(1-2)	100	116	100	98
240-56464-23	VAP-7(2-4)	97	117	104	99
LCS 240-201750/8	Lab Control Sample	99	113	102	103
MB 240-201750/9	Method Blank	103	117	110	107

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(78-125)	(61-120)	(80-120)	(79-120)
240-56464-1	TB-05(100815)	94	93	96	92
240-56464-3	VAP-6-GW(12-13)	96	99	96	93
240-56464-4	VAP-6-GW(15-16)	95	96	96	94
240-56464-5	VAP-6-GW(20-21)	96	99	97	93
240-56464-6	VAP-6-GW(25-26)	94	97	98	94
240-56464-7	VAP-6-GW(30-31)	93	95	95	92
240-56464-8	VAP-6-GW(30-35)	93	96	97	92
240-56464-9	VAP-6-GW(40-41)	97	94	95	95
240-56464-10	VAP-6-GW(45-46)	99	94	92	107
240-56464-11	VAP-6-GW(49-50)	96	90	86	102
240-56464-12	DUP-02(100815)	97	89	90	106
240-56464-12 MS	DUP-02(100815)	101	99	93	100
240-56464-12 MSD	DUP-02(100815)	105	104	95	101
240-56464-14	VAP-8-GW(18-19)	104	94	93	115
240-56464-15	VAP-8-GW(20-21)	104	96	96	109
240-56464-16	VAP-8-GW(25-26)	96	89	89	106
240-56464-17	VAP-8-GW(30-31)	105	99	99	112
240-56464-18	VAP-8-GW(35-36)	96	98	91	100
240-56464-19	VAP-8-GW(40-41)	95	89	87	101
240-56464-20	VAP-8-GW(45-46)	101	95	91	106
240-56464-21	VAP-8-GW(49-50)	97	90	90	104
240-56464-22	TB-06(100815)	94	89	85	106
240-56464-24	VAP-7-GW(13-14)	106	91	95	109
240-56464-25	VAP-7-GW(15-16)	96	101	93	95
240-56464-26	VAP-7-GW(20-21)	96	94	94	95
240-56464-27	VAP-7-GW(25-26)	101	99	93	98
240-56464-28	VAP-7-GW(30-31)	99	96	98	96
240-56464-28 MS	VAP-7-GW(30-31)	92	108	98	96
240-56464-28 MSD	VAP-7-GW(30-31)	96	111	102	102
240-56464-29	VAP-7-GW(35-36)	96	97	94	93
240-56464-30	VAP-7-GW(43-44)	101	101	92	97

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(78-125)	(61-120)	(80-120)	(79-120)
240-56464-31	VAP-7-GW(48-49)	98	98	93	96
240-56464-32	TB-07(100915)	101	98	95	96
240-56464-35	DUP-3	100	100	94	95
LCS 240-201894/4	Lab Control Sample	94	105	100	97
LCS 240-202626/16	Lab Control Sample	94	99	96	93
LCS 240-202687/4	Lab Control Sample	94	100	95	106
LCS 240-202688/4	Lab Control Sample	95	114	104	106
LCS 240-202891/4	Lab Control Sample	101	105	101	113
MB 240-201894/6	Method Blank	100	94	95	94
MB 240-202626/18	Method Blank	94	95	96	94
MB 240-202687/6	Method Blank	102	91	91	104
MB 240-202688/6	Method Blank	98	103	95	101
MB 240-202891/6	Method Blank	100	87	90	105

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(24-110)	(24-110)	(10-110)	(20-110)	(26-110)	(36-110)
240-56464-2	VAP-6(2-4)	58	58	34	58	54	80
240-56464-13	VAP-8-(1-2)	70	67	29	65	69	77
240-56464-23	VAP-7(2-4)	72	70	29	65	70	81
LCS 240-201376/24-A	Lab Control Sample	75	73	58	71	71	84
LCS 240-201566/14-A	Lab Control Sample	74	78	46	78	78	83
MB 240-201376/23-A	Method Blank	71	63	40	70	66	83
MB 240-201566/13-A	Method Blank	66	60	35	63	66	75

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(29-110)	(15-110)	(21-128)	(31-110)	(10-110)	(31-115)
240-56464-4	VAP-6-GW(15-16)	25 X	31	22	31	27	30 X
240-56464-4 - RE	VAP-6-GW(15-16)	48	47	41	50	32	39

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(29-110)	(15-110)	(21-128)	(31-110)	(10-110)	(31-115)
240-56464-5	VAP-6-GW(20-21)	13 X	27	11 X	18 X	24	13 X
240-56464-5 - RA	VAP-6-GW(20-21)	13 X	26	9 X	17 X	23	13 X
240-56464-5 - RE	VAP-6-GW(20-21)	34	40	29	38	26	33
240-56464-6	VAP-6-GW(25-26)	17 X	23	17 X	21 X	20	17 X
240-56464-6 - RE	VAP-6-GW(25-26)	34	25	30	38	13	18 X
240-56464-7	VAP-6-GW(30-31)	10 X	13 X	9 X	12 X	11	9 X
240-56464-7 - RE	VAP-6-GW(30-31)	52	32	39	52	15	39
240-56464-8	VAP-6-GW(30-35)	48	43	43	51	34	50
240-56464-8 - RA	VAP-6-GW(30-35)	52	47	40	51	36	49
240-56464-9	VAP-6-GW(40-41)	39	37	35	40	32	50
240-56464-10	VAP-6-GW(45-46)	13 X	14 X	10 X	16 X	12	11 X
240-56464-11	VAP-6-GW(49-50)	58	56	47	60	45	54
240-56464-12	DUP-02(100815)	53	52	46	54	43	39
240-56464-14	VAP-8-GW(18-19)	26 X	30	25	30 X	24	17 X
240-56464-14 - RE	VAP-8-GW(18-19)	68	44	62	67	33	70
240-56464-14 - RERA	VAP-8-GW(18-19)	66	43	30	62	26	66
240-56464-15	VAP-8-GW(20-21)	22 X	29	21	28 X	24	17 X
240-56464-15 - RE	VAP-8-GW(20-21)	70	57	67	67	39	76
240-56464-16	VAP-8-GW(25-26)	31	37	25	38	29	15 X
240-56464-16 - RA	VAP-8-GW(25-26)	34	39	24	40	30	17 X
240-56464-17	VAP-8-GW(30-31)	46	48	39	48	39	37
240-56464-18	VAP-8-GW(35-36)	32	39	29	37	34	23 X
240-56464-19	VAP-8-GW(40-41)	51	49	44	54	37	29 X
240-56464-20	VAP-8-GW(45-46)	32	41	23	32	34	22 X
240-56464-21	VAP-8-GW(49-50)	51	53	39	51	44	54
240-56464-24	VAP-7-GW(13-14)	41	48	36	43	39	35
240-56464-25	VAP-7-GW(15-16)	31	47	21	37	42	28 X
240-56464-26	VAP-7-GW(20-21)	48	50	38	48	42	52
240-56464-27	VAP-7-GW(25-26)	34	35	25	34	29	33
240-56464-28	VAP-7-GW(30-31)	28 X	34	22	31	29	31
240-56464-29	VAP-7-GW(35-36)	16 X	25	12 X	18 X	23	12 X
240-56464-29 - RE	VAP-7-GW(35-36)	64	58	53	64	45	53
240-56464-30	VAP-7-GW(43-44)	18 X	26	13 X	22 X	23	17 X
240-56464-30 - RE	VAP-7-GW(43-44)	70	66	62	72	52	71
240-56464-31	VAP-7-GW(48-49)	11 X	27	11 X	10 X	23	9 X
240-56464-31 - RE	VAP-7-GW(48-49)	67	64	58	66	52	67
240-56464-35	DUP-3	25 X	31	22	30 X	28	29 X
240-56464-35 - RE	DUP-3	62	56	50	62	44	63
LCS 240-201405/22-A	Lab Control Sample	80	75	76	87	61	82
LCS 240-201406/22-A	Lab Control Sample	69	55	66	75	39	76
LCS 240-202230/23-A	Lab Control Sample	81	68	77	88	49	82
LCS 240-202493/22-A	Lab Control Sample	93	88	80	102	70	95
MB 240-201405/21-A	Method Blank	59	57	48	58	46	66
MB 240-201406/21-A	Method Blank	66	63	52	69	49	75
MB 240-202230/22-A	Method Blank	57	52	44	56	41	63
MB 240-202493/21-A	Method Blank	73	63	55	72	50	87

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-201750/9
Matrix: Solid
Analysis Batch: 201750

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	2.62	J	20	1.6	ug/Kg			10/14/15 03:25	1
Benzene	5.0	U	5.0	0.24	ug/Kg			10/14/15 03:25	1
Dichlorobromomethane	5.0	U	5.0	0.21	ug/Kg			10/14/15 03:25	1
Bromoform	5.0	U	5.0	0.38	ug/Kg			10/14/15 03:25	1
Bromomethane	5.0	U	5.0	0.71	ug/Kg			10/14/15 03:25	1
2-Butanone (MEK)	0.698	J	20	0.48	ug/Kg			10/14/15 03:25	1
Carbon disulfide	5.0	U	5.0	0.34	ug/Kg			10/14/15 03:25	1
Carbon tetrachloride	5.0	U	5.0	0.33	ug/Kg			10/14/15 03:25	1
Chlorobenzene	5.0	U	5.0	0.29	ug/Kg			10/14/15 03:25	1
Chloroethane	5.0	U	5.0	0.34	ug/Kg			10/14/15 03:25	1
Chloroform	5.0	U	5.0	0.21	ug/Kg			10/14/15 03:25	1
Chloromethane	5.0	U	5.0	1.3	ug/Kg			10/14/15 03:25	1
1,1-Dichloroethane	5.0	U	5.0	1.2	ug/Kg			10/14/15 03:25	1
1,2-Dichloroethane	5.0	U	5.0	0.20	ug/Kg			10/14/15 03:25	1
1,1-Dichloroethene	5.0	U	5.0	0.49	ug/Kg			10/14/15 03:25	1
1,2-Dichloropropane	5.0	U	5.0	0.28	ug/Kg			10/14/15 03:25	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.27	ug/Kg			10/14/15 03:25	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.21	ug/Kg			10/14/15 03:25	1
Ethylbenzene	5.0	U	5.0	0.32	ug/Kg			10/14/15 03:25	1
2-Hexanone	20	U	20	0.70	ug/Kg			10/14/15 03:25	1
Methylene Chloride	2.16	J	5.0	1.1	ug/Kg			10/14/15 03:25	1
4-Methyl-2-pentanone (MIBK)	20	U	20	0.29	ug/Kg			10/14/15 03:25	1
Styrene	5.0	U	5.0	0.27	ug/Kg			10/14/15 03:25	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.16	ug/Kg			10/14/15 03:25	1
Tetrachloroethene	5.0	U	5.0	0.33	ug/Kg			10/14/15 03:25	1
Toluene	5.0	U	5.0	0.27	ug/Kg			10/14/15 03:25	1
Trichloroethene	5.0	U	5.0	0.26	ug/Kg			10/14/15 03:25	1
Vinyl chloride	5.0	U	5.0	0.39	ug/Kg			10/14/15 03:25	1
Xylenes, Total	10	U	10	0.63	ug/Kg			10/14/15 03:25	1
1,1,1-Trichloroethane	5.0	U	5.0	0.26	ug/Kg			10/14/15 03:25	1
1,1,2-Trichloroethane	5.0	U	5.0	0.49	ug/Kg			10/14/15 03:25	1
Cyclohexane	10	U	10	0.29	ug/Kg			10/14/15 03:25	1
1,2-Dibromo-3-Chloropropane	10	U	10	1.9	ug/Kg			10/14/15 03:25	1
Ethylene Dibromide	5.0	U	5.0	0.25	ug/Kg			10/14/15 03:25	1
Dichlorodifluoromethane	5.0	U	5.0	0.40	ug/Kg			10/14/15 03:25	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.28	ug/Kg			10/14/15 03:25	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.37	ug/Kg			10/14/15 03:25	1
Isopropylbenzene	5.0	U	5.0	0.30	ug/Kg			10/14/15 03:25	1
Methyl acetate	10	U	10	2.3	ug/Kg			10/14/15 03:25	1
Methyl tert-butyl ether	5.0	U	5.0	0.15	ug/Kg			10/14/15 03:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	0.39	ug/Kg			10/14/15 03:25	1
1,2,4-Trichlorobenzene	0.426	J	5.0	0.39	ug/Kg			10/14/15 03:25	1
1,2-Dichlorobenzene	5.0	U	5.0	0.38	ug/Kg			10/14/15 03:25	1
1,3-Dichlorobenzene	5.0	U	5.0	0.40	ug/Kg			10/14/15 03:25	1
1,4-Dichlorobenzene	5.0	U	5.0	0.41	ug/Kg			10/14/15 03:25	1
Trichlorofluoromethane	5.0	U	5.0	0.26	ug/Kg			10/14/15 03:25	1
Chlorodibromomethane	5.0	U	5.0	0.16	ug/Kg			10/14/15 03:25	1
Methylcyclohexane	10	U	10	0.33	ug/Kg			10/14/15 03:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		64 - 120		10/14/15 03:25	1
4-Bromofluorobenzene (Surr)	117		64 - 130		10/14/15 03:25	1
Toluene-d8 (Surr)	110		69 - 128		10/14/15 03:25	1
Dibromofluoromethane (Surr)	107		68 - 120		10/14/15 03:25	1

Lab Sample ID: LCS 240-201750/8
Matrix: Solid
Analysis Batch: 201750

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	71.5	*	ug/Kg		143	62 - 133
Benzene	25.0	26.8		ug/Kg		107	80 - 121
Dichlorobromomethane	25.0	27.5		ug/Kg		110	80 - 136
Bromoform	25.0	28.8		ug/Kg		115	71 - 135
Bromomethane	25.0	21.1		ug/Kg		84	57 - 120
2-Butanone (MEK)	50.0	55.2		ug/Kg		110	67 - 124
Carbon disulfide	25.0	26.7		ug/Kg		107	80 - 152
Carbon tetrachloride	25.0	31.3		ug/Kg		125	80 - 141
Chlorobenzene	25.0	26.5		ug/Kg		106	80 - 120
Chloroethane	25.0	26.0		ug/Kg		104	66 - 122
Chloroform	25.0	27.5		ug/Kg		110	80 - 120
Chloromethane	25.0	22.9		ug/Kg		92	62 - 120
1,1-Dichloroethane	25.0	27.4		ug/Kg		110	80 - 126
1,2-Dichloroethane	25.0	27.4		ug/Kg		110	76 - 132
1,1-Dichloroethene	25.0	27.0		ug/Kg		108	77 - 130
1,2-Dichloropropane	25.0	25.9		ug/Kg		103	80 - 128
cis-1,3-Dichloropropene	25.0	27.0		ug/Kg		108	73 - 139
trans-1,3-Dichloropropene	25.0	25.8		ug/Kg		103	71 - 151
Ethylbenzene	25.0	27.7		ug/Kg		111	80 - 132
2-Hexanone	50.0	60.1		ug/Kg		120	72 - 143
Methylene Chloride	25.0	27.8		ug/Kg		111	74 - 127
4-Methyl-2-pentanone (MIBK)	50.0	61.2		ug/Kg		122	74 - 139
Styrene	25.0	26.4		ug/Kg		105	80 - 135
1,1,2,2-Tetrachloroethane	25.0	28.8		ug/Kg		115	80 - 123
Tetrachloroethene	25.0	26.9		ug/Kg		108	80 - 128
Toluene	25.0	26.2		ug/Kg		105	80 - 129
Trichloroethene	25.0	27.0		ug/Kg		108	59 - 124
Vinyl chloride	25.0	24.9		ug/Kg		100	65 - 127
Xylenes, Total	50.0	56.2		ug/Kg		112	80 - 131
1,1,1-Trichloroethane	25.0	29.4		ug/Kg		118	80 - 134
1,1,2-Trichloroethane	25.0	25.4		ug/Kg		102	80 - 121
Cyclohexane	25.0	27.9		ug/Kg		112	80 - 138
1,2-Dibromo-3-Chloropropane	25.0	24.9		ug/Kg		99	65 - 132
Ethylene Dibromide	25.0	26.4		ug/Kg		105	47 - 123
Dichlorodifluoromethane	25.0	26.6		ug/Kg		106	30 - 149
cis-1,2-Dichloroethene	25.0	28.2		ug/Kg		113	80 - 123
trans-1,2-Dichloroethene	25.0	28.6		ug/Kg		114	80 - 125
Isopropylbenzene	25.0	29.1		ug/Kg		116	80 - 132
Methyl acetate	125	183	*	ug/Kg		147	61 - 135
Methyl tert-butyl ether	25.0	27.7		ug/Kg		111	75 - 125
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.1		ug/Kg		108	80 - 142
1,2,4-Trichlorobenzene	25.0	25.7		ug/Kg		103	70 - 125
1,2-Dichlorobenzene	25.0	25.2		ug/Kg		101	80 - 121

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201750/8
Matrix: Solid
Analysis Batch: 201750

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	25.0	26.1		ug/Kg		104	80 - 127
1,4-Dichlorobenzene	25.0	24.8		ug/Kg		99	79 - 120
Trichlorofluoromethane	25.0	25.0		ug/Kg		100	72 - 142
Methylcyclohexane	25.0	28.2		ug/Kg		113	80 - 137
m-Xylene & p-Xylene	25.0	27.6		ug/Kg		110	80 - 133
o-Xylene	25.0	28.6		ug/Kg		115	80 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*64 - 120*
4-Bromofluorobenzene (Surr)	*113*		*64 - 130*
Toluene-d8 (Surr)	*102*		*69 - 128*
Dibromofluoromethane (Surr)	*103*		*68 - 120*

Lab Sample ID: MB 240-201894/6
Matrix: Water
Analysis Batch: 201894

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/14/15 21:09	1
Benzene	1.0	U	1.0	0.35	ug/L			10/14/15 21:09	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/14/15 21:09	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/14/15 21:09	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/14/15 21:09	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/14/15 21:09	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/14/15 21:09	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/14/15 21:09	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 21:09	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/14/15 21:09	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/14/15 21:09	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/14/15 21:09	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/14/15 21:09	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/14/15 21:09	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/14/15 21:09	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/14/15 21:09	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/14/15 21:09	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/14/15 21:09	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/14/15 21:09	1
2-Hexanone	10	U	10	0.48	ug/L			10/14/15 21:09	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/14/15 21:09	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/14/15 21:09	1
Styrene	1.0	U	1.0	0.45	ug/L			10/14/15 21:09	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/14/15 21:09	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/14/15 21:09	1
Toluene	1.0	U	1.0	0.23	ug/L			10/14/15 21:09	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/14/15 21:09	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/14/15 21:09	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/14/15 21:09	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/14/15 21:09	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201894/6
Matrix: Water
Analysis Batch: 201894

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/14/15 21:09	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/14/15 21:09	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/14/15 21:09	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/14/15 21:09	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/14/15 21:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/14/15 21:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/14/15 21:09	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/14/15 21:09	1
Methyl acetate	10	U	10	2.3	ug/L			10/14/15 21:09	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/14/15 21:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/14/15 21:09	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/14/15 21:09	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/14/15 21:09	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/14/15 21:09	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/14/15 21:09	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/14/15 21:09	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/14/15 21:09	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/14/15 21:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*78 - 125*		*10/14/15 21:09*	*1*
4-Bromofluorobenzene (Surr)	*94*		*61 - 120*		*10/14/15 21:09*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/14/15 21:09*	*1*
Dibromofluoromethane (Surr)	*94*		*79 - 120*		*10/14/15 21:09*	*1*

Lab Sample ID: LCS 240-201894/4
Matrix: Water
Analysis Batch: 201894

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	20.1		ug/L		101	34 - 148
Benzene	10.0	10.7		ug/L		107	80 - 120
Dichlorobromomethane	10.0	10.1		ug/L		101	80 - 120
Bromoform	10.0	8.37		ug/L		84	56 - 122
Bromomethane	10.0	10.0		ug/L		100	38 - 132
2-Butanone (MEK)	20.0	20.7		ug/L		103	56 - 138
Carbon disulfide	10.0	9.69		ug/L		97	65 - 144
Carbon tetrachloride	10.0	9.99		ug/L		100	77 - 131
Chlorobenzene	10.0	9.99		ug/L		100	80 - 120
Chloroethane	10.0	9.41		ug/L		94	36 - 126
Chloroform	10.0	10.8		ug/L		108	80 - 120
Chloromethane	10.0	9.73		ug/L		97	48 - 133
1,1-Dichloroethane	10.0	11.0		ug/L		110	79 - 125
1,2-Dichloroethane	10.0	10.8		ug/L		108	80 - 120
1,1-Dichloroethene	10.0	9.83		ug/L		98	76 - 124
1,2-Dichloropropane	10.0	10.7		ug/L		107	78 - 124
cis-1,3-Dichloropropene	10.0	8.96		ug/L		90	74 - 126
trans-1,3-Dichloropropene	10.0	9.76		ug/L		98	75 - 131

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201894/4
Matrix: Water
Analysis Batch: 201894

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	10.0	10.3		ug/L		103	80 - 120
2-Hexanone	20.0	18.6		ug/L		93	55 - 141
Methylene Chloride	10.0	9.89		ug/L		99	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	20.0		ug/L		100	64 - 135
Styrene	10.0	10.1		ug/L		101	76 - 122
1,1,2,2-Tetrachloroethane	10.0	9.89		ug/L		99	71 - 123
Tetrachloroethene	10.0	9.80		ug/L		98	78 - 121
Toluene	10.0	10.7		ug/L		107	80 - 120
Trichloroethene	10.0	10.5		ug/L		105	80 - 121
Vinyl chloride	10.0	9.52		ug/L		95	52 - 121
Xylenes, Total	20.0	21.0		ug/L		105	80 - 120
1,1,1-Trichloroethane	10.0	10.5		ug/L		105	77 - 123
1,1,2-Trichloroethane	10.0	10.3		ug/L		103	80 - 120
Cyclohexane	10.0	10.1		ug/L		101	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	7.40		ug/L		74	50 - 132
Ethylene Dibromide	10.0	9.91		ug/L		99	80 - 120
Dichlorodifluoromethane	10.0	8.86		ug/L		89	23 - 136
cis-1,2-Dichloroethene	10.0	10.6		ug/L		106	79 - 120
trans-1,2-Dichloroethene	10.0	10.7		ug/L		107	80 - 124
Isopropylbenzene	10.0	10.4		ug/L		104	77 - 120
Methyl acetate	50.0	51.2		ug/L		102	67 - 131
Methyl tert-butyl ether	10.0	9.82		ug/L		98	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.29		ug/L		93	67 - 138
1,2,4-Trichlorobenzene	10.0	9.00		ug/L		90	61 - 120
1,2-Dichlorobenzene	10.0	9.77		ug/L		98	79 - 120
1,3-Dichlorobenzene	10.0	9.53		ug/L		95	79 - 120
1,4-Dichlorobenzene	10.0	9.65		ug/L		97	79 - 120
Trichlorofluoromethane	10.0	9.40		ug/L		94	61 - 133
Methylcyclohexane	10.0	9.62		ug/L		96	61 - 134
m-Xylene & p-Xylene	10.0	10.4		ug/L		104	80 - 120
o-Xylene	10.0	10.6		ug/L		106	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*78 - 125*
4-Bromofluorobenzene (Surr)	*105*		*61 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*79 - 120*

Lab Sample ID: 240-56464-28 MS
Matrix: Water
Analysis Batch: 201894

Client Sample ID: VAP-7-GW(30-31)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20	U	40.0	35.7		ug/L		89	32 - 126
Benzene	2.0	U	20.0	19.1		ug/L		95	73 - 121
Dichlorobromomethane	2.0	U	20.0	18.8		ug/L		94	72 - 120
Bromoform	2.0	U	20.0	16.0		ug/L		80	45 - 121

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56464-28 MS
Matrix: Water
Analysis Batch: 201894

Client Sample ID: VAP-7-GW(30-31)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromomethane	2.0	U F2	20.0	5.56		ug/L		28	26 - 136
2-Butanone (MEK)	20	U	40.0	39.3		ug/L		98	49 - 132
Carbon disulfide	2.0	U	20.0	22.6		ug/L		113	54 - 144
Carbon tetrachloride	2.0	U	20.0	15.4		ug/L		77	65 - 129
Chlorobenzene	2.0	U	20.0	17.2		ug/L		86	72 - 120
Chloroethane	2.0	U F2	20.0	8.41		ug/L		42	27 - 131
Chloroform	2.0	U	20.0	20.0		ug/L		100	73 - 121
Chloromethane	2.0	U F2 F1	20.0	6.46	F1	ug/L		32	39 - 134
1,1-Dichloroethane	2.0	U	20.0	20.5		ug/L		102	73 - 124
1,2-Dichloroethane	2.0	U	20.0	20.5		ug/L		102	74 - 125
1,1-Dichloroethene	2.0	U	20.0	17.4		ug/L		87	67 - 124
1,2-Dichloropropane	2.0	U	20.0	19.9		ug/L		99	73 - 122
cis-1,3-Dichloropropene	2.0	U	20.0	14.9		ug/L		74	60 - 120
trans-1,3-Dichloropropene	2.0	U	20.0	16.8		ug/L		84	58 - 132
Ethylbenzene	2.0	U	20.0	16.4		ug/L		82	68 - 121
2-Hexanone	20	U	40.0	42.3		ug/L		106	49 - 142
Methylene Chloride	2.0	U	20.0	18.8		ug/L		94	70 - 124
4-Methyl-2-pentanone (MIBK)	20	U	40.0	38.1		ug/L		95	58 - 136
Styrene	2.0	U	20.0	17.5		ug/L		88	64 - 126
1,1,2,2-Tetrachloroethane	2.0	U	20.0	18.6		ug/L		93	61 - 130
Tetrachloroethene	2.0	U	20.0	14.8		ug/L		74	59 - 125
Toluene	2.0	U	20.0	17.9		ug/L		90	72 - 122
Trichloroethene	33	F1	20.0	45.2	F1	ug/L		59	61 - 129
Vinyl chloride	2.0	U	20.0	17.3		ug/L		87	44 - 122
Xylenes, Total	4.0	U	40.0	34.3		ug/L		86	67 - 122
1,1,1-Trichloroethane	2.0	U F2	20.0	17.3		ug/L		87	69 - 122
1,1,2-Trichloroethane	2.0	U	20.0	19.2		ug/L		96	72 - 125
Cyclohexane	2.0	U	20.0	14.6		ug/L		73	41 - 137
1,2-Dibromo-3-Chloropropane	4.0	U	20.0	13.1		ug/L		66	42 - 130
Ethylene Dibromide	2.0	U	20.0	18.6		ug/L		93	69 - 125
Dichlorodifluoromethane	2.0	U	20.0	14.0		ug/L		70	14 - 137
cis-1,2-Dichloroethene	54		20.0	67.9		ug/L		68	66 - 124
trans-1,2-Dichloroethene	2.0	U	20.0	18.8		ug/L		94	72 - 125
Isopropylbenzene	2.0	U	20.0	15.7		ug/L		79	61 - 122
Methyl acetate	20	U	100	94.8		ug/L		95	64 - 124
Methyl tert-butyl ether	2.0	U	20.0	17.9		ug/L		90	61 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	U	20.0	13.9		ug/L		70	44 - 140
1,2,4-Trichlorobenzene	2.0	U	20.0	13.3		ug/L		67	48 - 120
1,2-Dichlorobenzene	2.0	U	20.0	16.0		ug/L		80	67 - 118
1,3-Dichlorobenzene	2.0	U	20.0	15.4		ug/L		77	65 - 120
1,4-Dichlorobenzene	2.0	U	20.0	15.5		ug/L		78	66 - 120
Trichlorofluoromethane	2.0	U	20.0	12.6		ug/L		63	49 - 133
Methylcyclohexane	2.0	U	20.0	13.4		ug/L		67	39 - 135
m-Xylene & p-Xylene	4.0	U	20.0	17.0		ug/L		85	66 - 123
o-Xylene	2.0	U	20.0	17.3		ug/L		87	68 - 121

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56464-28 MS
Matrix: Water
Analysis Batch: 201894

Client Sample ID: VAP-7-GW(30-31)
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*92*		*78 - 125*
4-Bromofluorobenzene (Surr)	*108*		*61 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*79 - 120*

Lab Sample ID: 240-56464-28 MSD
Matrix: Water
Analysis Batch: 201894

Client Sample ID: VAP-7-GW(30-31)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	20	U	40.0	37.7		ug/L		94	32 - 126	5	28
Benzene	2.0	U	20.0	19.9		ug/L		100	73 - 121	4	13
Dichlorobromomethane	2.0	U	20.0	18.8		ug/L		94	72 - 120	0	19
Bromoform	2.0	U	20.0	16.0		ug/L		80	45 - 121	0	19
Bromomethane	2.0	U F2	20.0	20.2	F2	ug/L		101	26 - 136	114	35
2-Butanone (MEK)	20	U	40.0	37.7		ug/L		94	49 - 132	4	19
Carbon disulfide	2.0	U	20.0	20.2		ug/L		101	54 - 144	11	34
Carbon tetrachloride	2.0	U	20.0	18.7		ug/L		93	65 - 129	19	20
Chlorobenzene	2.0	U	20.0	17.9		ug/L		90	72 - 120	4	15
Chloroethane	2.0	U F2	20.0	21.9	F2	ug/L		109	27 - 131	89	35
Chloroform	2.0	U	20.0	21.4		ug/L		107	73 - 121	7	17
Chloromethane	2.0	U F2 F1	20.0	13.6	F2	ug/L		68	39 - 134	71	20
1,1-Dichloroethane	2.0	U	20.0	22.2		ug/L		111	73 - 124	8	14
1,2-Dichloroethane	2.0	U	20.0	20.4		ug/L		102	74 - 125	1	24
1,1-Dichloroethene	2.0	U	20.0	19.6		ug/L		98	67 - 124	12	24
1,2-Dichloropropane	2.0	U	20.0	19.5		ug/L		98	73 - 122	2	15
cis-1,3-Dichloropropene	2.0	U	20.0	13.7		ug/L		69	60 - 120	8	21
trans-1,3-Dichloropropene	2.0	U	20.0	15.5		ug/L		78	58 - 132	8	22
Ethylbenzene	2.0	U	20.0	17.5		ug/L		87	68 - 121	6	16
2-Hexanone	20	U	40.0	34.4		ug/L		86	49 - 142	21	27
Methylene Chloride	2.0	U	20.0	20.2		ug/L		101	70 - 124	7	14
4-Methyl-2-pentanone (MIBK)	20	U	40.0	35.7		ug/L		89	58 - 136	7	32
Styrene	2.0	U	20.0	17.9		ug/L		89	64 - 126	2	15
1,1,2,2-Tetrachloroethane	2.0	U	20.0	18.6		ug/L		93	61 - 130	0	18
Tetrachloroethene	2.0	U	20.0	16.6		ug/L		83	59 - 125	11	20
Toluene	2.0	U	20.0	19.1		ug/L		95	72 - 122	6	15
Trichloroethene	33	F1	20.0	46.6		ug/L		66	61 - 129	3	14
Vinyl chloride	2.0	U	20.0	18.7		ug/L		93	44 - 122	8	35
Xylenes, Total	4.0	U	40.0	36.4		ug/L		91	67 - 122	6	14
1,1,1-Trichloroethane	2.0	U F2	20.0	20.0	F2	ug/L		100	69 - 122	15	14
1,1,2-Trichloroethane	2.0	U	20.0	18.8		ug/L		94	72 - 125	2	19
Cyclohexane	2.0	U	20.0	16.7		ug/L		84	41 - 137	14	35
1,2-Dibromo-3-Chloropropane	4.0	U	20.0	14.3		ug/L		72	42 - 130	8	24
Ethylene Dibromide	2.0	U	20.0	18.0		ug/L		90	69 - 125	3	24
Dichlorodifluoromethane	2.0	U	20.0	15.2		ug/L		76	14 - 137	8	34
cis-1,2-Dichloroethene	54		20.0	71.5		ug/L		86	66 - 124	5	22
trans-1,2-Dichloroethene	2.0	U	20.0	20.9		ug/L		105	72 - 125	11	25
Isopropylbenzene	2.0	U	20.0	17.7		ug/L		88	61 - 122	12	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56464-28 MSD
Matrix: Water
Analysis Batch: 201894

Client Sample ID: VAP-7-GW(30-31)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl acetate	20	U	100	101		ug/L		101	64 - 124	6	12
Methyl tert-butyl ether	2.0	U	20.0	19.8		ug/L		99	61 - 121	10	12
1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	U	20.0	15.8		ug/L		79	44 - 140	12	35
1,2,4-Trichlorobenzene	2.0	U	20.0	15.7		ug/L		79	48 - 120	17	28
1,2-Dichlorobenzene	2.0	U	20.0	17.0		ug/L		85	67 - 118	6	15
1,3-Dichlorobenzene	2.0	U	20.0	16.2		ug/L		81	65 - 120	5	15
1,4-Dichlorobenzene	2.0	U	20.0	16.0		ug/L		80	66 - 120	3	16
Trichlorofluoromethane	2.0	U	20.0	15.4		ug/L		77	49 - 133	20	25
Methylcyclohexane	2.0	U	20.0	15.2		ug/L		76	39 - 135	12	35
m-Xylene & p-Xylene	4.0	U	20.0	17.7		ug/L		89	66 - 123	4	15
o-Xylene	2.0	U	20.0	18.7		ug/L		94	68 - 121	8	14

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*78 - 125*
4-Bromofluorobenzene (Surr)	*111*		*61 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*79 - 120*

Lab Sample ID: MB 240-202626/18
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1.37	J	10	0.94	ug/L			10/20/15 00:21	1
Benzene	1.0	U	1.0	0.35	ug/L			10/20/15 00:21	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/20/15 00:21	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/20/15 00:21	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/20/15 00:21	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/20/15 00:21	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/20/15 00:21	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/20/15 00:21	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 00:21	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/20/15 00:21	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/20/15 00:21	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/20/15 00:21	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/20/15 00:21	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/20/15 00:21	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/20/15 00:21	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/20/15 00:21	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/20/15 00:21	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/20/15 00:21	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/20/15 00:21	1
2-Hexanone	10	U	10	0.48	ug/L			10/20/15 00:21	1
Methylene Chloride	0.953	J	1.0	0.33	ug/L			10/20/15 00:21	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/20/15 00:21	1
Styrene	1.0	U	1.0	0.45	ug/L			10/20/15 00:21	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/20/15 00:21	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-202626/18
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/20/15 00:21	1
Toluene	1.0	U	1.0	0.23	ug/L			10/20/15 00:21	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/20/15 00:21	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/20/15 00:21	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/20/15 00:21	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/20/15 00:21	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/20/15 00:21	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/20/15 00:21	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/20/15 00:21	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/20/15 00:21	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/20/15 00:21	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/20/15 00:21	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/20/15 00:21	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/20/15 00:21	1
Methyl acetate	10	U	10	2.3	ug/L			10/20/15 00:21	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/20/15 00:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/20/15 00:21	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/20/15 00:21	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 00:21	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/20/15 00:21	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/20/15 00:21	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/20/15 00:21	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/20/15 00:21	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/20/15 00:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*78 - 125*		*10/20/15 00:21*	*1*
4-Bromofluorobenzene (Surr)	*95*		*61 - 120*		*10/20/15 00:21*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/20/15 00:21*	*1*
Dibromofluoromethane (Surr)	*94*		*79 - 120*		*10/20/15 00:21*	*1*

Lab Sample ID: LCS 240-202626/16
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	19.4		ug/L		97	34 - 148
Benzene	10.0	10.8		ug/L		108	80 - 120
Dichlorobromomethane	10.0	10.7		ug/L		107	80 - 120
Bromoform	10.0	10.8		ug/L		108	56 - 122
Bromomethane	10.0	9.65		ug/L		97	38 - 132
2-Butanone (MEK)	20.0	19.3		ug/L		96	56 - 138
Carbon disulfide	10.0	10.3		ug/L		103	65 - 144
Carbon tetrachloride	10.0	10.5		ug/L		105	77 - 131
Chlorobenzene	10.0	10.6		ug/L		106	80 - 120
Chloroethane	10.0	9.36		ug/L		94	36 - 126
Chloroform	10.0	10.9		ug/L		109	80 - 120
Chloromethane	10.0	9.19		ug/L		92	48 - 133

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-202626/16
Matrix: Water
Analysis Batch: 202626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	10.0	11.0		ug/L		110	79 - 125
1,2-Dichloroethane	10.0	11.4		ug/L		114	80 - 120
1,1-Dichloroethene	10.0	10.4		ug/L		104	76 - 124
1,2-Dichloropropane	10.0	11.4		ug/L		114	78 - 124
cis-1,3-Dichloropropene	10.0	10.9		ug/L		109	74 - 126
trans-1,3-Dichloropropene	10.0	11.6		ug/L		116	75 - 131
Ethylbenzene	10.0	10.1		ug/L		101	80 - 120
2-Hexanone	20.0	21.6		ug/L		108	55 - 141
Methylene Chloride	10.0	12.3		ug/L		123	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	22.4		ug/L		112	64 - 135
Styrene	10.0	10.1		ug/L		101	76 - 122
1,1,2,2-Tetrachloroethane	10.0	11.2		ug/L		112	71 - 123
Tetrachloroethene	10.0	10.0		ug/L		100	78 - 121
Toluene	10.0	10.6		ug/L		106	80 - 120
Trichloroethene	10.0	10.7		ug/L		107	80 - 121
Vinyl chloride	10.0	8.80		ug/L		88	52 - 121
Xylenes, Total	20.0	21.0		ug/L		105	80 - 120
1,1,1-Trichloroethane	10.0	10.3		ug/L		103	77 - 123
1,1,2-Trichloroethane	10.0	10.9		ug/L		109	80 - 120
Cyclohexane	10.0	9.41		ug/L		94	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	11.3		ug/L		113	50 - 132
Ethylene Dibromide	10.0	11.2		ug/L		112	80 - 120
Dichlorodifluoromethane	10.0	7.82		ug/L		78	23 - 136
cis-1,2-Dichloroethene	10.0	10.7		ug/L		107	79 - 120
trans-1,2-Dichloroethene	10.0	10.6		ug/L		106	80 - 124
Isopropylbenzene	10.0	9.98		ug/L		100	77 - 120
Methyl acetate	50.0	58.0		ug/L		116	67 - 131
Methyl tert-butyl ether	10.0	11.1		ug/L		111	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.51		ug/L		95	67 - 138
1,2,4-Trichlorobenzene	10.0	10.6		ug/L		106	61 - 120
1,2-Dichlorobenzene	10.0	10.6		ug/L		106	79 - 120
1,3-Dichlorobenzene	10.0	10.4		ug/L		104	79 - 120
1,4-Dichlorobenzene	10.0	10.3		ug/L		103	79 - 120
Trichlorofluoromethane	10.0	8.59		ug/L		86	61 - 133
Methylcyclohexane	10.0	9.06		ug/L		91	61 - 134
m-Xylene & p-Xylene	10.0	10.4		ug/L		104	80 - 120
o-Xylene	10.0	10.6		ug/L		106	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*78 - 125*
4-Bromofluorobenzene (Surr)	*99*		*61 - 120*
Toluene-d8 (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*93*		*79 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-202687/6
Matrix: Water
Analysis Batch: 202687

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/20/15 10:49	1
Benzene	1.0	U	1.0	0.35	ug/L			10/20/15 10:49	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/20/15 10:49	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/20/15 10:49	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/20/15 10:49	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/20/15 10:49	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/20/15 10:49	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/20/15 10:49	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 10:49	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/20/15 10:49	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/20/15 10:49	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/20/15 10:49	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/20/15 10:49	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/20/15 10:49	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/20/15 10:49	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/20/15 10:49	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/20/15 10:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/20/15 10:49	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/20/15 10:49	1
2-Hexanone	10	U	10	0.48	ug/L			10/20/15 10:49	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/20/15 10:49	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/20/15 10:49	1
Styrene	1.0	U	1.0	0.45	ug/L			10/20/15 10:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/20/15 10:49	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/20/15 10:49	1
Toluene	1.0	U	1.0	0.23	ug/L			10/20/15 10:49	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/20/15 10:49	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/20/15 10:49	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/20/15 10:49	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/20/15 10:49	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/20/15 10:49	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/20/15 10:49	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/20/15 10:49	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/20/15 10:49	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/20/15 10:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/20/15 10:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/20/15 10:49	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/20/15 10:49	1
Methyl acetate	10	U	10	2.3	ug/L			10/20/15 10:49	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/20/15 10:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/20/15 10:49	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/20/15 10:49	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 10:49	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/20/15 10:49	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/20/15 10:49	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/20/15 10:49	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/20/15 10:49	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/20/15 10:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*102*		*78 - 125*		*10/20/15 10:49*	*1*
4-Bromofluorobenzene (Surr)	*91*		*61 - 120*		*10/20/15 10:49*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*10/20/15 10:49*	*1*
Dibromofluoromethane (Surr)	*104*		*79 - 120*		*10/20/15 10:49*	*1*

Lab Sample ID: LCS 240-202687/4
Matrix: Water
Analysis Batch: 202687

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	16.4		ug/L		82	34 - 148
Benzene	10.0	9.81		ug/L		98	80 - 120
Dichlorobromomethane	10.0	10.6		ug/L		106	80 - 120
Bromoform	10.0	11.2		ug/L		112	56 - 122
Bromomethane	10.0	5.70		ug/L		57	38 - 132
2-Butanone (MEK)	20.0	20.4		ug/L		102	56 - 138
Carbon disulfide	10.0	8.52		ug/L		85	65 - 144
Carbon tetrachloride	10.0	10.8		ug/L		108	77 - 131
Chlorobenzene	10.0	9.96		ug/L		100	80 - 120
Chloroethane	10.0	5.96		ug/L		60	36 - 126
Chloroform	10.0	9.56		ug/L		96	80 - 120
Chloromethane	10.0	7.10		ug/L		71	48 - 133
1,1-Dichloroethane	10.0	10.2		ug/L		102	79 - 125
1,2-Dichloroethane	10.0	10.2		ug/L		102	80 - 120
1,1-Dichloroethene	10.0	7.82		ug/L		78	76 - 124
1,2-Dichloropropane	10.0	10.5		ug/L		105	78 - 124
cis-1,3-Dichloropropene	10.0	10.4		ug/L		104	74 - 126
trans-1,3-Dichloropropene	10.0	9.74		ug/L		97	75 - 131
Ethylbenzene	10.0	9.51		ug/L		95	80 - 120
2-Hexanone	20.0	16.8		ug/L		84	55 - 141
Methylene Chloride	10.0	8.85		ug/L		88	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	20.8		ug/L		104	64 - 135
Styrene	10.0	9.40		ug/L		94	76 - 122
1,1,2,2-Tetrachloroethane	10.0	10.6		ug/L		106	71 - 123
Tetrachloroethene	10.0	9.09		ug/L		91	78 - 121
Toluene	10.0	8.84		ug/L		88	80 - 120
Trichloroethene	10.0	10.1		ug/L		101	80 - 121
Vinyl chloride	10.0	6.65		ug/L		67	52 - 121
Xylenes, Total	20.0	19.6		ug/L		98	80 - 120
1,1,1-Trichloroethane	10.0	9.49		ug/L		95	77 - 123
1,1,2-Trichloroethane	10.0	9.35		ug/L		93	80 - 120
Cyclohexane	10.0	7.86		ug/L		79	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	10.6		ug/L		106	50 - 132
Ethylene Dibromide	10.0	9.73		ug/L		97	80 - 120
Dichlorodifluoromethane	10.0	6.00		ug/L		60	23 - 136
cis-1,2-Dichloroethene	10.0	10.1		ug/L		101	79 - 120
trans-1,2-Dichloroethene	10.0	9.72		ug/L		97	80 - 124
Isopropylbenzene	10.0	9.58		ug/L		96	77 - 120
Methyl acetate	50.0	51.6		ug/L		103	67 - 131
Methyl tert-butyl ether	10.0	9.48		ug/L		95	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	7.25		ug/L		72	67 - 138
1,2,4-Trichlorobenzene	10.0	9.27		ug/L		93	61 - 120
1,2-Dichlorobenzene	10.0	9.31		ug/L		93	79 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-202687/4
Matrix: Water
Analysis Batch: 202687

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	10.0	9.56		ug/L		96	79 - 120
1,4-Dichlorobenzene	10.0	9.84		ug/L		98	79 - 120
Trichlorofluoromethane	10.0	7.42		ug/L		74	61 - 133
Methylcyclohexane	10.0	7.80		ug/L		78	61 - 134
m-Xylene & p-Xylene	10.0	9.62		ug/L		96	80 - 120
o-Xylene	10.0	9.93		ug/L		99	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*78 - 125*
4-Bromofluorobenzene (Surr)	*100*		*61 - 120*
Toluene-d8 (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*79 - 120*

Lab Sample ID: 240-56464-12 MS
Matrix: Water
Analysis Batch: 202687

Client Sample ID: DUP-02(100815)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	500	U	1000	740		ug/L		74	32 - 126
Benzene	50	U	500	474		ug/L		95	73 - 121
Dichlorobromomethane	50	U	500	497		ug/L		99	72 - 120
Bromoform	50	U	500	504		ug/L		101	45 - 121
Bromomethane	50	U	500	276		ug/L		55	26 - 136
2-Butanone (MEK)	500	U	1000	1020		ug/L		102	49 - 132
Carbon disulfide	50	U	500	449		ug/L		90	54 - 144
Carbon tetrachloride	50	U	500	538		ug/L		108	65 - 129
Chlorobenzene	50	U	500	473		ug/L		95	72 - 120
Chloroethane	50	U	500	338		ug/L		68	27 - 131
Chloroform	50	U	500	467		ug/L		93	73 - 121
Chloromethane	50	U	500	344		ug/L		69	39 - 134
1,1-Dichloroethane	50	U	500	490		ug/L		98	73 - 124
1,2-Dichloroethane	50	U	500	482		ug/L		96	74 - 125
1,1-Dichloroethene	50	U	500	407		ug/L		81	67 - 124
1,2-Dichloropropane	50	U	500	508		ug/L		102	73 - 122
cis-1,3-Dichloropropene	50	U	500	482		ug/L		96	60 - 120
trans-1,3-Dichloropropene	50	U	500	447		ug/L		89	58 - 132
Ethylbenzene	50	U	500	443		ug/L		89	68 - 121
2-Hexanone	500	U	1000	939		ug/L		94	49 - 142
Methylene Chloride	50	U	500	464		ug/L		93	70 - 124
4-Methyl-2-pentanone (MIBK)	500	U	1000	1130		ug/L		113	58 - 136
Styrene	50	U	500	433		ug/L		87	64 - 126
1,1,2,2-Tetrachloroethane	50	U	500	542		ug/L		108	61 - 130
Tetrachloroethene	50	U	500	430		ug/L		86	59 - 125
Toluene	50	U	500	437		ug/L		87	72 - 122
Trichloroethene	1600		500	2090	E	ug/L		95	61 - 129
Vinyl chloride	50	U	500	338		ug/L		68	44 - 122
Xylenes, Total	100	U	1000	928		ug/L		93	67 - 122
1,1,1-Trichloroethane	50	U	500	465		ug/L		93	69 - 122

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56464-12 MS
Matrix: Water
Analysis Batch: 202687

Client Sample ID: DUP-02(100815)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	50	U	500	471		ug/L		94	72 - 125
Cyclohexane	50	U	500	436		ug/L		87	41 - 137
1,2-Dibromo-3-Chloropropane	100	U	500	489		ug/L		98	42 - 130
Ethylene Dibromide	50	U	500	473		ug/L		95	69 - 125
Dichlorodifluoromethane	50	U	500	276		ug/L		55	14 - 137
cis-1,2-Dichloroethene	1300		500	1790		ug/L		100	66 - 124
trans-1,2-Dichloroethene	21	J	500	505		ug/L		97	72 - 125
Isopropylbenzene	50	U	500	445		ug/L		89	61 - 122
Methyl acetate	500	U	2500	2580		ug/L		103	64 - 124
Methyl tert-butyl ether	50	U	500	472		ug/L		94	61 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	50	U	500	380		ug/L		76	44 - 140
1,2,4-Trichlorobenzene	50	U	500	385		ug/L		77	48 - 120
1,2-Dichlorobenzene	50	U	500	414		ug/L		83	67 - 118
1,3-Dichlorobenzene	50	U	500	425		ug/L		85	65 - 120
1,4-Dichlorobenzene	50	U	500	426		ug/L		85	66 - 120
Trichlorofluoromethane	50	U	500	331		ug/L		66	49 - 133
Methylcyclohexane	50	U	500	432		ug/L		86	39 - 135
m-Xylene & p-Xylene	100	U	500	446		ug/L		89	66 - 123
o-Xylene	50	U	500	482		ug/L		96	68 - 121

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*78 - 125*
4-Bromofluorobenzene (Surr)	*99*		*61 - 120*
Toluene-d8 (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*79 - 120*

Lab Sample ID: 240-56464-12 MSD
Matrix: Water
Analysis Batch: 202687

Client Sample ID: DUP-02(100815)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	500	U	1000	775		ug/L		78	32 - 126	5	28
Benzene	50	U	500	484		ug/L		97	73 - 121	2	13
Dichlorobromomethane	50	U	500	500		ug/L		100	72 - 120	1	19
Bromoform	50	U	500	503		ug/L		101	45 - 121	0	19
Bromomethane	50	U	500	280		ug/L		56	26 - 136	1	35
2-Butanone (MEK)	500	U	1000	1070		ug/L		107	49 - 132	5	19
Carbon disulfide	50	U	500	446		ug/L		89	54 - 144	1	34
Carbon tetrachloride	50	U	500	542		ug/L		108	65 - 129	1	20
Chlorobenzene	50	U	500	465		ug/L		93	72 - 120	2	15
Chloroethane	50	U	500	337		ug/L		67	27 - 131	0	35
Chloroform	50	U	500	468		ug/L		94	73 - 121	0	17
Chloromethane	50	U	500	340		ug/L		68	39 - 134	1	20
1,1-Dichloroethane	50	U	500	499		ug/L		100	73 - 124	2	14
1,2-Dichloroethane	50	U	500	479		ug/L		96	74 - 125	1	24
1,1-Dichloroethene	50	U	500	401		ug/L		80	67 - 124	1	24
1,2-Dichloropropane	50	U	500	491		ug/L		98	73 - 122	3	15

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-56464-12 MSD
Matrix: Water
Analysis Batch: 202687

Client Sample ID: DUP-02(100815)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	50	U	500	479		ug/L		96	60 - 120	1	21
trans-1,3-Dichloropropene	50	U	500	449		ug/L		90	58 - 132	1	22
Ethylbenzene	50	U	500	468		ug/L		94	68 - 121	5	16
2-Hexanone	500	U	1000	952		ug/L		95	49 - 142	1	27
Methylene Chloride	50	U	500	448		ug/L		90	70 - 124	4	14
4-Methyl-2-pentanone (MIBK)	500	U	1000	1100		ug/L		110	58 - 136	3	32
Styrene	50	U	500	450		ug/L		90	64 - 126	4	15
1,1,2,2-Tetrachloroethane	50	U	500	544		ug/L		109	61 - 130	0	18
Tetrachloroethene	50	U	500	450		ug/L		90	59 - 125	5	20
Toluene	50	U	500	431		ug/L		86	72 - 122	1	15
Trichloroethene	1600		500	2150	E	ug/L		107	61 - 129	3	14
Vinyl chloride	50	U	500	336		ug/L		67	44 - 122	0	35
Xylenes, Total	100	U	1000	942		ug/L		94	67 - 122	1	14
1,1,1-Trichloroethane	50	U	500	475		ug/L		95	69 - 122	2	14
1,1,2-Trichloroethane	50	U	500	471		ug/L		94	72 - 125	0	19
Cyclohexane	50	U	500	444		ug/L		89	41 - 137	2	35
1,2-Dibromo-3-Chloropropane	100	U	500	507		ug/L		101	42 - 130	4	24
Ethylene Dibromide	50	U	500	482		ug/L		96	69 - 125	2	24
Dichlorodifluoromethane	50	U	500	330		ug/L		66	14 - 137	18	34
cis-1,2-Dichloroethene	1300		500	1850		ug/L		111	66 - 124	3	22
trans-1,2-Dichloroethene	21	J	500	513		ug/L		98	72 - 125	2	25
Isopropylbenzene	50	U	500	452		ug/L		90	61 - 122	2	20
Methyl acetate	500	U	2500	2630		ug/L		105	64 - 124	2	12
Methyl tert-butyl ether	50	U	500	493		ug/L		99	61 - 121	4	12
1,1,2-Trichloro-1,2,2-trifluoroethane	50	U	500	401		ug/L		80	44 - 140	5	35
1,2,4-Trichlorobenzene	50	U	500	409		ug/L		82	48 - 120	6	28
1,2-Dichlorobenzene	50	U	500	429		ug/L		86	67 - 118	4	15
1,3-Dichlorobenzene	50	U	500	447		ug/L		89	65 - 120	5	15
1,4-Dichlorobenzene	50	U	500	442		ug/L		88	66 - 120	4	16
Trichlorofluoromethane	50	U	500	330		ug/L		66	49 - 133	0	25
Methylcyclohexane	50	U	500	453		ug/L		91	39 - 135	5	35
m-Xylene & p-Xylene	100	U	500	458		ug/L		92	66 - 123	3	15
o-Xylene	50	U	500	484		ug/L		97	68 - 121	0	14

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*78 - 125*
4-Bromofluorobenzene (Surr)	*104*		*61 - 120*
Toluene-d8 (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*79 - 120*

Lab Sample ID: MB 240-202688/6
Matrix: Water
Analysis Batch: 202688

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/20/15 10:50	1
Benzene	1.0	U	1.0	0.35	ug/L			10/20/15 10:50	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-202688/6
Matrix: Water
Analysis Batch: 202688

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/20/15 10:50	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/20/15 10:50	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/20/15 10:50	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/20/15 10:50	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/20/15 10:50	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/20/15 10:50	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 10:50	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/20/15 10:50	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/20/15 10:50	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/20/15 10:50	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/20/15 10:50	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/20/15 10:50	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/20/15 10:50	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/20/15 10:50	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/20/15 10:50	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/20/15 10:50	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/20/15 10:50	1
2-Hexanone	10	U	10	0.48	ug/L			10/20/15 10:50	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/20/15 10:50	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/20/15 10:50	1
Styrene	1.0	U	1.0	0.45	ug/L			10/20/15 10:50	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/20/15 10:50	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/20/15 10:50	1
Toluene	1.0	U	1.0	0.23	ug/L			10/20/15 10:50	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/20/15 10:50	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/20/15 10:50	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/20/15 10:50	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/20/15 10:50	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/20/15 10:50	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/20/15 10:50	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/20/15 10:50	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/20/15 10:50	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/20/15 10:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/20/15 10:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/20/15 10:50	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/20/15 10:50	1
Methyl acetate	10	U	10	2.3	ug/L			10/20/15 10:50	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/20/15 10:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/20/15 10:50	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/20/15 10:50	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/20/15 10:50	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/20/15 10:50	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/20/15 10:50	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/20/15 10:50	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/20/15 10:50	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/20/15 10:50	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-202688/6
Matrix: Water
Analysis Batch: 202688

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		78 - 125		10/20/15 10:50	1
4-Bromofluorobenzene (Surr)	103		61 - 120		10/20/15 10:50	1
Toluene-d8 (Surr)	95		80 - 120		10/20/15 10:50	1
Dibromofluoromethane (Surr)	101		79 - 120		10/20/15 10:50	1

Lab Sample ID: LCS 240-202688/4
Matrix: Water
Analysis Batch: 202688

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	21.5		ug/L		108	34 - 148
Benzene	10.0	10.4		ug/L		104	80 - 120
Dichlorobromomethane	10.0	9.67		ug/L		97	80 - 120
Bromoform	10.0	8.50		ug/L		85	56 - 122
Bromomethane	10.0	11.4		ug/L		114	38 - 132
2-Butanone (MEK)	20.0	19.8		ug/L		99	56 - 138
Carbon disulfide	10.0	10.2		ug/L		102	65 - 144
Carbon tetrachloride	10.0	11.0		ug/L		110	77 - 131
Chlorobenzene	10.0	9.63		ug/L		96	80 - 120
Chloroethane	10.0	10.4		ug/L		104	36 - 126
Chloroform	10.0	11.0		ug/L		110	80 - 120
Chloromethane	10.0	10.2		ug/L		102	48 - 133
1,1-Dichloroethane	10.0	11.3		ug/L		113	79 - 125
1,2-Dichloroethane	10.0	10.3		ug/L		103	80 - 120
1,1-Dichloroethene	10.0	10.3		ug/L		103	76 - 124
1,2-Dichloropropane	10.0	10.3		ug/L		103	78 - 124
cis-1,3-Dichloropropene	10.0	7.80		ug/L		78	74 - 126
trans-1,3-Dichloropropene	10.0	8.56		ug/L		86	75 - 131
Ethylbenzene	10.0	10.3		ug/L		103	80 - 120
2-Hexanone	20.0	18.2		ug/L		91	55 - 141
Methylene Chloride	10.0	10.3		ug/L		103	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	19.1		ug/L		95	64 - 135
Styrene	10.0	9.90		ug/L		99	76 - 122
1,1,2,2-Tetrachloroethane	10.0	9.36		ug/L		94	71 - 123
Tetrachloroethene	10.0	9.68		ug/L		97	78 - 121
Toluene	10.0	10.3		ug/L		103	80 - 120
Trichloroethene	10.0	10.4		ug/L		104	80 - 121
Vinyl chloride	10.0	10.2		ug/L		102	52 - 121
Xylenes, Total	20.0	21.4		ug/L		107	80 - 120
1,1,1-Trichloroethane	10.0	11.1		ug/L		111	77 - 123
1,1,2-Trichloroethane	10.0	9.38		ug/L		94	80 - 120
Cyclohexane	10.0	11.1		ug/L		111	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	7.41		ug/L		74	50 - 132
Ethylene Dibromide	10.0	9.00		ug/L		90	80 - 120
Dichlorodifluoromethane	10.0	9.10		ug/L		91	23 - 136
cis-1,2-Dichloroethene	10.0	10.9		ug/L		109	79 - 120
trans-1,2-Dichloroethene	10.0	11.2		ug/L		112	80 - 124
Isopropylbenzene	10.0	11.0		ug/L		110	77 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-202688/4
Matrix: Water
Analysis Batch: 202688

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	50.0	54.2		ug/L		108	67 - 131
Methyl tert-butyl ether	10.0	10.6		ug/L		106	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.1		ug/L		101	67 - 138
1,2,4-Trichlorobenzene	10.0	9.34		ug/L		93	61 - 120
1,2-Dichlorobenzene	10.0	9.64		ug/L		96	79 - 120
1,3-Dichlorobenzene	10.0	9.14		ug/L		91	79 - 120
1,4-Dichlorobenzene	10.0	9.10		ug/L		91	79 - 120
Trichlorofluoromethane	10.0	10.1		ug/L		101	61 - 133
Methylcyclohexane	10.0	10.6		ug/L		106	61 - 134
m-Xylene & p-Xylene	10.0	10.5		ug/L		105	80 - 120
o-Xylene	10.0	10.9		ug/L		109	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*78 - 125*
4-Bromofluorobenzene (Surr)	*114*		*61 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*79 - 120*

Lab Sample ID: MB 240-202891/6
Matrix: Water
Analysis Batch: 202891

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/21/15 11:56	1
Benzene	1.0	U	1.0	0.35	ug/L			10/21/15 11:56	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/21/15 11:56	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/21/15 11:56	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/21/15 11:56	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/21/15 11:56	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/21/15 11:56	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/21/15 11:56	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/21/15 11:56	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/21/15 11:56	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/21/15 11:56	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/21/15 11:56	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/21/15 11:56	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/21/15 11:56	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/21/15 11:56	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/21/15 11:56	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/21/15 11:56	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/21/15 11:56	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/21/15 11:56	1
2-Hexanone	10	U	10	0.48	ug/L			10/21/15 11:56	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/21/15 11:56	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/21/15 11:56	1
Styrene	1.0	U	1.0	0.45	ug/L			10/21/15 11:56	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/21/15 11:56	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-202891/6
Matrix: Water
Analysis Batch: 202891

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/21/15 11:56	1
Toluene	1.0	U	1.0	0.23	ug/L			10/21/15 11:56	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/21/15 11:56	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/21/15 11:56	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/21/15 11:56	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/21/15 11:56	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/21/15 11:56	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/21/15 11:56	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/21/15 11:56	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/21/15 11:56	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/21/15 11:56	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/21/15 11:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/21/15 11:56	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/21/15 11:56	1
Methyl acetate	10	U	10	2.3	ug/L			10/21/15 11:56	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/21/15 11:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/21/15 11:56	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/21/15 11:56	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/21/15 11:56	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/21/15 11:56	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/21/15 11:56	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/21/15 11:56	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/21/15 11:56	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/21/15 11:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*78 - 125*		*10/21/15 11:56*	*1*
4-Bromofluorobenzene (Surr)	*87*		*61 - 120*		*10/21/15 11:56*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*10/21/15 11:56*	*1*
Dibromofluoromethane (Surr)	*105*		*79 - 120*		*10/21/15 11:56*	*1*

Lab Sample ID: LCS 240-202891/4
Matrix: Water
Analysis Batch: 202891

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	16.8		ug/L		84	34 - 148
Benzene	10.0	9.64		ug/L		96	80 - 120
Dichlorobromomethane	10.0	10.2		ug/L		102	80 - 120
Bromoform	10.0	11.1		ug/L		111	56 - 122
Bromomethane	10.0	5.61		ug/L		56	38 - 132
2-Butanone (MEK)	20.0	20.1		ug/L		100	56 - 138
Carbon disulfide	10.0	9.12		ug/L		91	65 - 144
Carbon tetrachloride	10.0	11.9		ug/L		119	77 - 131
Chlorobenzene	10.0	9.87		ug/L		99	80 - 120
Chloroethane	10.0	6.00		ug/L		60	36 - 126
Chloroform	10.0	9.44		ug/L		94	80 - 120
Chloromethane	10.0	6.95		ug/L		69	48 - 133

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-202891/4
Matrix: Water
Analysis Batch: 202891

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	10.0	9.99		ug/L		100	79 - 125
1,2-Dichloroethane	10.0	9.63		ug/L		96	80 - 120
1,1-Dichloroethene	10.0	8.49		ug/L		85	76 - 124
1,2-Dichloropropane	10.0	10.2		ug/L		102	78 - 124
cis-1,3-Dichloropropene	10.0	10.2		ug/L		102	74 - 126
trans-1,3-Dichloropropene	10.0	9.74		ug/L		97	75 - 131
Ethylbenzene	10.0	9.51		ug/L		95	80 - 120
2-Hexanone	20.0	17.3		ug/L		86	55 - 141
Methylene Chloride	10.0	8.86		ug/L		89	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	19.9		ug/L		100	64 - 135
Styrene	10.0	9.71		ug/L		97	76 - 122
1,1,2,2-Tetrachloroethane	10.0	10.3		ug/L		103	71 - 123
Tetrachloroethene	10.0	9.94		ug/L		99	78 - 121
Toluene	10.0	9.12		ug/L		91	80 - 120
Trichloroethene	10.0	9.97		ug/L		100	80 - 121
Vinyl chloride	10.0	7.01		ug/L		70	52 - 121
Xylenes, Total	20.0	20.3		ug/L		101	80 - 120
1,1,1-Trichloroethane	10.0	9.62		ug/L		96	77 - 123
1,1,2-Trichloroethane	10.0	9.30		ug/L		93	80 - 120
Cyclohexane	10.0	9.44		ug/L		94	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	9.36		ug/L		94	50 - 132
Ethylene Dibromide	10.0	9.68		ug/L		97	80 - 120
Dichlorodifluoromethane	10.0	6.63		ug/L		66	23 - 136
cis-1,2-Dichloroethene	10.0	9.80		ug/L		98	79 - 120
trans-1,2-Dichloroethene	10.0	10.1		ug/L		101	80 - 124
Isopropylbenzene	10.0	10.1		ug/L		101	77 - 120
Methyl acetate	50.0	49.1		ug/L		98	67 - 131
Methyl tert-butyl ether	10.0	9.31		ug/L		93	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	8.91		ug/L		89	67 - 138
1,2,4-Trichlorobenzene	10.0	8.88		ug/L		89	61 - 120
1,2-Dichlorobenzene	10.0	8.78		ug/L		88	79 - 120
1,3-Dichlorobenzene	10.0	8.96		ug/L		90	79 - 120
1,4-Dichlorobenzene	10.0	9.11		ug/L		91	79 - 120
Trichlorofluoromethane	10.0	8.25		ug/L		82	61 - 133
Methylcyclohexane	10.0	9.59		ug/L		96	61 - 134
m-Xylene & p-Xylene	10.0	9.86		ug/L		99	80 - 120
o-Xylene	10.0	10.4		ug/L		104	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*78 - 125*
4-Bromofluorobenzene (Surr)	*105*		*61 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*113*		*79 - 120*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-201376/23-A
Matrix: Solid
Analysis Batch: 201805

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201376

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	50	U	50	3.5	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
bis (2-chloroisopropyl) ether	100	U	100	9.5	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
2,4,5-Trichlorophenol	150	U	150	25	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
2,4,6-Trichlorophenol	150	U	150	8.9	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
2,4-Dichlorophenol	150	U	150	20	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
2,4-Dimethylphenol	150	U	150	20	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
2,4-Dinitrophenol	330	U	330	21	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
2,4-Dinitrotoluene	200	U	200	17	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
2,6-Dinitrotoluene	200	U	200	21	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
2-Chloronaphthalene	50	U	50	0.45	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
2-Chlorophenol	50	U	50	8.2	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
2-Methylnaphthalene	6.7	U	6.7	0.50	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
2-Methylphenol	200	U	200	11	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
2-Nitroaniline	200	U	200	9.1	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
2-Nitrophenol	50	U	50	8.3	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
3,3'-Dichlorobenzidine	100	U	100	18	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
3-Nitroaniline	200	U	200	16	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
4,6-Dinitro-2-methylphenol	150	U	150	9.2	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
4-Bromophenyl phenyl ether	50	U	50	13	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
4-Chloro-3-methylphenol	150	U	150	21	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
4-Chloroaniline	150	U	150	17	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
4-Chlorophenyl phenyl ether	50	U	50	13	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
4-Nitroaniline	200	U	200	26	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
4-Nitrophenol	330	U	330	17	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Acenaphthene	6.7	U	6.7	0.76	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Acenaphthylene	6.7	U	6.7	0.35	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Acetophenone	100	U	100	9.2	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Anthracene	6.7	U	6.7	0.78	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Atrazine	200	U	200	9.1	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Benzaldehyde	100	U	100	12	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Benzo[a]anthracene	6.7	U	6.7	0.63	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Benzo[a]pyrene	6.7	U	6.7	0.64	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Benzo[b]fluoranthene	6.7	U	6.7	0.59	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Benzo[g,h,i]perylene	6.7	U	6.7	0.35	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Benzo[k]fluoranthene	6.7	U	6.7	0.68	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Bis(2-chloroethoxy)methane	100	U	100	22	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Bis(2-chloroethyl)ether	100	U	100	2.0	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Bis(2-ethylhexyl) phthalate	70	U	70	19	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Butyl benzyl phthalate	70	U	70	10	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Caprolactam	330	U	330	37	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Carbazole	50	U	50	27	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Chrysene	6.7	U	6.7	1.1	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Dibenz(a,h)anthracene	6.7	U	6.7	0.66	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Dibenzofuran	50	U	50	0.66	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Diethyl phthalate	70	U	70	16	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Dimethyl phthalate	70	U	70	17	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Di-n-butyl phthalate	70	U	70	15	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Di-n-octyl phthalate	70	U	70	7.9	ug/Kg		10/12/15 07:51	10/14/15 10:26	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201376/23-A
Matrix: Solid
Analysis Batch: 201805

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201376

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	6.7	U	6.7	0.55	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Fluorene	6.7	U	6.7	0.53	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Hexachlorobenzene	6.7	U	6.7	2.1	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Hexachlorobutadiene	50	U	50	5.6	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Hexachlorocyclopentadiene	330	U	330	8.1	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Hexachloroethane	50	U	50	9.0	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Indeno[1,2,3-cd]pyrene	6.7	U	6.7	0.35	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Isophorone	50	U	50	13	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Naphthalene	6.7	U	6.7	0.82	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Nitrobenzene	100	U	100	2.2	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
N-Nitrosodi-n-propylamine	50	U	50	6.3	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
N-Nitrosodiphenylamine	50	U	50	21	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Pentachlorophenol	150	U	150	9.1	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Phenol	50	U	50	7.3	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Phenanthrene	6.7	U	6.7	0.73	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
Pyrene	6.7	U	6.7	0.44	ug/Kg		10/12/15 07:51	10/14/15 10:26	1
3 & 4 Methylphenol	400	U	400	20	ug/Kg		10/12/15 07:51	10/14/15 10:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*71*		*24 - 110*	*10/12/15 07:51*	*10/14/15 10:26*	*1*
2-Fluorophenol (Surr)	*63*		*24 - 110*	*10/12/15 07:51*	*10/14/15 10:26*	*1*
2,4,6-Tribromophenol (Surr)	*40*		*10 - 110*	*10/12/15 07:51*	*10/14/15 10:26*	*1*
Nitrobenzene-d5 (Surr)	*70*		*20 - 110*	*10/12/15 07:51*	*10/14/15 10:26*	*1*
Phenol-d5 (Surr)	*66*		*26 - 110*	*10/12/15 07:51*	*10/14/15 10:26*	*1*
Terphenyl-d14 (Surr)	*83*		*36 - 110*	*10/12/15 07:51*	*10/14/15 10:26*	*1*

Lab Sample ID: LCS 240-201376/24-A
Matrix: Solid
Analysis Batch: 201805

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201376

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	667	471		ug/Kg		71	35 - 110
bis (2-chloroisopropyl) ether	667	450		ug/Kg		67	29 - 110
2,4,5-Trichlorophenol	667	454		ug/Kg		68	25 - 110
2,4,6-Trichlorophenol	667	457		ug/Kg		69	12 - 110
2,4-Dichlorophenol	667	453		ug/Kg		68	39 - 110
2,4-Dimethylphenol	667	417		ug/Kg		63	29 - 110
2,4-Dinitrophenol	1330	521		ug/Kg		39	10 - 110
2,4-Dinitrotoluene	667	459		ug/Kg		69	48 - 110
2,6-Dinitrotoluene	667	471		ug/Kg		71	45 - 110
2-Chloronaphthalene	667	474		ug/Kg		71	32 - 110
2-Chlorophenol	667	445		ug/Kg		67	37 - 110
2-Methylnaphthalene	667	455		ug/Kg		68	36 - 110
2-Methylphenol	667	468		ug/Kg		70	41 - 110
2-Nitroaniline	667	428		ug/Kg		64	45 - 110
2-Nitrophenol	667	478		ug/Kg		72	34 - 110
3,3'-Dichlorobenzidine	1330	840		ug/Kg		63	28 - 110
3-Nitroaniline	667	420		ug/Kg		63	44 - 110

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201376/24-A
Matrix: Solid
Analysis Batch: 201805

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201376

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,6-Dinitro-2-methylphenol	1330	778		ug/Kg		58	10 - 110
4-Bromophenyl phenyl ether	667	562		ug/Kg		84	39 - 110
4-Chloro-3-methylphenol	667	490		ug/Kg		73	48 - 110
4-Chloroaniline	667	397		ug/Kg		60	30 - 110
4-Chlorophenyl phenyl ether	667	473		ug/Kg		71	40 - 110
4-Nitroaniline	667	430		ug/Kg		65	48 - 110
4-Nitrophenol	1330	889		ug/Kg		67	28 - 110
Acenaphthene	667	425		ug/Kg		64	38 - 110
Acenaphthylene	667	456		ug/Kg		68	40 - 110
Acetophenone	667	446		ug/Kg		67	40 - 110
Anthracene	667	460		ug/Kg		69	48 - 110
Atrazine	1330	1050		ug/Kg		79	54 - 120
Benzaldehyde	1330	918		ug/Kg		69	32 - 110
Benzo[a]anthracene	667	504		ug/Kg		76	50 - 110
Benzo[a]pyrene	667	506		ug/Kg		76	44 - 110
Benzo[b]fluoranthene	667	509		ug/Kg		76	43 - 110
Benzo[g,h,i]perylene	667	535		ug/Kg		80	51 - 110
Benzo[k]fluoranthene	667	502		ug/Kg		75	38 - 105
Bis(2-chloroethoxy)methane	667	462		ug/Kg		69	32 - 110
Bis(2-chloroethyl)ether	667	424		ug/Kg		64	34 - 110
Bis(2-ethylhexyl) phthalate	667	521		ug/Kg		78	50 - 110
Butyl benzyl phthalate	667	533		ug/Kg		80	51 - 110
Caprolactam	1330	992		ug/Kg		74	44 - 114
Carbazole	667	519		ug/Kg		78	50 - 110
Chrysene	667	520		ug/Kg		78	50 - 110
Dibenz(a,h)anthracene	667	564		ug/Kg		85	51 - 110
Dibenzofuran	667	398		ug/Kg		60	43 - 110
Diethyl phthalate	667	446		ug/Kg		67	52 - 110
Dimethyl phthalate	667	478		ug/Kg		72	50 - 110
Di-n-butyl phthalate	667	519		ug/Kg		78	51 - 110
Di-n-octyl phthalate	667	529		ug/Kg		79	48 - 110
Fluoranthene	667	526		ug/Kg		79	51 - 110
Fluorene	667	438		ug/Kg		66	46 - 110
Hexachlorobenzene	667	510		ug/Kg		77	43 - 110
Hexachlorobutadiene	667	471		ug/Kg		71	29 - 110
Hexachlorocyclopentadiene	667	377		ug/Kg		57	12 - 110
Hexachloroethane	667	432		ug/Kg		65	30 - 110
Indeno[1,2,3-cd]pyrene	667	546		ug/Kg		82	50 - 110
Isophorone	667	469		ug/Kg		70	36 - 110
Naphthalene	667	445		ug/Kg		67	36 - 110
Nitrobenzene	667	462		ug/Kg		69	32 - 110
N-Nitrosodi-n-propylamine	667	451		ug/Kg		68	38 - 110
N-Nitrosodiphenylamine	1330	1100		ug/Kg		82	46 - 110
Pentachlorophenol	1330	568		ug/Kg		43	10 - 110
Phenol	667	444		ug/Kg		67	38 - 110
Phenanthrene	667	462		ug/Kg		69	49 - 110
Pyrene	667	509		ug/Kg		76	49 - 110
3 & 4 Methylphenol	667	458		ug/Kg		69	40 - 110

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201376/24-A
Matrix: Solid
Analysis Batch: 201805

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201376

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*75*		*24 - 110*
2-Fluorophenol (Surr)	*73*		*24 - 110*
2,4,6-Tribromophenol (Surr)	*58*		*10 - 110*
Nitrobenzene-d5 (Surr)	*71*		*20 - 110*
Phenol-d5 (Surr)	*71*		*26 - 110*
Terphenyl-d14 (Surr)	*84*		*36 - 110*

Lab Sample ID: MB 240-201405/21-A
Matrix: Water
Analysis Batch: 201553

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201405

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/12/15 09:30	10/13/15 08:25	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/12/15 09:30	10/13/15 08:25	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/12/15 09:30	10/13/15 08:25	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/12/15 09:30	10/13/15 08:25	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/12/15 09:30	10/13/15 08:25	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/12/15 09:30	10/13/15 08:25	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/12/15 09:30	10/13/15 08:25	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/12/15 09:30	10/13/15 08:25	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/12/15 09:30	10/13/15 08:25	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/12/15 09:30	10/13/15 08:25	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/12/15 09:30	10/13/15 08:25	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/12/15 09:30	10/13/15 08:25	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/12/15 09:30	10/13/15 08:25	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/12/15 09:30	10/13/15 08:25	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/12/15 09:30	10/13/15 08:25	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/12/15 09:30	10/13/15 08:25	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/12/15 09:30	10/13/15 08:25	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/12/15 09:30	10/13/15 08:25	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/12/15 09:30	10/13/15 08:25	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/12/15 09:30	10/13/15 08:25	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/12/15 09:30	10/13/15 08:25	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/12/15 09:30	10/13/15 08:25	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/12/15 09:30	10/13/15 08:25	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/12/15 09:30	10/13/15 08:25	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/12/15 09:30	10/13/15 08:25	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/12/15 09:30	10/13/15 08:25	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/12/15 09:30	10/13/15 08:25	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/12/15 09:30	10/13/15 08:25	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/12/15 09:30	10/13/15 08:25	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/12/15 09:30	10/13/15 08:25	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/12/15 09:30	10/13/15 08:25	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/12/15 09:30	10/13/15 08:25	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/12/15 09:30	10/13/15 08:25	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/12/15 09:30	10/13/15 08:25	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/12/15 09:30	10/13/15 08:25	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/12/15 09:30	10/13/15 08:25	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201405/21-A
Matrix: Water
Analysis Batch: 201553

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201405

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/12/15 09:30	10/13/15 08:25	1
Bis(2-ethylhexyl) phthalate	1.73	J	2.0	1.5	ug/L		10/12/15 09:30	10/13/15 08:25	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/12/15 09:30	10/13/15 08:25	1
Caprolactam	1.14	J	5.0	0.37	ug/L		10/12/15 09:30	10/13/15 08:25	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/12/15 09:30	10/13/15 08:25	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/12/15 09:30	10/13/15 08:25	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/12/15 09:30	10/13/15 08:25	1
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/12/15 09:30	10/13/15 08:25	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/12/15 09:30	10/13/15 08:25	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/12/15 09:30	10/13/15 08:25	1
Di-n-butyl phthalate	0.587	J	1.0	0.40	ug/L		10/12/15 09:30	10/13/15 08:25	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/12/15 09:30	10/13/15 08:25	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/12/15 09:30	10/13/15 08:25	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/12/15 09:30	10/13/15 08:25	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/12/15 09:30	10/13/15 08:25	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/12/15 09:30	10/13/15 08:25	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/12/15 09:30	10/13/15 08:25	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/12/15 09:30	10/13/15 08:25	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/12/15 09:30	10/13/15 08:25	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/12/15 09:30	10/13/15 08:25	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/12/15 09:30	10/13/15 08:25	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/12/15 09:30	10/13/15 08:25	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/12/15 09:30	10/13/15 08:25	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/12/15 09:30	10/13/15 08:25	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/12/15 09:30	10/13/15 08:25	1
Phenol	1.0	U	1.0	0.15	ug/L		10/12/15 09:30	10/13/15 08:25	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/12/15 09:30	10/13/15 08:25	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/12/15 09:30	10/13/15 08:25	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/12/15 09:30	10/13/15 08:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*59*		*29 - 110*	*10/12/15 09:30*	*10/13/15 08:25*	*1*
2-Fluorophenol (Surr)	*57*		*15 - 110*	*10/12/15 09:30*	*10/13/15 08:25*	*1*
2,4,6-Tribromophenol (Surr)	*48*		*21 - 128*	*10/12/15 09:30*	*10/13/15 08:25*	*1*
Nitrobenzene-d5 (Surr)	*58*		*31 - 110*	*10/12/15 09:30*	*10/13/15 08:25*	*1*
Phenol-d5 (Surr)	*46*		*10 - 110*	*10/12/15 09:30*	*10/13/15 08:25*	*1*
Terphenyl-d14 (Surr)	*66*		*31 - 115*	*10/12/15 09:30*	*10/13/15 08:25*	*1*

Lab Sample ID: LCS 240-201405/22-A
Matrix: Water
Analysis Batch: 201553

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201405

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	32.0	25.4		ug/L		79	43 - 120
bis (2-chloroisopropyl) ether	32.0	25.9		ug/L		81	45 - 112
2,4,5-Trichlorophenol	32.0	25.5		ug/L		80	49 - 120
2,4,6-Trichlorophenol	32.0	24.9		ug/L		78	50 - 120
2,4-Dichlorophenol	32.0	26.4		ug/L		82	54 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201405/22-A
Matrix: Water
Analysis Batch: 201553

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201405

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dimethylphenol	32.0	28.2		ug/L		88	40 - 125
2,4-Dinitrophenol	64.0	38.4	J	ug/L		60	30 - 120
2,4-Dinitrotoluene	32.0	28.0		ug/L		88	50 - 120
2,6-Dinitrotoluene	32.0	27.1		ug/L		85	52 - 120
2-Chloronaphthalene	32.0	25.3		ug/L		79	43 - 120
2-Chlorophenol	32.0	27.1		ug/L		85	53 - 120
2-Methylnaphthalene	32.0	24.8		ug/L		78	46 - 120
2-Methylphenol	32.0	26.9		ug/L		84	52 - 120
2-Nitroaniline	32.0	28.2		ug/L		88	47 - 120
2-Nitrophenol	32.0	28.5		ug/L		89	53 - 120
3,3'-Dichlorobenzidine	64.0	36.2		ug/L		57	30 - 120
3-Nitroaniline	32.0	29.3		ug/L		91	40 - 144
4,6-Dinitro-2-methylphenol	64.0	43.2		ug/L		67	40 - 120
4-Bromophenyl phenyl ether	32.0	24.3		ug/L		76	49 - 120
4-Chloro-3-methylphenol	32.0	25.8		ug/L		81	55 - 120
4-Chloroaniline	32.0	12.0		ug/L		37	20 - 136
4-Chlorophenyl phenyl ether	32.0	25.5		ug/L		80	48 - 120
4-Nitroaniline	32.0	30.0		ug/L		94	40 - 135
4-Nitrophenol	64.0	42.0		ug/L		66	30 - 120
Acenaphthene	32.0	26.0		ug/L		81	48 - 120
Acenaphthylene	32.0	26.1		ug/L		82	47 - 120
Acetophenone	32.0	28.1		ug/L		88	53 - 120
Anthracene	32.0	24.6		ug/L		77	50 - 120
Atrazine	64.0	52.2		ug/L		82	49 - 120
Benzaldehyde	64.0	100	E	ug/L		156	40 - 160
Benzo[a]anthracene	32.0	23.8		ug/L		74	46 - 120
Benzo[a]pyrene	32.0	25.8		ug/L		81	49 - 120
Benzo[b]fluoranthene	32.0	26.0		ug/L		81	49 - 120
Benzo[g,h,i]perylene	32.0	19.0		ug/L		59	48 - 120
Benzo[k]fluoranthene	32.0	28.0		ug/L		87	50 - 120
Bis(2-chloroethoxy)methane	32.0	27.0		ug/L		84	54 - 120
Bis(2-chloroethyl)ether	32.0	27.3		ug/L		85	51 - 120
Bis(2-ethylhexyl) phthalate	32.0	28.5		ug/L		89	30 - 156
Butyl benzyl phthalate	32.0	27.2		ug/L		85	40 - 125
Caprolactam	64.0	20.9		ug/L		33	10 - 120
Carbazole	32.0	26.8		ug/L		84	46 - 127
Chrysene	32.0	25.2		ug/L		79	45 - 120
Dibenz(a,h)anthracene	32.0	17.3		ug/L		54	49 - 120
Dibenzofuran	32.0	25.4		ug/L		79	45 - 120
Diethyl phthalate	32.0	27.9		ug/L		87	48 - 121
Dimethyl phthalate	32.0	26.9		ug/L		84	50 - 120
Di-n-butyl phthalate	32.0	27.8		ug/L		87	40 - 160
Di-n-octyl phthalate	32.0	28.3		ug/L		88	40 - 128
Fluoranthene	32.0	25.1		ug/L		78	50 - 120
Fluorene	32.0	25.8		ug/L		81	50 - 120
Hexachlorobenzene	32.0	22.4		ug/L		70	46 - 120
Hexachlorobutadiene	32.0	22.4		ug/L		70	30 - 120
Hexachlorocyclopentadiene	32.0	17.5		ug/L		55	4 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201405/22-A
Matrix: Water
Analysis Batch: 201553

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201405

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachloroethane	32.0	23.4		ug/L		73	30 - 120
Indeno[1,2,3-cd]pyrene	32.0	21.3		ug/L		67	48 - 140
Isophorone	32.0	30.0		ug/L		94	52 - 120
Naphthalene	32.0	25.4		ug/L		79	45 - 120
Nitrobenzene	32.0	27.3		ug/L		85	54 - 120
N-Nitrosodi-n-propylamine	32.0	28.8		ug/L		90	52 - 117
N-Nitrosodiphenylamine	64.0	49.2		ug/L		77	47 - 109
Pentachlorophenol	64.0	37.4	J	ug/L		58	30 - 120
Phenol	32.0	19.4		ug/L		61	40 - 120
Phenanthrene	32.0	25.1		ug/L		78	50 - 120
Pyrene	32.0	24.8		ug/L		78	49 - 114
3 & 4 Methylphenol	32.0	26.0		ug/L		81	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*80*		*29 - 110*
2-Fluorophenol (Surr)	*75*		*15 - 110*
2,4,6-Tribromophenol (Surr)	*76*		*21 - 128*
Nitrobenzene-d5 (Surr)	*87*		*31 - 110*
Phenol-d5 (Surr)	*61*		*10 - 110*
Terphenyl-d14 (Surr)	*82*		*31 - 115*

Lab Sample ID: MB 240-201406/21-A
Matrix: Water
Analysis Batch: 201553

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201406

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/13/15 09:12	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/12/15 09:34	10/13/15 09:12	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/12/15 09:34	10/13/15 09:12	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/12/15 09:34	10/13/15 09:12	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/12/15 09:34	10/13/15 09:12	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/12/15 09:34	10/13/15 09:12	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/12/15 09:34	10/13/15 09:12	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/12/15 09:34	10/13/15 09:12	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/12/15 09:34	10/13/15 09:12	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/13/15 09:12	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/12/15 09:34	10/13/15 09:12	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/12/15 09:34	10/13/15 09:12	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/12/15 09:34	10/13/15 09:12	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/12/15 09:34	10/13/15 09:12	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/12/15 09:34	10/13/15 09:12	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/12/15 09:34	10/13/15 09:12	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/12/15 09:34	10/13/15 09:12	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/12/15 09:34	10/13/15 09:12	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/12/15 09:34	10/13/15 09:12	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/12/15 09:34	10/13/15 09:12	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/12/15 09:34	10/13/15 09:12	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/12/15 09:34	10/13/15 09:12	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201406/21-A
Matrix: Water
Analysis Batch: 201553

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201406

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/12/15 09:34	10/13/15 09:12	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/12/15 09:34	10/13/15 09:12	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/12/15 09:34	10/13/15 09:12	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/12/15 09:34	10/13/15 09:12	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/13/15 09:12	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/12/15 09:34	10/13/15 09:12	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/13/15 09:12	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/12/15 09:34	10/13/15 09:12	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/12/15 09:34	10/13/15 09:12	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/12/15 09:34	10/13/15 09:12	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/12/15 09:34	10/13/15 09:12	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/12/15 09:34	10/13/15 09:12	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/12/15 09:34	10/13/15 09:12	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/12/15 09:34	10/13/15 09:12	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/12/15 09:34	10/13/15 09:12	1
Bis(2-ethylhexyl) phthalate	4.05		2.0	1.5	ug/L		10/12/15 09:34	10/13/15 09:12	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/12/15 09:34	10/13/15 09:12	1
Caprolactam	1.39	J	5.0	0.37	ug/L		10/12/15 09:34	10/13/15 09:12	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/12/15 09:34	10/13/15 09:12	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/12/15 09:34	10/13/15 09:12	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/12/15 09:34	10/13/15 09:12	1
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/13/15 09:12	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/12/15 09:34	10/13/15 09:12	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/12/15 09:34	10/13/15 09:12	1
Di-n-butyl phthalate	0.714	J	1.0	0.40	ug/L		10/12/15 09:34	10/13/15 09:12	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/12/15 09:34	10/13/15 09:12	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/12/15 09:34	10/13/15 09:12	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/12/15 09:34	10/13/15 09:12	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/13/15 09:12	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/12/15 09:34	10/13/15 09:12	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/12/15 09:34	10/13/15 09:12	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/12/15 09:34	10/13/15 09:12	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/12/15 09:34	10/13/15 09:12	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/12/15 09:34	10/13/15 09:12	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/12/15 09:34	10/13/15 09:12	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/12/15 09:34	10/13/15 09:12	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/12/15 09:34	10/13/15 09:12	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/12/15 09:34	10/13/15 09:12	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/12/15 09:34	10/13/15 09:12	1
Phenol	1.0	U	1.0	0.15	ug/L		10/12/15 09:34	10/13/15 09:12	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/12/15 09:34	10/13/15 09:12	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/12/15 09:34	10/13/15 09:12	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/12/15 09:34	10/13/15 09:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*66*		*29 - 110*	*10/12/15 09:34*	*10/13/15 09:12*	*1*
2-Fluorophenol (Surr)	*63*		*15 - 110*	*10/12/15 09:34*	*10/13/15 09:12*	*1*
2,4,6-Tribromophenol (Surr)	*52*		*21 - 128*	*10/12/15 09:34*	*10/13/15 09:12*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201406/21-A
Matrix: Water
Analysis Batch: 201553

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201406

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	69		31 - 110	10/12/15 09:34	10/13/15 09:12	1
Phenol-d5 (Surr)	49		10 - 110	10/12/15 09:34	10/13/15 09:12	1
Terphenyl-d14 (Surr)	75		31 - 115	10/12/15 09:34	10/13/15 09:12	1

Lab Sample ID: LCS 240-201406/22-A
Matrix: Water
Analysis Batch: 201553

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201406

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	32.0	21.3		ug/L		67	43 - 120
bis (2-chloroisopropyl) ether	32.0	22.7		ug/L		71	45 - 112
2,4,5-Trichlorophenol	32.0	22.3		ug/L		70	49 - 120
2,4,6-Trichlorophenol	32.0	22.6		ug/L		71	50 - 120
2,4-Dichlorophenol	32.0	23.4		ug/L		73	54 - 120
2,4-Dimethylphenol	32.0	25.5		ug/L		80	40 - 125
2,4-Dinitrophenol	64.0	32.6	J	ug/L		51	30 - 120
2,4-Dinitrotoluene	32.0	25.0		ug/L		78	50 - 120
2,6-Dinitrotoluene	32.0	23.9		ug/L		75	52 - 120
2-Chloronaphthalene	32.0	20.6		ug/L		64	43 - 120
2-Chlorophenol	32.0	23.4		ug/L		73	53 - 120
2-Methylnaphthalene	32.0	20.4		ug/L		64	46 - 120
2-Methylphenol	32.0	22.3		ug/L		70	52 - 120
2-Nitroaniline	32.0	24.7		ug/L		77	47 - 120
2-Nitrophenol	32.0	24.2		ug/L		76	53 - 120
3,3'-Dichlorobenzidine	64.0	33.9		ug/L		53	30 - 120
3-Nitroaniline	32.0	26.9		ug/L		84	40 - 144
4,6-Dinitro-2-methylphenol	64.0	38.6		ug/L		60	40 - 120
4-Bromophenyl phenyl ether	32.0	21.6		ug/L		68	49 - 120
4-Chloro-3-methylphenol	32.0	23.7		ug/L		74	55 - 120
4-Chloroaniline	32.0	6.30		ug/L		20	20 - 136
4-Chlorophenyl phenyl ether	32.0	21.8		ug/L		68	48 - 120
4-Nitroaniline	32.0	27.0		ug/L		84	40 - 135
4-Nitrophenol	64.0	25.8		ug/L		40	30 - 120
Acenaphthene	32.0	22.2		ug/L		69	48 - 120
Acenaphthylene	32.0	22.6		ug/L		71	47 - 120
Acetophenone	32.0	24.8		ug/L		77	53 - 120
Anthracene	32.0	22.7		ug/L		71	50 - 120
Atrazine	64.0	47.9		ug/L		75	49 - 120
Benzaldehyde	64.0	88.7	E	ug/L		139	40 - 160
Benzo[a]anthracene	32.0	21.9		ug/L		68	46 - 120
Benzo[a]pyrene	32.0	24.4		ug/L		76	49 - 120
Benzo[b]fluoranthene	32.0	24.4		ug/L		76	49 - 120
Benzo[g,h,i]perylene	32.0	17.0		ug/L		53	48 - 120
Benzo[k]fluoranthene	32.0	24.9		ug/L		78	50 - 120
Bis(2-chloroethoxy)methane	32.0	24.7		ug/L		77	54 - 120
Bis(2-chloroethyl)ether	32.0	23.9		ug/L		75	51 - 120
Bis(2-ethylhexyl) phthalate	32.0	26.4		ug/L		83	30 - 156
Butyl benzyl phthalate	32.0	25.0		ug/L		78	40 - 125

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201406/22-A
Matrix: Water
Analysis Batch: 201553

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201406

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Caprolactam	64.0	11.3		ug/L		18	10 - 120
Carbazole	32.0	24.3		ug/L		76	46 - 127
Chrysene	32.0	23.4		ug/L		73	45 - 120
Dibenz(a,h)anthracene	32.0	15.6		ug/L		49	49 - 120
Dibenzofuran	32.0	22.3		ug/L		70	45 - 120
Diethyl phthalate	32.0	25.2		ug/L		79	48 - 121
Dimethyl phthalate	32.0	24.1		ug/L		75	50 - 120
Di-n-butyl phthalate	32.0	25.6		ug/L		80	40 - 160
Di-n-octyl phthalate	32.0	26.0		ug/L		81	40 - 128
Fluoranthene	32.0	23.1		ug/L		72	50 - 120
Fluorene	32.0	22.4		ug/L		70	50 - 120
Hexachlorobenzene	32.0	20.5		ug/L		64	46 - 120
Hexachlorobutadiene	32.0	17.1		ug/L		53	30 - 120
Hexachlorocyclopentadiene	32.0	14.2		ug/L		44	4 - 120
Hexachloroethane	32.0	17.5		ug/L		55	30 - 120
Indeno[1,2,3-cd]pyrene	32.0	18.9		ug/L		59	48 - 140
Isophorone	32.0	26.9		ug/L		84	52 - 120
Naphthalene	32.0	20.4		ug/L		64	45 - 120
Nitrobenzene	32.0	23.8		ug/L		74	54 - 120
N-Nitrosodi-n-propylamine	32.0	25.7		ug/L		80	52 - 117
N-Nitrosodiphenylamine	64.0	45.8		ug/L		72	47 - 109
Pentachlorophenol	64.0	32.8	J	ug/L		51	30 - 120
Phenol	32.0	12.3	*	ug/L		38	40 - 120
Phenanthrene	32.0	22.9		ug/L		72	50 - 120
Pyrene	32.0	22.7		ug/L		71	49 - 114
3 & 4 Methylphenol	32.0	20.8		ug/L		65	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*69*		*29 - 110*
2-Fluorophenol (Surr)	*55*		*15 - 110*
2,4,6-Tribromophenol (Surr)	*66*		*21 - 128*
Nitrobenzene-d5 (Surr)	*75*		*31 - 110*
Phenol-d5 (Surr)	*39*		*10 - 110*
Terphenyl-d14 (Surr)	*76*		*31 - 115*

Lab Sample ID: MB 240-201566/13-A
Matrix: Solid
Analysis Batch: 202045

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201566

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	50	U	50	3.5	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
bis (2-chloroisopropyl) ether	100	U	100	9.5	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
2,4,5-Trichlorophenol	150	U	150	25	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
2,4,6-Trichlorophenol	150	U	150	8.9	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
2,4-Dichlorophenol	150	U	150	20	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
2,4-Dimethylphenol	150	U	150	20	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
2,4-Dinitrophenol	330	U	330	21	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
2,4-Dinitrotoluene	200	U	200	17	ug/Kg		10/13/15 08:07	10/15/15 10:27	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201566/13-A
Matrix: Solid
Analysis Batch: 202045

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201566

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	200	U	200	21	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
2-Chloronaphthalene	50	U	50	0.45	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
2-Chlorophenol	50	U	50	8.2	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
2-Methylnaphthalene	6.7	U	6.7	0.50	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
2-Methylphenol	200	U	200	11	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
2-Nitroaniline	200	U	200	9.1	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
2-Nitrophenol	50	U	50	8.3	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
3,3'-Dichlorobenzidine	100	U	100	18	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
3-Nitroaniline	200	U	200	16	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
4,6-Dinitro-2-methylphenol	150	U	150	9.2	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
4-Bromophenyl phenyl ether	50	U	50	13	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
4-Chloro-3-methylphenol	150	U	150	21	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
4-Chloroaniline	150	U	150	17	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
4-Chlorophenyl phenyl ether	50	U	50	13	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
4-Nitroaniline	200	U	200	26	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
4-Nitrophenol	330	U	330	17	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Acenaphthene	6.7	U	6.7	0.76	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Acenaphthylene	6.7	U	6.7	0.35	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Acetophenone	100	U	100	9.2	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Anthracene	6.7	U	6.7	0.78	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Atrazine	200	U	200	9.1	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Benzaldehyde	100	U	100	12	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Benzo[a]anthracene	6.7	U	6.7	0.63	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Benzo[a]pyrene	6.7	U	6.7	0.64	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Benzo[b]fluoranthene	6.7	U	6.7	0.59	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Benzo[g,h,i]perylene	6.7	U	6.7	0.35	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Benzo[k]fluoranthene	6.7	U	6.7	0.68	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Bis(2-chloroethoxy)methane	100	U	100	22	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Bis(2-chloroethyl)ether	100	U	100	2.0	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Bis(2-ethylhexyl) phthalate	70	U	70	19	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Butyl benzyl phthalate	70	U	70	10	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Caprolactam	330	U	330	37	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Carbazole	50	U	50	27	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Chrysene	6.7	U	6.7	1.1	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Dibenz(a,h)anthracene	6.7	U	6.7	0.66	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Dibenzofuran	50	U	50	0.66	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Diethyl phthalate	70	U	70	16	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Dimethyl phthalate	70	U	70	17	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Di-n-butyl phthalate	70	U	70	15	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Di-n-octyl phthalate	70	U	70	7.9	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Fluoranthene	6.7	U	6.7	0.55	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Fluorene	6.7	U	6.7	0.53	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Hexachlorobenzene	6.7	U	6.7	2.1	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Hexachlorobutadiene	50	U	50	5.6	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Hexachlorocyclopentadiene	330	U	330	8.1	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Hexachloroethane	50	U	50	9.0	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Indeno[1,2,3-cd]pyrene	6.7	U	6.7	0.35	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Isophorone	50	U	50	13	ug/Kg		10/13/15 08:07	10/15/15 10:27	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201566/13-A
Matrix: Solid
Analysis Batch: 202045

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201566

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	6.7	U	6.7	0.82	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Nitrobenzene	100	U	100	2.2	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
N-Nitrosodi-n-propylamine	50	U	50	6.3	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
N-Nitrosodiphenylamine	50	U	50	21	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Pentachlorophenol	150	U	150	9.1	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Phenol	50	U	50	7.3	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Phenanthrene	6.7	U	6.7	0.73	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
Pyrene	6.7	U	6.7	0.44	ug/Kg		10/13/15 08:07	10/15/15 10:27	1
3 & 4 Methylphenol	400	U	400	20	ug/Kg		10/13/15 08:07	10/15/15 10:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*66*		*24 - 110*	*10/13/15 08:07*	*10/15/15 10:27*	*1*
2-Fluorophenol (Surr)	*60*		*24 - 110*	*10/13/15 08:07*	*10/15/15 10:27*	*1*
2,4,6-Tribromophenol (Surr)	*35*		*10 - 110*	*10/13/15 08:07*	*10/15/15 10:27*	*1*
Nitrobenzene-d5 (Surr)	*63*		*20 - 110*	*10/13/15 08:07*	*10/15/15 10:27*	*1*
Phenol-d5 (Surr)	*66*		*26 - 110*	*10/13/15 08:07*	*10/15/15 10:27*	*1*
Terphenyl-d14 (Surr)	*75*		*36 - 110*	*10/13/15 08:07*	*10/15/15 10:27*	*1*

Lab Sample ID: LCS 240-201566/14-A
Matrix: Solid
Analysis Batch: 202045

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201566

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	667	468		ug/Kg		70	35 - 110
bis (2-chloroisopropyl) ether	667	533		ug/Kg		80	29 - 110
2,4,5-Trichlorophenol	667	385		ug/Kg		58	25 - 110
2,4,6-Trichlorophenol	667	275		ug/Kg		41	12 - 110
2,4-Dichlorophenol	667	482		ug/Kg		72	39 - 110
2,4-Dimethylphenol	667	447		ug/Kg		67	29 - 110
2,4-Dinitrophenol	1330	455		ug/Kg		34	10 - 110
2,4-Dinitrotoluene	667	563		ug/Kg		84	48 - 110
2,6-Dinitrotoluene	667	527		ug/Kg		79	45 - 110
2-Chloronaphthalene	667	460		ug/Kg		69	32 - 110
2-Chlorophenol	667	484		ug/Kg		73	37 - 110
2-Methylnaphthalene	667	501		ug/Kg		75	36 - 110
2-Methylphenol	667	480		ug/Kg		72	41 - 110
2-Nitroaniline	667	530		ug/Kg		80	45 - 110
2-Nitrophenol	667	538		ug/Kg		81	34 - 110
3,3'-Dichlorobenzidine	1330	835		ug/Kg		63	28 - 110
3-Nitroaniline	667	470		ug/Kg		71	44 - 110
4,6-Dinitro-2-methylphenol	1330	738		ug/Kg		55	10 - 110
4-Bromophenyl phenyl ether	667	495		ug/Kg		74	39 - 110
4-Chloro-3-methylphenol	667	511		ug/Kg		77	48 - 110
4-Chloroaniline	667	377		ug/Kg		57	30 - 110
4-Chlorophenyl phenyl ether	667	500		ug/Kg		75	40 - 110
4-Nitroaniline	667	553		ug/Kg		83	48 - 110
4-Nitrophenol	1330	907		ug/Kg		68	28 - 110
Acenaphthene	667	488		ug/Kg		73	38 - 110

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-201566/14-A
Matrix: Solid
Analysis Batch: 202045

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201566

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthylene	667	471		ug/Kg		71	40 - 110
Acetophenone	667	495		ug/Kg		74	40 - 110
Anthracene	667	497		ug/Kg		75	48 - 110
Atrazine	1330	1030		ug/Kg		77	54 - 120
Benzaldehyde	1330	1020		ug/Kg		76	32 - 110
Benzo[a]anthracene	667	492		ug/Kg		74	50 - 110
Benzo[a]pyrene	667	514		ug/Kg		77	44 - 110
Benzo[b]fluoranthene	667	518		ug/Kg		78	43 - 110
Benzo[g,h,i]perylene	667	518		ug/Kg		78	51 - 110
Benzo[k]fluoranthene	667	507		ug/Kg		76	38 - 105
Bis(2-chloroethoxy)methane	667	498		ug/Kg		75	32 - 110
Bis(2-chloroethyl)ether	667	491		ug/Kg		74	34 - 110
Bis(2-ethylhexyl) phthalate	667	548		ug/Kg		82	50 - 110
Butyl benzyl phthalate	667	508		ug/Kg		76	51 - 110
Caprolactam	1330	992		ug/Kg		74	44 - 114
Carbazole	667	505		ug/Kg		76	50 - 110
Chrysene	667	503		ug/Kg		75	50 - 110
Dibenz(a,h)anthracene	667	552		ug/Kg		83	51 - 110
Dibenzofuran	667	485		ug/Kg		73	43 - 110
Diethyl phthalate	667	532		ug/Kg		80	52 - 110
Dimethyl phthalate	667	506		ug/Kg		76	50 - 110
Di-n-butyl phthalate	667	525		ug/Kg		79	51 - 110
Di-n-octyl phthalate	667	532		ug/Kg		80	48 - 110
Fluoranthene	667	491		ug/Kg		74	51 - 110
Fluorene	667	490		ug/Kg		73	46 - 110
Hexachlorobenzene	667	487		ug/Kg		73	43 - 110
Hexachlorobutadiene	667	487		ug/Kg		73	29 - 110
Hexachlorocyclopentadiene	667	453		ug/Kg		68	12 - 110
Hexachloroethane	667	494		ug/Kg		74	30 - 110
Indeno[1,2,3-cd]pyrene	667	547		ug/Kg		82	50 - 110
Isophorone	667	496		ug/Kg		74	36 - 110
Naphthalene	667	479		ug/Kg		72	36 - 110
Nitrobenzene	667	495		ug/Kg		74	32 - 110
N-Nitrosodi-n-propylamine	667	510		ug/Kg		76	38 - 110
N-Nitrosodiphenylamine	1330	1010		ug/Kg		76	46 - 110
Pentachlorophenol	1330	701		ug/Kg		53	10 - 110
Phenol	667	488		ug/Kg		73	38 - 110
Phenanthrene	667	495		ug/Kg		74	49 - 110
Pyrene	667	484		ug/Kg		73	49 - 110
3 & 4 Methylphenol	667	486		ug/Kg		73	40 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*74*		*24 - 110*
2-Fluorophenol (Surr)	*78*		*24 - 110*
2,4,6-Tribromophenol (Surr)	*46*		*10 - 110*
Nitrobenzene-d5 (Surr)	*78*		*20 - 110*
Phenol-d5 (Surr)	*78*		*26 - 110*
Terphenyl-d14 (Surr)	*83*		*36 - 110*

Lab Sample ID: MB 240-202230/22-A
Matrix: Water
Analysis Batch: 202432

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 202230

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/16/15 08:59	10/19/15 08:24	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/16/15 08:59	10/19/15 08:24	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/16/15 08:59	10/19/15 08:24	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/16/15 08:59	10/19/15 08:24	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/16/15 08:59	10/19/15 08:24	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/16/15 08:59	10/19/15 08:24	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/16/15 08:59	10/19/15 08:24	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/16/15 08:59	10/19/15 08:24	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/16/15 08:59	10/19/15 08:24	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/16/15 08:59	10/19/15 08:24	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/16/15 08:59	10/19/15 08:24	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/16/15 08:59	10/19/15 08:24	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/16/15 08:59	10/19/15 08:24	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/16/15 08:59	10/19/15 08:24	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/16/15 08:59	10/19/15 08:24	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/16/15 08:59	10/19/15 08:24	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/16/15 08:59	10/19/15 08:24	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/16/15 08:59	10/19/15 08:24	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/16/15 08:59	10/19/15 08:24	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/16/15 08:59	10/19/15 08:24	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/16/15 08:59	10/19/15 08:24	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/16/15 08:59	10/19/15 08:24	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/16/15 08:59	10/19/15 08:24	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/16/15 08:59	10/19/15 08:24	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/16/15 08:59	10/19/15 08:24	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/16/15 08:59	10/19/15 08:24	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/16/15 08:59	10/19/15 08:24	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/16/15 08:59	10/19/15 08:24	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/16/15 08:59	10/19/15 08:24	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/16/15 08:59	10/19/15 08:24	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/16/15 08:59	10/19/15 08:24	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/16/15 08:59	10/19/15 08:24	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/16/15 08:59	10/19/15 08:24	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/16/15 08:59	10/19/15 08:24	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/16/15 08:59	10/19/15 08:24	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/16/15 08:59	10/19/15 08:24	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/16/15 08:59	10/19/15 08:24	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	1.5	ug/L		10/16/15 08:59	10/19/15 08:24	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/16/15 08:59	10/19/15 08:24	1
Caprolactam	1.55	J	5.0	0.37	ug/L		10/16/15 08:59	10/19/15 08:24	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/16/15 08:59	10/19/15 08:24	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/16/15 08:59	10/19/15 08:24	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/16/15 08:59	10/19/15 08:24	1
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/16/15 08:59	10/19/15 08:24	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/16/15 08:59	10/19/15 08:24	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/16/15 08:59	10/19/15 08:24	1
Di-n-butyl phthalate	1.0	U	1.0	0.40	ug/L		10/16/15 08:59	10/19/15 08:24	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/16/15 08:59	10/19/15 08:24	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/16/15 08:59	10/19/15 08:24	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/16/15 08:59	10/19/15 08:24	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-202230/22-A
Matrix: Water
Analysis Batch: 202432

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 202230

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/16/15 08:59	10/19/15 08:24	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/16/15 08:59	10/19/15 08:24	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/16/15 08:59	10/19/15 08:24	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/16/15 08:59	10/19/15 08:24	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/16/15 08:59	10/19/15 08:24	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/16/15 08:59	10/19/15 08:24	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/16/15 08:59	10/19/15 08:24	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/16/15 08:59	10/19/15 08:24	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/16/15 08:59	10/19/15 08:24	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/16/15 08:59	10/19/15 08:24	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/16/15 08:59	10/19/15 08:24	1
Phenol	1.0	U	1.0	0.15	ug/L		10/16/15 08:59	10/19/15 08:24	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/16/15 08:59	10/19/15 08:24	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/16/15 08:59	10/19/15 08:24	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/16/15 08:59	10/19/15 08:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*57*		*29 - 110*	*10/16/15 08:59*	*10/19/15 08:24*	*1*
2-Fluorophenol (Surr)	*52*		*15 - 110*	*10/16/15 08:59*	*10/19/15 08:24*	*1*
2,4,6-Tribromophenol (Surr)	*44*		*21 - 128*	*10/16/15 08:59*	*10/19/15 08:24*	*1*
Nitrobenzene-d5 (Surr)	*56*		*31 - 110*	*10/16/15 08:59*	*10/19/15 08:24*	*1*
Phenol-d5 (Surr)	*41*		*10 - 110*	*10/16/15 08:59*	*10/19/15 08:24*	*1*
Terphenyl-d14 (Surr)	*63*		*31 - 115*	*10/16/15 08:59*	*10/19/15 08:24*	*1*

Lab Sample ID: LCS 240-202230/23-A
Matrix: Water
Analysis Batch: 202432

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 202230

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	32.0	24.8		ug/L		78	43 - 120
bis (2-chloroisopropyl) ether	32.0	27.0		ug/L		84	45 - 112
2,4,5-Trichlorophenol	32.0	25.2		ug/L		79	49 - 120
2,4,6-Trichlorophenol	32.0	24.6		ug/L		77	50 - 120
2,4-Dichlorophenol	32.0	26.0		ug/L		81	54 - 120
2,4-Dimethylphenol	32.0	27.5		ug/L		86	40 - 125
2,4-Dinitrophenol	64.0	40.6		ug/L		63	30 - 120
2,4-Dinitrotoluene	32.0	27.8		ug/L		87	50 - 120
2,6-Dinitrotoluene	32.0	26.7		ug/L		84	52 - 120
2-Chloronaphthalene	32.0	25.2		ug/L		79	43 - 120
2-Chlorophenol	32.0	26.7		ug/L		83	53 - 120
2-Methylnaphthalene	32.0	25.1		ug/L		78	46 - 120
2-Methylphenol	32.0	25.6		ug/L		80	52 - 120
2-Nitroaniline	32.0	27.2		ug/L		85	47 - 120
2-Nitrophenol	32.0	27.8		ug/L		87	53 - 120
3,3'-Dichlorobenzidine	64.0	13.4	*	ug/L		21	30 - 120
3-Nitroaniline	32.0	21.6		ug/L		68	40 - 144
4,6-Dinitro-2-methylphenol	64.0	44.3		ug/L		69	40 - 120
4-Bromophenyl phenyl ether	32.0	24.1		ug/L		75	49 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-202230/23-A
Matrix: Water
Analysis Batch: 202432

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 202230

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloro-3-methylphenol	32.0	26.1		ug/L		82	55 - 120
4-Chloroaniline	32.0	5.26	*	ug/L		16	20 - 136
4-Chlorophenyl phenyl ether	32.0	25.1		ug/L		79	48 - 120
4-Nitroaniline	32.0	28.7		ug/L		90	40 - 135
4-Nitrophenol	64.0	32.5		ug/L		51	30 - 120
Acenaphthene	32.0	25.0		ug/L		78	48 - 120
Acenaphthylene	32.0	25.7		ug/L		80	47 - 120
Acetophenone	32.0	28.4		ug/L		89	53 - 120
Anthracene	32.0	24.1		ug/L		75	50 - 120
Atrazine	64.0	49.2		ug/L		77	49 - 120
Benzaldehyde	64.0	104	E *	ug/L		162	40 - 160
Benzo[a]anthracene	32.0	23.3		ug/L		73	46 - 120
Benzo[a]pyrene	32.0	25.8		ug/L		81	49 - 120
Benzo[b]fluoranthene	32.0	24.9		ug/L		78	49 - 120
Benzo[g,h,i]perylene	32.0	30.2		ug/L		94	48 - 120
Benzo[k]fluoranthene	32.0	24.8		ug/L		77	50 - 120
Bis(2-chloroethoxy)methane	32.0	27.9		ug/L		87	54 - 120
Bis(2-chloroethyl)ether	32.0	27.7		ug/L		86	51 - 120
Bis(2-ethylhexyl) phthalate	32.0	26.9		ug/L		84	30 - 156
Butyl benzyl phthalate	32.0	25.5		ug/L		80	40 - 125
Caprolactam	64.0	12.3		ug/L		19	10 - 120
Carbazole	32.0	25.1		ug/L		78	46 - 127
Chrysene	32.0	24.5		ug/L		76	45 - 120
Dibenz(a,h)anthracene	32.0	25.7		ug/L		80	49 - 120
Dibenzofuran	32.0	25.2		ug/L		79	45 - 120
Diethyl phthalate	32.0	26.5		ug/L		83	48 - 121
Dimethyl phthalate	32.0	26.4		ug/L		82	50 - 120
Di-n-butyl phthalate	32.0	25.5		ug/L		80	40 - 160
Di-n-octyl phthalate	32.0	28.2		ug/L		88	40 - 128
Fluoranthene	32.0	23.6		ug/L		74	50 - 120
Fluorene	32.0	25.2		ug/L		79	50 - 120
Hexachlorobenzene	32.0	22.6		ug/L		71	46 - 120
Hexachlorobutadiene	32.0	23.9		ug/L		75	30 - 120
Hexachlorocyclopentadiene	32.0	20.9		ug/L		65	4 - 120
Hexachloroethane	32.0	25.6		ug/L		80	30 - 120
Indeno[1,2,3-cd]pyrene	32.0	30.2		ug/L		94	48 - 140
Isophorone	32.0	29.8		ug/L		93	52 - 120
Naphthalene	32.0	25.5		ug/L		80	45 - 120
Nitrobenzene	32.0	27.6		ug/L		86	54 - 120
N-Nitrosodi-n-propylamine	32.0	29.0		ug/L		91	52 - 117
N-Nitrosodiphenylamine	64.0	48.4		ug/L		76	47 - 109
Pentachlorophenol	64.0	36.9	J	ug/L		58	30 - 120
Phenol	32.0	15.2		ug/L		48	40 - 120
Phenanthrene	32.0	24.2		ug/L		76	50 - 120
Pyrene	32.0	24.7		ug/L		77	49 - 114
3 & 4 Methylphenol	32.0	24.4		ug/L		76	50 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-202230/23-A
Matrix: Water
Analysis Batch: 202432

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 202230

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*81*		*29 - 110*
2-Fluorophenol (Surr)	*68*		*15 - 110*
2,4,6-Tribromophenol (Surr)	*77*		*21 - 128*
Nitrobenzene-d5 (Surr)	*88*		*31 - 110*
Phenol-d5 (Surr)	*49*		*10 - 110*
Terphenyl-d14 (Surr)	*82*		*31 - 115*

Lab Sample ID: MB 240-202493/21-A
Matrix: Water
Analysis Batch: 203054

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 202493

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/19/15 09:03	10/22/15 07:24	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/19/15 09:03	10/22/15 07:24	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/19/15 09:03	10/22/15 07:24	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/19/15 09:03	10/22/15 07:24	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/19/15 09:03	10/22/15 07:24	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/19/15 09:03	10/22/15 07:24	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/19/15 09:03	10/22/15 07:24	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/19/15 09:03	10/22/15 07:24	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/19/15 09:03	10/22/15 07:24	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/19/15 09:03	10/22/15 07:24	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/19/15 09:03	10/22/15 07:24	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/19/15 09:03	10/22/15 07:24	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/19/15 09:03	10/22/15 07:24	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/19/15 09:03	10/22/15 07:24	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/19/15 09:03	10/22/15 07:24	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/19/15 09:03	10/22/15 07:24	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/19/15 09:03	10/22/15 07:24	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/19/15 09:03	10/22/15 07:24	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/19/15 09:03	10/22/15 07:24	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/19/15 09:03	10/22/15 07:24	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/19/15 09:03	10/22/15 07:24	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/19/15 09:03	10/22/15 07:24	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/19/15 09:03	10/22/15 07:24	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/19/15 09:03	10/22/15 07:24	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/19/15 09:03	10/22/15 07:24	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/19/15 09:03	10/22/15 07:24	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/19/15 09:03	10/22/15 07:24	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/19/15 09:03	10/22/15 07:24	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/19/15 09:03	10/22/15 07:24	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/19/15 09:03	10/22/15 07:24	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/19/15 09:03	10/22/15 07:24	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/19/15 09:03	10/22/15 07:24	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/19/15 09:03	10/22/15 07:24	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/19/15 09:03	10/22/15 07:24	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/19/15 09:03	10/22/15 07:24	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/19/15 09:03	10/22/15 07:24	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-202493/21-A
Matrix: Water
Analysis Batch: 203054

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 202493

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/19/15 09:03	10/22/15 07:24	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	1.5	ug/L		10/19/15 09:03	10/22/15 07:24	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/19/15 09:03	10/22/15 07:24	1
Caprolactam	0.962	J	5.0	0.37	ug/L		10/19/15 09:03	10/22/15 07:24	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/19/15 09:03	10/22/15 07:24	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/19/15 09:03	10/22/15 07:24	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/19/15 09:03	10/22/15 07:24	1
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/19/15 09:03	10/22/15 07:24	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/19/15 09:03	10/22/15 07:24	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/19/15 09:03	10/22/15 07:24	1
Di-n-butyl phthalate	0.601	J	1.0	0.40	ug/L		10/19/15 09:03	10/22/15 07:24	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/19/15 09:03	10/22/15 07:24	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/19/15 09:03	10/22/15 07:24	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/19/15 09:03	10/22/15 07:24	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/19/15 09:03	10/22/15 07:24	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/19/15 09:03	10/22/15 07:24	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/19/15 09:03	10/22/15 07:24	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/19/15 09:03	10/22/15 07:24	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/19/15 09:03	10/22/15 07:24	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/19/15 09:03	10/22/15 07:24	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/19/15 09:03	10/22/15 07:24	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/19/15 09:03	10/22/15 07:24	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/19/15 09:03	10/22/15 07:24	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/19/15 09:03	10/22/15 07:24	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/19/15 09:03	10/22/15 07:24	1
Phenol	1.0	U	1.0	0.15	ug/L		10/19/15 09:03	10/22/15 07:24	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/19/15 09:03	10/22/15 07:24	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/19/15 09:03	10/22/15 07:24	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/19/15 09:03	10/22/15 07:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*73*		*29 - 110*	*10/19/15 09:03*	*10/22/15 07:24*	*1*
2-Fluorophenol (Surr)	*63*		*15 - 110*	*10/19/15 09:03*	*10/22/15 07:24*	*1*
2,4,6-Tribromophenol (Surr)	*55*		*21 - 128*	*10/19/15 09:03*	*10/22/15 07:24*	*1*
Nitrobenzene-d5 (Surr)	*72*		*31 - 110*	*10/19/15 09:03*	*10/22/15 07:24*	*1*
Phenol-d5 (Surr)	*50*		*10 - 110*	*10/19/15 09:03*	*10/22/15 07:24*	*1*
Terphenyl-d14 (Surr)	*87*		*31 - 115*	*10/19/15 09:03*	*10/22/15 07:24*	*1*

Lab Sample ID: LCS 240-202493/22-A
Matrix: Water
Analysis Batch: 203054

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 202493

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	32.0	28.5		ug/L		89	43 - 120
bis (2-chloroisopropyl) ether	32.0	30.2		ug/L		94	45 - 112
2,4,5-Trichlorophenol	32.0	27.8		ug/L		87	49 - 120
2,4,6-Trichlorophenol	32.0	27.2		ug/L		85	50 - 120
2,4-Dichlorophenol	32.0	29.7		ug/L		93	54 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-202493/22-A
Matrix: Water
Analysis Batch: 203054

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 202493

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dimethylphenol	32.0	32.6		ug/L		102	40 - 125
2,4-Dinitrophenol	64.0	38.2	J	ug/L		60	30 - 120
2,4-Dinitrotoluene	32.0	31.5		ug/L		98	50 - 120
2,6-Dinitrotoluene	32.0	30.0		ug/L		94	52 - 120
2-Chloronaphthalene	32.0	28.6		ug/L		89	43 - 120
2-Chlorophenol	32.0	31.2		ug/L		98	53 - 120
2-Methylnaphthalene	32.0	28.5		ug/L		89	46 - 120
2-Methylphenol	32.0	30.7		ug/L		96	52 - 120
2-Nitroaniline	32.0	32.0		ug/L		100	47 - 120
2-Nitrophenol	32.0	31.4		ug/L		98	53 - 120
3,3'-Dichlorobenzidine	64.0	11.2	*	ug/L		17	30 - 120
3-Nitroaniline	32.0	29.3		ug/L		92	40 - 144
4,6-Dinitro-2-methylphenol	64.0	46.3		ug/L		72	40 - 120
4-Bromophenyl phenyl ether	32.0	27.4		ug/L		86	49 - 120
4-Chloro-3-methylphenol	32.0	29.6		ug/L		93	55 - 120
4-Chloroaniline	32.0	4.22	*	ug/L		13	20 - 136
4-Chlorophenyl phenyl ether	32.0	28.3		ug/L		88	48 - 120
4-Nitroaniline	32.0	33.7		ug/L		105	40 - 135
4-Nitrophenol	64.0	46.9		ug/L		73	30 - 120
Acenaphthene	32.0	29.5		ug/L		92	48 - 120
Acenaphthylene	32.0	28.9		ug/L		90	47 - 120
Acetophenone	32.0	33.0		ug/L		103	53 - 120
Anthracene	32.0	27.7		ug/L		87	50 - 120
Atrazine	64.0	59.2		ug/L		92	49 - 120
Benzaldehyde	64.0	121	E *	ug/L		190	40 - 160
Benzo[a]anthracene	32.0	27.7		ug/L		86	46 - 120
Benzo[a]pyrene	32.0	30.9		ug/L		96	49 - 120
Benzo[b]fluoranthene	32.0	28.6		ug/L		89	49 - 120
Benzo[g,h,i]perylene	32.0	28.0		ug/L		87	48 - 120
Benzo[k]fluoranthene	32.0	32.1		ug/L		100	50 - 120
Bis(2-chloroethoxy)methane	32.0	31.9		ug/L		100	54 - 120
Bis(2-chloroethyl)ether	32.0	31.9		ug/L		100	51 - 120
Bis(2-ethylhexyl) phthalate	32.0	33.1		ug/L		103	30 - 156
Butyl benzyl phthalate	32.0	31.8		ug/L		99	40 - 125
Caprolactam	64.0	20.2		ug/L		32	10 - 120
Carbazole	32.0	29.7		ug/L		93	46 - 127
Chrysene	32.0	29.1		ug/L		91	45 - 120
Dibenz(a,h)anthracene	32.0	25.1		ug/L		78	49 - 120
Dibenzofuran	32.0	28.9		ug/L		90	45 - 120
Diethyl phthalate	32.0	31.2		ug/L		97	48 - 121
Dimethyl phthalate	32.0	30.1		ug/L		94	50 - 120
Di-n-butyl phthalate	32.0	31.1		ug/L		97	40 - 160
Di-n-octyl phthalate	32.0	35.3		ug/L		110	40 - 128
Fluoranthene	32.0	28.5		ug/L		89	50 - 120
Fluorene	32.0	28.9		ug/L		90	50 - 120
Hexachlorobenzene	32.0	25.6		ug/L		80	46 - 120
Hexachlorobutadiene	32.0	27.4		ug/L		86	30 - 120
Hexachlorocyclopentadiene	32.0	19.8		ug/L		62	4 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-202493/22-A
Matrix: Water
Analysis Batch: 203054

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 202493

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachloroethane	32.0	29.7		ug/L		93	30 - 120
Indeno[1,2,3-cd]pyrene	32.0	29.8		ug/L		93	48 - 140
Isophorone	32.0	34.4		ug/L		108	52 - 120
Naphthalene	32.0	29.2		ug/L		91	45 - 120
Nitrobenzene	32.0	31.9		ug/L		100	54 - 120
N-Nitrosodi-n-propylamine	32.0	33.4		ug/L		104	52 - 117
N-Nitrosodiphenylamine	64.0	56.4		ug/L		88	47 - 109
Pentachlorophenol	64.0	38.4	J	ug/L		60	30 - 120
Phenol	32.0	21.9		ug/L		69	40 - 120
Phenanthrene	32.0	28.2		ug/L		88	50 - 120
Pyrene	32.0	28.6		ug/L		89	49 - 114
3 & 4 Methylphenol	32.0	29.9		ug/L		93	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*93*		*29 - 110*
2-Fluorophenol (Surr)	*88*		*15 - 110*
2,4,6-Tribromophenol (Surr)	*80*		*21 - 128*
Nitrobenzene-d5 (Surr)	*102*		*31 - 110*
Phenol-d5 (Surr)	*70*		*10 - 110*
Terphenyl-d14 (Surr)	*95*		*31 - 115*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-201435/1-A
Matrix: Solid
Analysis Batch: 201601

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201435

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0	0.41	mg/Kg		10/12/15 11:32	10/13/15 07:47	1
Barium	20	U	20	0.41	mg/Kg		10/12/15 11:32	10/13/15 07:47	1
Cadmium	0.0276	J	0.20	0.021	mg/Kg		10/12/15 11:32	10/13/15 07:47	1
Chromium	0.0907	J	0.50	0.075	mg/Kg		10/12/15 11:32	10/13/15 07:47	1
Lead	0.549		0.30	0.20	mg/Kg		10/12/15 11:32	10/13/15 07:47	1
Selenium	0.50	U	0.50	0.34	mg/Kg		10/12/15 11:32	10/13/15 07:47	1
Silver	0.50	U	0.50	0.063	mg/Kg		10/12/15 11:32	10/13/15 07:47	1

Lab Sample ID: LCS 240-201435/2-A
Matrix: Solid
Analysis Batch: 201601

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201435

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	189		mg/Kg		94	80 - 120
Barium	200	186		mg/Kg		93	80 - 120
Cadmium	5.00	4.66		mg/Kg		93	80 - 120
Chromium	20.0	18.4		mg/Kg		92	80 - 120
Lead	50.0	48.8		mg/Kg		98	80 - 120
Selenium	200	190		mg/Kg		95	80 - 120
Silver	5.00	4.87		mg/Kg		97	80 - 120

Lab Sample ID: MB 240-201393/1-A
Matrix: Water
Analysis Batch: 201786

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 201393

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10	U	10	2.9	ug/L		10/12/15 08:36	10/13/15 21:23	1
Barium	3.23	J	200	1.0	ug/L		10/12/15 08:36	10/13/15 21:23	1
Cadmium	2.0	U	2.0	0.14	ug/L		10/12/15 08:36	10/13/15 21:23	1
Chromium	5.0	U	5.0	0.55	ug/L		10/12/15 08:36	10/13/15 21:23	1
Lead	3.0	U	3.0	1.9	ug/L		10/12/15 08:36	10/13/15 21:23	1
Selenium	5.0	U	5.0	4.0	ug/L		10/12/15 08:36	10/13/15 21:23	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 08:36	10/13/15 21:23	1

Lab Sample ID: LCS 240-201393/2-A
Matrix: Water
Analysis Batch: 201786

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 201393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2000	2020		ug/L		101	80 - 120
Barium	2000	1870		ug/L		93	80 - 120
Cadmium	50.0	51.0		ug/L		102	80 - 120
Chromium	200	184		ug/L		92	80 - 120
Lead	500	458		ug/L		92	80 - 120
Selenium	2000	2050		ug/L		103	80 - 120
Silver	50.0	48.6		ug/L		97	80 - 120

Lab Sample ID: MB 240-201420/1-A
Matrix: Water
Analysis Batch: 201889

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 201420

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10	U	10	2.9	ug/L		10/12/15 10:21	10/15/15 01:20	1
Barium	1.10	J	200	1.0	ug/L		10/12/15 10:21	10/15/15 01:20	1
Cadmium	2.0	U	2.0	0.14	ug/L		10/12/15 10:21	10/15/15 01:20	1
Chromium	5.0	U	5.0	0.55	ug/L		10/12/15 10:21	10/15/15 01:20	1
Lead	3.0	U	3.0	1.9	ug/L		10/12/15 10:21	10/15/15 01:20	1
Selenium	5.0	U	5.0	4.0	ug/L		10/12/15 10:21	10/15/15 01:20	1
Silver	5.0	U	5.0	0.92	ug/L		10/12/15 10:21	10/15/15 01:20	1

Lab Sample ID: LCS 240-201420/2-A
Matrix: Water
Analysis Batch: 201889

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 201420

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2000	2010		ug/L		101	80 - 120
Barium	2000	1890		ug/L		95	80 - 120
Cadmium	50.0	51.4		ug/L		103	80 - 120
Chromium	200	194		ug/L		97	80 - 120
Lead	500	467		ug/L		93	80 - 120
Selenium	2000	2040		ug/L		102	80 - 120
Silver	50.0	50.2		ug/L		100	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 240-56464-5 MS
Matrix: Water
Analysis Batch: 201889

Client Sample ID: VAP-6-GW(20-21)
Prep Type: Total Recoverable
Prep Batch: 201420

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	10	U	2000	2040		ug/L		102	75 - 125
Barium	21	J B	2000	1940		ug/L		96	75 - 125
Cadmium	2.0	U	50.0	52.3		ug/L		105	75 - 125
Chromium	2.4	J	200	198		ug/L		98	75 - 125
Lead	3.0	U	500	471		ug/L		94	75 - 125
Selenium	5.0	U	2000	2040		ug/L		102	75 - 125
Silver	5.0	U	50.0	49.6		ug/L		99	75 - 125

Lab Sample ID: 240-56464-5 MSD
Matrix: Water
Analysis Batch: 201889

Client Sample ID: VAP-6-GW(20-21)
Prep Type: Total Recoverable
Prep Batch: 201420

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	10	U	2000	1980		ug/L		99	75 - 125	3	20
Barium	21	J B	2000	1880		ug/L		93	75 - 125	3	20
Cadmium	2.0	U	50.0	50.0		ug/L		100	75 - 125	5	20
Chromium	2.4	J	200	191		ug/L		94	75 - 125	4	20
Lead	3.0	U	500	456		ug/L		91	75 - 125	3	20
Selenium	5.0	U	2000	1980		ug/L		99	75 - 125	3	20
Silver	5.0	U	50.0	47.8		ug/L		96	75 - 125	4	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-201395/1-A
Matrix: Water
Analysis Batch: 201918

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201395

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/12/15 14:00	10/14/15 07:02	1

Lab Sample ID: LCS 240-201395/2-A
Matrix: Water
Analysis Batch: 201918

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201395

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.25		ug/L		105	80 - 120

Lab Sample ID: MB 240-201421/1-A
Matrix: Water
Analysis Batch: 201918

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201421

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/12/15 14:00	10/14/15 10:27	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-201421/2-A
Matrix: Water
Analysis Batch: 201918

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201421

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.94		ug/L		99	80 - 120

Lab Sample ID: 240-56464-5 MS
Matrix: Water
Analysis Batch: 201918

Client Sample ID: VAP-6-GW(20-21)
Prep Type: Total/NA
Prep Batch: 201421

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.20	U	1.00	0.986		ug/L		99	80 - 120

Lab Sample ID: 240-56464-5 MSD
Matrix: Water
Analysis Batch: 201918

Client Sample ID: VAP-6-GW(20-21)
Prep Type: Total/NA
Prep Batch: 201421

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.20	U	1.00	0.990		ug/L		99	80 - 120	0	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 240-201445/1-A
Matrix: Solid
Analysis Batch: 201712

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201445

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10	U	0.10	0.014	mg/Kg		10/12/15 17:25	10/13/15 09:18	1

Lab Sample ID: LCS 240-201445/2-A
Matrix: Solid
Analysis Batch: 201712

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201445

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.823		mg/Kg		99	80 - 120

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 240-202528/7-A
Matrix: Solid
Analysis Batch: 202731

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 202528

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.80	U	0.80	0.26	mg/Kg		10/19/15 11:20	10/20/15 00:00	1

Lab Sample ID: LCSI 240-202528/9-A
Matrix: Solid
Analysis Batch: 202731

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 202528

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	643	698		mg/Kg		109	75 - 125

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: LCSS 240-202528/8-A
Matrix: Solid
Analysis Batch: 202731

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 202528

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	20.0	18.1		mg/Kg		91	90 - 110

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Prep Batch: 201660

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-2	VAP-6(2-4)	Total/NA	Solid	5035	
240-56464-13	VAP-8-(1-2)	Total/NA	Solid	5035	
240-56464-23	VAP-7(2-4)	Total/NA	Solid	5035	

Analysis Batch: 201750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-2	VAP-6(2-4)	Total/NA	Solid	8260B	201660
240-56464-13	VAP-8-(1-2)	Total/NA	Solid	8260B	201660
240-56464-23	VAP-7(2-4)	Total/NA	Solid	8260B	201660
LCS 240-201750/8	Lab Control Sample	Total/NA	Solid	8260B	
MB 240-201750/9	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 201894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-28	VAP-7-GW(30-31)	Total/NA	Water	8260B	
240-56464-28 MS	VAP-7-GW(30-31)	Total/NA	Water	8260B	
240-56464-28 MSD	VAP-7-GW(30-31)	Total/NA	Water	8260B	
LCS 240-201894/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-201894/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 202626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-1	TB-05(100815)	Total/NA	Water	8260B	
240-56464-3	VAP-6-GW(12-13)	Total/NA	Water	8260B	
240-56464-4	VAP-6-GW(15-16)	Total/NA	Water	8260B	
240-56464-5	VAP-6-GW(20-21)	Total/NA	Water	8260B	
240-56464-6	VAP-6-GW(25-26)	Total/NA	Water	8260B	
240-56464-7	VAP-6-GW(30-31)	Total/NA	Water	8260B	
240-56464-8	VAP-6-GW(30-35)	Total/NA	Water	8260B	
240-56464-9	VAP-6-GW(40-41)	Total/NA	Water	8260B	
LCS 240-202626/16	Lab Control Sample	Total/NA	Water	8260B	
MB 240-202626/18	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 202687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-10	VAP-6-GW(45-46)	Total/NA	Water	8260B	
240-56464-11	VAP-6-GW(49-50)	Total/NA	Water	8260B	
240-56464-12	DUP-02(100815)	Total/NA	Water	8260B	
240-56464-12 MS	DUP-02(100815)	Total/NA	Water	8260B	
240-56464-12 MSD	DUP-02(100815)	Total/NA	Water	8260B	
240-56464-14	VAP-8-GW(18-19)	Total/NA	Water	8260B	
240-56464-15	VAP-8-GW(20-21)	Total/NA	Water	8260B	
240-56464-16	VAP-8-GW(25-26)	Total/NA	Water	8260B	
240-56464-17	VAP-8-GW(30-31)	Total/NA	Water	8260B	
240-56464-18	VAP-8-GW(35-36)	Total/NA	Water	8260B	
240-56464-19	VAP-8-GW(40-41)	Total/NA	Water	8260B	
240-56464-20	VAP-8-GW(45-46)	Total/NA	Water	8260B	
240-56464-21	VAP-8-GW(49-50)	Total/NA	Water	8260B	
240-56464-22	TB-06(100815)	Total/NA	Water	8260B	
LCS 240-202687/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-202687/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 202688

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-25	VAP-7-GW(15-16)	Total/NA	Water	8260B	
240-56464-26	VAP-7-GW(20-21)	Total/NA	Water	8260B	
240-56464-27	VAP-7-GW(25-26)	Total/NA	Water	8260B	
240-56464-29	VAP-7-GW(35-36)	Total/NA	Water	8260B	
240-56464-30	VAP-7-GW(43-44)	Total/NA	Water	8260B	
240-56464-31	VAP-7-GW(48-49)	Total/NA	Water	8260B	
240-56464-32	TB-07(100915)	Total/NA	Water	8260B	
240-56464-35	DUP-3	Total/NA	Water	8260B	
LCS 240-202688/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-202688/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 202891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-24	VAP-7-GW(13-14)	Total/NA	Water	8260B	
LCS 240-202891/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-202891/6	Method Blank	Total/NA	Water	8260B	

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Prep Batch: 201376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-2	VAP-6(2-4)	Total/NA	Solid	3540C	
LCS 240-201376/24-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-201376/23-A	Method Blank	Total/NA	Solid	3540C	

Prep Batch: 201405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-4	VAP-6-GW(15-16)	Total/NA	Water	3510C	
240-56464-5	VAP-6-GW(20-21)	Total/NA	Water	3510C	
240-56464-5 - RA	VAP-6-GW(20-21)	Total/NA	Water	3510C	
240-56464-6	VAP-6-GW(25-26)	Total/NA	Water	3510C	
240-56464-7	VAP-6-GW(30-31)	Total/NA	Water	3510C	
240-56464-8 - RA	VAP-6-GW(30-35)	Total/NA	Water	3510C	
240-56464-8	VAP-6-GW(30-35)	Total/NA	Water	3510C	
240-56464-9	VAP-6-GW(40-41)	Total/NA	Water	3510C	
240-56464-10	VAP-6-GW(45-46)	Total/NA	Water	3510C	
LCS 240-201405/22-A	Lab Control Sample	Total/NA	Water	3510C	
MB 240-201405/21-A	Method Blank	Total/NA	Water	3510C	

Prep Batch: 201406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-11	VAP-6-GW(49-50)	Total/NA	Water	3510C	
240-56464-12	DUP-02(100815)	Total/NA	Water	3510C	
240-56464-14	VAP-8-GW(18-19)	Total/NA	Water	3510C	
240-56464-15	VAP-8-GW(20-21)	Total/NA	Water	3510C	
240-56464-16 - RA	VAP-8-GW(25-26)	Total/NA	Water	3510C	
240-56464-16	VAP-8-GW(25-26)	Total/NA	Water	3510C	
240-56464-17	VAP-8-GW(30-31)	Total/NA	Water	3510C	
240-56464-18	VAP-8-GW(35-36)	Total/NA	Water	3510C	
240-56464-19	VAP-8-GW(40-41)	Total/NA	Water	3510C	
240-56464-20	VAP-8-GW(45-46)	Total/NA	Water	3510C	
240-56464-21	VAP-8-GW(49-50)	Total/NA	Water	3510C	
240-56464-24	VAP-7-GW(13-14)	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 201406 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-25	VAP-7-GW(15-16)	Total/NA	Water	3510C	
240-56464-26	VAP-7-GW(20-21)	Total/NA	Water	3510C	
240-56464-27	VAP-7-GW(25-26)	Total/NA	Water	3510C	
240-56464-28	VAP-7-GW(30-31)	Total/NA	Water	3510C	
240-56464-29	VAP-7-GW(35-36)	Total/NA	Water	3510C	
240-56464-30	VAP-7-GW(43-44)	Total/NA	Water	3510C	
240-56464-31	VAP-7-GW(48-49)	Total/NA	Water	3510C	
240-56464-35	DUP-3	Total/NA	Water	3510C	
LCS 240-201406/22-A	Lab Control Sample	Total/NA	Water	3510C	
MB 240-201406/21-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 201553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-201405/22-A	Lab Control Sample	Total/NA	Water	8270C	201405
LCS 240-201406/22-A	Lab Control Sample	Total/NA	Water	8270C	201406
MB 240-201405/21-A	Method Blank	Total/NA	Water	8270C	201405
MB 240-201406/21-A	Method Blank	Total/NA	Water	8270C	201406

Prep Batch: 201566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-13	VAP-8-(1-2)	Total/NA	Solid	3540C	
240-56464-23	VAP-7(2-4)	Total/NA	Solid	3540C	
LCS 240-201566/14-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-201566/13-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 201778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-4	VAP-6-GW(15-16)	Total/NA	Water	8270C	201405
240-56464-5	VAP-6-GW(20-21)	Total/NA	Water	8270C	201405
240-56464-6	VAP-6-GW(25-26)	Total/NA	Water	8270C	201405
240-56464-7	VAP-6-GW(30-31)	Total/NA	Water	8270C	201405
240-56464-8	VAP-6-GW(30-35)	Total/NA	Water	8270C	201405
240-56464-9	VAP-6-GW(40-41)	Total/NA	Water	8270C	201405
240-56464-10	VAP-6-GW(45-46)	Total/NA	Water	8270C	201405

Analysis Batch: 201805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-201376/24-A	Lab Control Sample	Total/NA	Solid	8270C	201376
MB 240-201376/23-A	Method Blank	Total/NA	Solid	8270C	201376

Analysis Batch: 201992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-5 - RA	VAP-6-GW(20-21)	Total/NA	Water	8270C	201405
240-56464-8 - RA	VAP-6-GW(30-35)	Total/NA	Water	8270C	201405
240-56464-11	VAP-6-GW(49-50)	Total/NA	Water	8270C	201406
240-56464-12	DUP-02(100815)	Total/NA	Water	8270C	201406
240-56464-14	VAP-8-GW(18-19)	Total/NA	Water	8270C	201406
240-56464-15	VAP-8-GW(20-21)	Total/NA	Water	8270C	201406
240-56464-16	VAP-8-GW(25-26)	Total/NA	Water	8270C	201406
240-56464-17	VAP-8-GW(30-31)	Total/NA	Water	8270C	201406
240-56464-18	VAP-8-GW(35-36)	Total/NA	Water	8270C	201406

GC/MS Semi VOA (Continued)

Analysis Batch: 201992 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-19	VAP-8-GW(40-41)	Total/NA	Water	8270C	201406
240-56464-20	VAP-8-GW(45-46)	Total/NA	Water	8270C	201406
240-56464-21	VAP-8-GW(49-50)	Total/NA	Water	8270C	201406
240-56464-24	VAP-7-GW(13-14)	Total/NA	Water	8270C	201406
240-56464-25	VAP-7-GW(15-16)	Total/NA	Water	8270C	201406
240-56464-26	VAP-7-GW(20-21)	Total/NA	Water	8270C	201406
240-56464-27	VAP-7-GW(25-26)	Total/NA	Water	8270C	201406
240-56464-28	VAP-7-GW(30-31)	Total/NA	Water	8270C	201406
240-56464-29	VAP-7-GW(35-36)	Total/NA	Water	8270C	201406
240-56464-30	VAP-7-GW(43-44)	Total/NA	Water	8270C	201406
240-56464-31	VAP-7-GW(48-49)	Total/NA	Water	8270C	201406
240-56464-35	DUP-3	Total/NA	Water	8270C	201406

Analysis Batch: 202045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-13	VAP-8-(1-2)	Total/NA	Solid	8270C	201566
LCS 240-201566/14-A	Lab Control Sample	Total/NA	Solid	8270C	201566
MB 240-201566/13-A	Method Blank	Total/NA	Solid	8270C	201566

Analysis Batch: 202201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-16 - RA	VAP-8-GW(25-26)	Total/NA	Water	8270C	201406

Analysis Batch: 202221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-23	VAP-7(2-4)	Total/NA	Solid	8270C	201566

Prep Batch: 202230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-4 - RE	VAP-6-GW(15-16)	Total/NA	Water	3510C	
240-56464-5 - RE	VAP-6-GW(20-21)	Total/NA	Water	3510C	
240-56464-6 - RE	VAP-6-GW(25-26)	Total/NA	Water	3510C	
240-56464-7 - RE	VAP-6-GW(30-31)	Total/NA	Water	3510C	
LCS 240-202230/23-A	Lab Control Sample	Total/NA	Water	3510C	
MB 240-202230/22-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 202432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-4 - RE	VAP-6-GW(15-16)	Total/NA	Water	8270C	202230
240-56464-5 - RE	VAP-6-GW(20-21)	Total/NA	Water	8270C	202230
240-56464-6 - RE	VAP-6-GW(25-26)	Total/NA	Water	8270C	202230
240-56464-7 - RE	VAP-6-GW(30-31)	Total/NA	Water	8270C	202230
LCS 240-202230/23-A	Lab Control Sample	Total/NA	Water	8270C	202230
MB 240-202230/22-A	Method Blank	Total/NA	Water	8270C	202230

Analysis Batch: 202480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-2	VAP-6(2-4)	Total/NA	Solid	8270C	201376

GC/MS Semi VOA (Continued)

Prep Batch: 202493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-14 - RE	VAP-8-GW(18-19)	Total/NA	Water	3510C	
240-56464-14 - RERA	VAP-8-GW(18-19)	Total/NA	Water	3510C	
240-56464-15 - RE	VAP-8-GW(20-21)	Total/NA	Water	3510C	
240-56464-29 - RE	VAP-7-GW(35-36)	Total/NA	Water	3510C	
240-56464-30 - RE	VAP-7-GW(43-44)	Total/NA	Water	3510C	
240-56464-31 - RE	VAP-7-GW(48-49)	Total/NA	Water	3510C	
240-56464-35 - RE	DUP-3	Total/NA	Water	3510C	
LCS 240-202493/22-A	Lab Control Sample	Total/NA	Water	3510C	
MB 240-202493/21-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 202663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-14 - RE	VAP-8-GW(18-19)	Total/NA	Water	8270C	202493
240-56464-15 - RE	VAP-8-GW(20-21)	Total/NA	Water	8270C	202493
240-56464-29 - RE	VAP-7-GW(35-36)	Total/NA	Water	8270C	202493
240-56464-30 - RE	VAP-7-GW(43-44)	Total/NA	Water	8270C	202493
240-56464-31 - RE	VAP-7-GW(48-49)	Total/NA	Water	8270C	202493
240-56464-35 - RE	DUP-3	Total/NA	Water	8270C	202493

Analysis Batch: 202845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-14 - RERA	VAP-8-GW(18-19)	Total/NA	Water	8270C	202493

Analysis Batch: 203054

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-202493/22-A	Lab Control Sample	Total/NA	Water	8270C	202493
MB 240-202493/21-A	Method Blank	Total/NA	Water	8270C	202493

Metals

Prep Batch: 201393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-27	VAP-7-GW(25-26)	Total Recoverable	Water	3005A	
240-56464-28	VAP-7-GW(30-31)	Total Recoverable	Water	3005A	
240-56464-29	VAP-7-GW(35-36)	Total Recoverable	Water	3005A	
240-56464-30	VAP-7-GW(43-44)	Total Recoverable	Water	3005A	
240-56464-31	VAP-7-GW(48-49)	Total Recoverable	Water	3005A	
240-56464-35	DUP-3	Total Recoverable	Water	3005A	
LCS 240-201393/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-201393/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 201395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-27	VAP-7-GW(25-26)	Total/NA	Water	7470A	
240-56464-28	VAP-7-GW(30-31)	Total/NA	Water	7470A	
240-56464-29	VAP-7-GW(35-36)	Total/NA	Water	7470A	
240-56464-30	VAP-7-GW(43-44)	Total/NA	Water	7470A	
240-56464-31	VAP-7-GW(48-49)	Total/NA	Water	7470A	
240-56464-35	DUP-3	Total/NA	Water	7470A	
LCS 240-201395/2-A	Lab Control Sample	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 201395 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-201395/1-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 201420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-4	VAP-6-GW(15-16)	Total Recoverable	Water	3005A	
240-56464-5	VAP-6-GW(20-21)	Total Recoverable	Water	3005A	
240-56464-5 MS	VAP-6-GW(20-21)	Total Recoverable	Water	3005A	
240-56464-5 MSD	VAP-6-GW(20-21)	Total Recoverable	Water	3005A	
240-56464-6	VAP-6-GW(25-26)	Total Recoverable	Water	3005A	
240-56464-7	VAP-6-GW(30-31)	Total Recoverable	Water	3005A	
240-56464-8	VAP-6-GW(30-35)	Total Recoverable	Water	3005A	
240-56464-9	VAP-6-GW(40-41)	Total Recoverable	Water	3005A	
240-56464-10	VAP-6-GW(45-46)	Total Recoverable	Water	3005A	
240-56464-11	VAP-6-GW(49-50)	Total Recoverable	Water	3005A	
240-56464-12	DUP-02(100815)	Total Recoverable	Water	3005A	
240-56464-14	VAP-8-GW(18-19)	Total Recoverable	Water	3005A	
240-56464-15	VAP-8-GW(20-21)	Total Recoverable	Water	3005A	
240-56464-16	VAP-8-GW(25-26)	Total Recoverable	Water	3005A	
240-56464-17	VAP-8-GW(30-31)	Total Recoverable	Water	3005A	
240-56464-18	VAP-8-GW(35-36)	Total Recoverable	Water	3005A	
240-56464-19	VAP-8-GW(40-41)	Total Recoverable	Water	3005A	
240-56464-20	VAP-8-GW(45-46)	Total Recoverable	Water	3005A	
240-56464-21	VAP-8-GW(49-50)	Total Recoverable	Water	3005A	
240-56464-24	VAP-7-GW(13-14)	Total Recoverable	Water	3005A	
240-56464-25	VAP-7-GW(15-16)	Total Recoverable	Water	3005A	
240-56464-26	VAP-7-GW(20-21)	Total Recoverable	Water	3005A	
LCS 240-201420/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-201420/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 201421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-4	VAP-6-GW(15-16)	Total/NA	Water	7470A	
240-56464-5	VAP-6-GW(20-21)	Total/NA	Water	7470A	
240-56464-5 MS	VAP-6-GW(20-21)	Total/NA	Water	7470A	
240-56464-5 MSD	VAP-6-GW(20-21)	Total/NA	Water	7470A	
240-56464-6	VAP-6-GW(25-26)	Total/NA	Water	7470A	
240-56464-7	VAP-6-GW(30-31)	Total/NA	Water	7470A	
240-56464-8	VAP-6-GW(30-35)	Total/NA	Water	7470A	
240-56464-9	VAP-6-GW(40-41)	Total/NA	Water	7470A	
240-56464-10	VAP-6-GW(45-46)	Total/NA	Water	7470A	
240-56464-11	VAP-6-GW(49-50)	Total/NA	Water	7470A	
240-56464-12	DUP-02(100815)	Total/NA	Water	7470A	
240-56464-14	VAP-8-GW(18-19)	Total/NA	Water	7470A	
240-56464-15	VAP-8-GW(20-21)	Total/NA	Water	7470A	
240-56464-16	VAP-8-GW(25-26)	Total/NA	Water	7470A	
240-56464-17	VAP-8-GW(30-31)	Total/NA	Water	7470A	
240-56464-18	VAP-8-GW(35-36)	Total/NA	Water	7470A	
240-56464-19	VAP-8-GW(40-41)	Total/NA	Water	7470A	
240-56464-20	VAP-8-GW(45-46)	Total/NA	Water	7470A	
240-56464-21	VAP-8-GW(49-50)	Total/NA	Water	7470A	
240-56464-24	VAP-7-GW(13-14)	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 201421 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-25	VAP-7-GW(15-16)	Total/NA	Water	7470A	
240-56464-26	VAP-7-GW(20-21)	Total/NA	Water	7470A	
LCS 240-201421/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 240-201421/1-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 201435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-2	VAP-6(2-4)	Total/NA	Solid	3050B	
240-56464-13	VAP-8-(1-2)	Total/NA	Solid	3050B	
240-56464-23	VAP-7(2-4)	Total/NA	Solid	3050B	
LCS 240-201435/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 240-201435/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 201445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-2	VAP-6(2-4)	Total/NA	Solid	7471A	
240-56464-13	VAP-8-(1-2)	Total/NA	Solid	7471A	
240-56464-23	VAP-7(2-4)	Total/NA	Solid	7471A	
LCS 240-201445/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 240-201445/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 201601

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-201435/2-A	Lab Control Sample	Total/NA	Solid	6010B	201435
MB 240-201435/1-A	Method Blank	Total/NA	Solid	6010B	201435

Analysis Batch: 201712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-2	VAP-6(2-4)	Total/NA	Solid	7471A	201445
240-56464-13	VAP-8-(1-2)	Total/NA	Solid	7471A	201445
240-56464-23	VAP-7(2-4)	Total/NA	Solid	7471A	201445
LCS 240-201445/2-A	Lab Control Sample	Total/NA	Solid	7471A	201445
MB 240-201445/1-A	Method Blank	Total/NA	Solid	7471A	201445

Analysis Batch: 201786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-2	VAP-6(2-4)	Total/NA	Solid	6010B	201435
240-56464-13	VAP-8-(1-2)	Total/NA	Solid	6010B	201435
240-56464-23	VAP-7(2-4)	Total/NA	Solid	6010B	201435
240-56464-27	VAP-7-GW(25-26)	Total Recoverable	Water	6010B	201393
240-56464-28	VAP-7-GW(30-31)	Total Recoverable	Water	6010B	201393
240-56464-29	VAP-7-GW(35-36)	Total Recoverable	Water	6010B	201393
240-56464-30	VAP-7-GW(43-44)	Total Recoverable	Water	6010B	201393
240-56464-31	VAP-7-GW(48-49)	Total Recoverable	Water	6010B	201393
240-56464-35	DUP-3	Total Recoverable	Water	6010B	201393
LCS 240-201393/2-A	Lab Control Sample	Total Recoverable	Water	6010B	201393
MB 240-201393/1-A	Method Blank	Total Recoverable	Water	6010B	201393

Analysis Batch: 201889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-4	VAP-6-GW(15-16)	Total Recoverable	Water	6010B	201420

Metals (Continued)

Analysis Batch: 201889 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-5	VAP-6-GW(20-21)	Total Recoverable	Water	6010B	201420
240-56464-5 MS	VAP-6-GW(20-21)	Total Recoverable	Water	6010B	201420
240-56464-5 MSD	VAP-6-GW(20-21)	Total Recoverable	Water	6010B	201420
240-56464-6	VAP-6-GW(25-26)	Total Recoverable	Water	6010B	201420
240-56464-7	VAP-6-GW(30-31)	Total Recoverable	Water	6010B	201420
240-56464-8	VAP-6-GW(30-35)	Total Recoverable	Water	6010B	201420
240-56464-8	VAP-6-GW(30-35)	Total Recoverable	Water	6010B	201420
240-56464-9	VAP-6-GW(40-41)	Total Recoverable	Water	6010B	201420
240-56464-10	VAP-6-GW(45-46)	Total Recoverable	Water	6010B	201420
240-56464-11	VAP-6-GW(49-50)	Total Recoverable	Water	6010B	201420
240-56464-12	DUP-02(100815)	Total Recoverable	Water	6010B	201420
240-56464-14	VAP-8-GW(18-19)	Total Recoverable	Water	6010B	201420
240-56464-15	VAP-8-GW(20-21)	Total Recoverable	Water	6010B	201420
240-56464-16	VAP-8-GW(25-26)	Total Recoverable	Water	6010B	201420
240-56464-16	VAP-8-GW(25-26)	Total Recoverable	Water	6010B	201420
240-56464-17	VAP-8-GW(30-31)	Total Recoverable	Water	6010B	201420
240-56464-18	VAP-8-GW(35-36)	Total Recoverable	Water	6010B	201420
240-56464-19	VAP-8-GW(40-41)	Total Recoverable	Water	6010B	201420
240-56464-20	VAP-8-GW(45-46)	Total Recoverable	Water	6010B	201420
240-56464-21	VAP-8-GW(49-50)	Total Recoverable	Water	6010B	201420
240-56464-24	VAP-7-GW(13-14)	Total Recoverable	Water	6010B	201420
240-56464-25	VAP-7-GW(15-16)	Total Recoverable	Water	6010B	201420
240-56464-26	VAP-7-GW(20-21)	Total Recoverable	Water	6010B	201420
LCS 240-201420/2-A	Lab Control Sample	Total Recoverable	Water	6010B	201420
MB 240-201420/1-A	Method Blank	Total Recoverable	Water	6010B	201420

Analysis Batch: 201918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-4	VAP-6-GW(15-16)	Total/NA	Water	7470A	201421
240-56464-5	VAP-6-GW(20-21)	Total/NA	Water	7470A	201421
240-56464-5 MS	VAP-6-GW(20-21)	Total/NA	Water	7470A	201421
240-56464-5 MSD	VAP-6-GW(20-21)	Total/NA	Water	7470A	201421
240-56464-6	VAP-6-GW(25-26)	Total/NA	Water	7470A	201421
240-56464-7	VAP-6-GW(30-31)	Total/NA	Water	7470A	201421
240-56464-8	VAP-6-GW(30-35)	Total/NA	Water	7470A	201421
240-56464-9	VAP-6-GW(40-41)	Total/NA	Water	7470A	201421
240-56464-10	VAP-6-GW(45-46)	Total/NA	Water	7470A	201421
240-56464-11	VAP-6-GW(49-50)	Total/NA	Water	7470A	201421
240-56464-12	DUP-02(100815)	Total/NA	Water	7470A	201421
240-56464-14	VAP-8-GW(18-19)	Total/NA	Water	7470A	201421
240-56464-15	VAP-8-GW(20-21)	Total/NA	Water	7470A	201421
240-56464-16	VAP-8-GW(25-26)	Total/NA	Water	7470A	201421
240-56464-17	VAP-8-GW(30-31)	Total/NA	Water	7470A	201421
240-56464-18	VAP-8-GW(35-36)	Total/NA	Water	7470A	201421
240-56464-19	VAP-8-GW(40-41)	Total/NA	Water	7470A	201421
240-56464-20	VAP-8-GW(45-46)	Total/NA	Water	7470A	201421
240-56464-21	VAP-8-GW(49-50)	Total/NA	Water	7470A	201421
240-56464-24	VAP-7-GW(13-14)	Total/NA	Water	7470A	201421
240-56464-25	VAP-7-GW(15-16)	Total/NA	Water	7470A	201421
240-56464-26	VAP-7-GW(20-21)	Total/NA	Water	7470A	201421
240-56464-27	VAP-7-GW(25-26)	Total/NA	Water	7470A	201395

Metals (Continued)

Analysis Batch: 201918 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-28	VAP-7-GW(30-31)	Total/NA	Water	7470A	201395
240-56464-29	VAP-7-GW(35-36)	Total/NA	Water	7470A	201395
240-56464-30	VAP-7-GW(43-44)	Total/NA	Water	7470A	201395
240-56464-31	VAP-7-GW(48-49)	Total/NA	Water	7470A	201395
240-56464-35	DUP-3	Total/NA	Water	7470A	201395
LCS 240-201395/2-A	Lab Control Sample	Total/NA	Water	7470A	201395
LCS 240-201421/2-A	Lab Control Sample	Total/NA	Water	7470A	201421
MB 240-201395/1-A	Method Blank	Total/NA	Water	7470A	201395
MB 240-201421/1-A	Method Blank	Total/NA	Water	7470A	201421

General Chemistry

Analysis Batch: 201423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-2	VAP-6(2-4)	Total/NA	Solid	Moisture	
240-56464-13	VAP-8-(1-2)	Total/NA	Solid	Moisture	
240-56464-23	VAP-7(2-4)	Total/NA	Solid	Moisture	

Prep Batch: 202528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-2	VAP-6(2-4)	Total/NA	Solid	3060A	
240-56464-13	VAP-8-(1-2)	Total/NA	Solid	3060A	
240-56464-23	VAP-7(2-4)	Total/NA	Solid	3060A	
LCSI 240-202528/9-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 240-202528/8-A	Lab Control Sample	Total/NA	Solid	3060A	
MB 240-202528/7-A	Method Blank	Total/NA	Solid	3060A	

Analysis Batch: 202731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-2	VAP-6(2-4)	Total/NA	Solid	7196A	202528
240-56464-13	VAP-8-(1-2)	Total/NA	Solid	7196A	202528
240-56464-23	VAP-7(2-4)	Total/NA	Solid	7196A	202528
LCSI 240-202528/9-A	Lab Control Sample	Total/NA	Solid	7196A	202528
LCSS 240-202528/8-A	Lab Control Sample	Total/NA	Solid	7196A	202528
MB 240-202528/7-A	Method Blank	Total/NA	Solid	7196A	202528

Client Sample ID: TB-05(100815)
Date Collected: 10/08/15 00:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	202626	10/20/15 01:52	RJQ	TAL CAN

Client Sample ID: VAP-6(2-4)
Date Collected: 10/08/15 00:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	201423	10/12/15 10:38	JMB	TAL CAN

Client Sample ID: VAP-6(2-4)
Date Collected: 10/08/15 00:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-2
Matrix: Solid
Percent Solids: 80.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			201660	10/13/15 12:14	LAM	TAL CAN
Total/NA	Analysis	8260B		1	201750	10/14/15 08:30	TJL2	TAL CAN
Total/NA	Prep	3540C			201376	10/12/15 07:51	NAK	TAL CAN
Total/NA	Analysis	8270C		1	202480	10/19/15 18:35	JMG	TAL CAN
Total/NA	Prep	3050B			201435	10/12/15 11:32	DEE	TAL CAN
Total/NA	Analysis	6010B		1	201786	10/13/15 18:46	KLC	TAL CAN
Total/NA	Prep	7471A			201445	10/12/15 17:25	DEE	TAL CAN
Total/NA	Analysis	7471A		1	201712	10/13/15 09:42	WAL	TAL CAN
Total/NA	Prep	3060A			202528	10/19/15 11:20	JMB	TAL CAN
Total/NA	Analysis	7196A		1	202731	10/20/15 11:19	JMB	TAL CAN

Client Sample ID: VAP-6-GW(12-13)
Date Collected: 10/08/15 08:40
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	202626	10/20/15 02:15	RJQ	TAL CAN

Client Sample ID: VAP-6-GW(15-16)
Date Collected: 10/08/15 09:21
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	202626	10/20/15 02:37	RJQ	TAL CAN
Total/NA	Prep	3510C			201405	10/12/15 09:30	CS	TAL CAN
Total/NA	Analysis	8270C		1	201778	10/14/15 16:19	TMH	TAL CAN
Total/NA	Prep	3510C	RE		202230	10/16/15 08:59	CSC	TAL CAN
Total/NA	Analysis	8270C	RE	1	202432	10/19/15 13:52	TMH	TAL CAN

Client Sample ID: VAP-6-GW(15-16)

Lab Sample ID: 240-56464-4

Date Collected: 10/08/15 09:21

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			201420	10/12/15 10:21	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201889	10/15/15 01:55	KLC	TAL CAN
Total/NA	Prep	7470A			201421	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 11:15	WAL	TAL CAN

Client Sample ID: VAP-6-GW(20-21)

Lab Sample ID: 240-56464-5

Date Collected: 10/08/15 09:42

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		33.33	202626	10/20/15 03:00	RJQ	TAL CAN
Total/NA	Prep	3510C			201405	10/12/15 09:30	CS	TAL CAN
Total/NA	Analysis	8270C		1	201778	10/14/15 16:43	TMH	TAL CAN
Total/NA	Prep	3510C	RA		201405	10/12/15 09:30	CS	TAL CAN
Total/NA	Analysis	8270C	RA	4	201992	10/15/15 10:37	TMH	TAL CAN
Total/NA	Prep	3510C	RE		202230	10/16/15 08:59	CSC	TAL CAN
Total/NA	Analysis	8270C	RE	1	202432	10/19/15 14:15	TMH	TAL CAN
Total Recoverable	Prep	3005A			201420	10/12/15 10:21	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201889	10/15/15 07:22	KLC	TAL CAN
Total/NA	Prep	7470A			201421	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 10:32	WAL	TAL CAN

Client Sample ID: VAP-6-GW(25-26)

Lab Sample ID: 240-56464-6

Date Collected: 10/08/15 10:10

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		40	202626	10/20/15 03:28	RJQ	TAL CAN
Total/NA	Prep	3510C			201405	10/12/15 09:30	CS	TAL CAN
Total/NA	Analysis	8270C		1	201778	10/14/15 17:06	TMH	TAL CAN
Total/NA	Prep	3510C	RE		202230	10/16/15 08:59	CSC	TAL CAN
Total/NA	Analysis	8270C	RE	1	202432	10/19/15 14:39	TMH	TAL CAN
Total Recoverable	Prep	3005A			201420	10/12/15 10:21	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201889	10/15/15 02:00	KLC	TAL CAN
Total/NA	Prep	7470A			201421	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 11:17	WAL	TAL CAN

Client Sample ID: VAP-6-GW(30-31)

Lab Sample ID: 240-56464-7

Date Collected: 10/08/15 10:35

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	202626	10/20/15 03:50	RJQ	TAL CAN

Client Sample ID: VAP-6-GW(30-31)

Lab Sample ID: 240-56464-7

Date Collected: 10/08/15 10:35

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			201405	10/12/15 09:30	CS	TAL CAN
Total/NA	Analysis	8270C		1	201778	10/14/15 17:29	TMH	TAL CAN
Total/NA	Prep	3510C	RE		202230	10/16/15 08:59	CSC	TAL CAN
Total/NA	Analysis	8270C	RE	1	202432	10/19/15 15:02	TMH	TAL CAN
Total Recoverable	Prep	3005A			201420	10/12/15 10:21	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201889	10/15/15 02:04	KLC	TAL CAN
Total/NA	Prep	7470A			201421	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 11:20	WAL	TAL CAN

Client Sample ID: VAP-6-GW(30-35)

Lab Sample ID: 240-56464-8

Date Collected: 10/08/15 11:15

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		40	202626	10/20/15 04:12	RJQ	TAL CAN
Total/NA	Prep	3510C			201405	10/12/15 09:30	CS	TAL CAN
Total/NA	Analysis	8270C		1	201778	10/14/15 17:53	TMH	TAL CAN
Total/NA	Prep	3510C	RA		201405	10/12/15 09:30	CS	TAL CAN
Total/NA	Analysis	8270C	RA	4	201992	10/15/15 11:00	TMH	TAL CAN
Total Recoverable	Prep	3005A			201420	10/12/15 10:21	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201889	10/15/15 02:08	KLC	TAL CAN
Total Recoverable	Prep	3005A			201420	10/12/15 10:21	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201889	10/15/15 07:35	KLC	TAL CAN
Total/NA	Prep	7470A			201421	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 11:22	WAL	TAL CAN

Client Sample ID: VAP-6-GW(40-41)

Lab Sample ID: 240-56464-9

Date Collected: 10/08/15 11:40

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		25	202626	10/20/15 04:35	RJQ	TAL CAN
Total/NA	Prep	3510C			201405	10/12/15 09:30	CS	TAL CAN
Total/NA	Analysis	8270C		1	201778	10/14/15 18:16	TMH	TAL CAN
Total Recoverable	Prep	3005A			201420	10/12/15 10:21	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201889	10/15/15 02:12	KLC	TAL CAN
Total/NA	Prep	7470A			201421	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 11:24	WAL	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-6-GW(45-46)

Lab Sample ID: 240-56464-10

Date Collected: 10/08/15 12:23
Matrix: Water
Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		4	202687	10/20/15 11:35	LEE	TAL CAN
Total/NA	Prep	3510C			201405	10/12/15 09:30	CS	TAL CAN
Total/NA	Analysis	8270C		1	201778	10/14/15 18:39	TMH	TAL CAN
Total Recoverable	Prep	3005A			201420	10/12/15 10:21	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201889	10/15/15 02:24	KLC	TAL CAN
Total/NA	Prep	7470A			201421	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 11:31	WAL	TAL CAN

Client Sample ID: VAP-6-GW(49-50)

Lab Sample ID: 240-56464-11

Date Collected: 10/08/15 12:47
Matrix: Water
Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	202687	10/20/15 11:58	LEE	TAL CAN
Total/NA	Prep	3510C			201406	10/12/15 09:34	CS	TAL CAN
Total/NA	Analysis	8270C		1	201992	10/15/15 11:23	TMH	TAL CAN
Total Recoverable	Prep	3005A			201420	10/12/15 10:21	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201889	10/15/15 02:28	KLC	TAL CAN
Total/NA	Prep	7470A			201421	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 10:38	WAL	TAL CAN

Client Sample ID: DUP-02(100815)

Lab Sample ID: 240-56464-12

Date Collected: 10/08/15 00:00
Matrix: Water
Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	202687	10/20/15 12:20	LEE	TAL CAN
Total/NA	Prep	3510C			201406	10/12/15 09:34	CS	TAL CAN
Total/NA	Analysis	8270C		1	201992	10/15/15 11:47	TMH	TAL CAN
Total Recoverable	Prep	3005A			201420	10/12/15 10:21	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201889	10/15/15 02:32	KLC	TAL CAN
Total/NA	Prep	7470A			201421	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 10:44	WAL	TAL CAN

Client Sample ID: VAP-8-(1-2)

Lab Sample ID: 240-56464-13

Date Collected: 10/08/15 13:35
Matrix: Solid
Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	201423	10/12/15 10:38	JMB	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: VAP-8-(1-2)

Lab Sample ID: 240-56464-13

Date Collected: 10/08/15 13:35
Date Received: 10/10/15 09:45

Matrix: Solid
Percent Solids: 81.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			201660	10/13/15 12:14	LAM	TAL CAN
Total/NA	Analysis	8260B		1	201750	10/14/15 08:51	TJL2	TAL CAN
Total/NA	Prep	3540C			201566	10/13/15 08:07	SDE	TAL CAN
Total/NA	Analysis	8270C		1	202045	10/15/15 19:03	JMG	TAL CAN
Total/NA	Prep	3050B			201435	10/12/15 11:32	DEE	TAL CAN
Total/NA	Analysis	6010B		1	201786	10/13/15 18:50	KLC	TAL CAN
Total/NA	Prep	7471A			201445	10/12/15 17:25	DEE	TAL CAN
Total/NA	Analysis	7471A		1	201712	10/13/15 09:44	WAL	TAL CAN
Total/NA	Prep	3060A			202528	10/19/15 11:20	JMB	TAL CAN
Total/NA	Analysis	7196A		1	202731	10/20/15 11:22	JMB	TAL CAN

Client Sample ID: VAP-8-GW(18-19)

Lab Sample ID: 240-56464-14

Date Collected: 10/08/15 14:00
Date Received: 10/10/15 09:45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		3.33	202687	10/20/15 12:43	LEE	TAL CAN
Total/NA	Prep	3510C			201406	10/12/15 09:34	CS	TAL CAN
Total/NA	Analysis	8270C		1	201992	10/15/15 12:10	TMH	TAL CAN
Total/NA	Prep	3510C	RE		202493	10/19/15 09:03	JDR	TAL CAN
Total/NA	Analysis	8270C	RE	1	202663	10/20/15 14:13	TMH	TAL CAN
Total/NA	Prep	3510C	RERA		202493	10/19/15 09:03	JDR	TAL CAN
Total/NA	Analysis	8270C	RERA	5	202845	10/21/15 17:33	TMH	TAL CAN
Total Recoverable	Prep	3005A			201420	10/12/15 10:21	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201889	10/15/15 02:36	KLC	TAL CAN
Total/NA	Prep	7470A			201421	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 10:47	WAL	TAL CAN

Client Sample ID: VAP-8-GW(20-21)

Lab Sample ID: 240-56464-15

Date Collected: 10/08/15 14:40
Date Received: 10/10/15 09:45

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2.5	202687	10/20/15 13:05	LEE	TAL CAN
Total/NA	Prep	3510C			201406	10/12/15 09:34	CS	TAL CAN
Total/NA	Analysis	8270C		1	201992	10/15/15 12:33	TMH	TAL CAN
Total/NA	Prep	3510C	RE		202493	10/19/15 09:03	JDR	TAL CAN
Total/NA	Analysis	8270C	RE	1	202663	10/20/15 14:37	TMH	TAL CAN
Total Recoverable	Prep	3005A			201420	10/12/15 10:21	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201889	10/15/15 02:40	KLC	TAL CAN
Total/NA	Prep	7470A			201421	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 11:05	WAL	TAL CAN

Client Sample ID: VAP-8-GW(25-26)

Lab Sample ID: 240-56464-16

Date Collected: 10/08/15 15:01

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	202687	10/20/15 13:28	LEE	TAL CAN
Total/NA	Prep	3510C			201406	10/12/15 09:34	CS	TAL CAN
Total/NA	Analysis	8270C		1	201992	10/15/15 12:57	TMH	TAL CAN
Total/NA	Prep	3510C	RA		201406	10/12/15 09:34	CS	TAL CAN
Total/NA	Analysis	8270C	RA	4	202201	10/16/15 09:48	TMH	TAL CAN
Total Recoverable	Prep	3005A			201420	10/12/15 10:21	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201889	10/15/15 02:44	KLC	TAL CAN
Total Recoverable	Prep	3005A			201420	10/12/15 10:21	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201889	10/15/15 07:39	KLC	TAL CAN
Total/NA	Prep	7470A			201421	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 11:11	WAL	TAL CAN

Client Sample ID: VAP-8-GW(30-31)

Lab Sample ID: 240-56464-17

Date Collected: 10/08/15 15:27

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	202687	10/20/15 13:51	LEE	TAL CAN
Total/NA	Prep	3510C			201406	10/12/15 09:34	CS	TAL CAN
Total/NA	Analysis	8270C		1	201992	10/15/15 13:20	TMH	TAL CAN
Total Recoverable	Prep	3005A			201420	10/12/15 10:21	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201889	10/15/15 02:48	KLC	TAL CAN
Total/NA	Prep	7470A			201421	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 11:13	WAL	TAL CAN

Client Sample ID: VAP-8-GW(35-36)

Lab Sample ID: 240-56464-18

Date Collected: 10/08/15 15:55

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	202687	10/20/15 14:13	LEE	TAL CAN
Total/NA	Prep	3510C			201406	10/12/15 09:34	CS	TAL CAN
Total/NA	Analysis	8270C		1	201992	10/15/15 13:44	TMH	TAL CAN
Total Recoverable	Prep	3005A			201420	10/12/15 10:21	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201889	10/15/15 02:52	KLC	TAL CAN
Total/NA	Prep	7470A			201421	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 10:59	WAL	TAL CAN

Client Sample ID: VAP-8-GW(40-41)

Lab Sample ID: 240-56464-19

Date Collected: 10/08/15 16:38

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	202687	10/20/15 14:36	LEE	TAL CAN
Total/NA	Prep	3510C			201406	10/12/15 09:34	CS	TAL CAN
Total/NA	Analysis	8270C		1	201992	10/15/15 14:07	TMH	TAL CAN
Total Recoverable	Prep	3005A			201420	10/12/15 10:21	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201889	10/15/15 02:56	KLC	TAL CAN
Total/NA	Prep	7470A			201421	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 10:57	WAL	TAL CAN

Client Sample ID: VAP-8-GW(45-46)

Lab Sample ID: 240-56464-20

Date Collected: 10/08/15 17:08

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	202687	10/20/15 14:58	LEE	TAL CAN
Total/NA	Prep	3510C			201406	10/12/15 09:34	CS	TAL CAN
Total/NA	Analysis	8270C		1	201992	10/15/15 14:30	TMH	TAL CAN
Total Recoverable	Prep	3005A			201420	10/12/15 10:21	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201889	10/15/15 03:00	KLC	TAL CAN
Total/NA	Prep	7470A			201421	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 10:49	WAL	TAL CAN

Client Sample ID: VAP-8-GW(49-50)

Lab Sample ID: 240-56464-21

Date Collected: 10/08/15 17:40

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	202687	10/20/15 15:21	LEE	TAL CAN
Total/NA	Prep	3510C			201406	10/12/15 09:34	CS	TAL CAN
Total/NA	Analysis	8270C		1	201992	10/15/15 14:54	TMH	TAL CAN
Total Recoverable	Prep	3005A			201420	10/12/15 10:21	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201889	10/15/15 03:12	KLC	TAL CAN
Total/NA	Prep	7470A			201421	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 10:51	WAL	TAL CAN

Client Sample ID: TB-06(100815)

Lab Sample ID: 240-56464-22

Date Collected: 10/08/15 00:00

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	202687	10/20/15 15:44	LEE	TAL CAN

Client Sample ID: VAP-7(2-4)
Date Collected: 10/09/15 08:07
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-23
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	201423	10/12/15 10:38	JMB	TAL CAN

Client Sample ID: VAP-7(2-4)
Date Collected: 10/09/15 08:07
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-23
Matrix: Solid
Percent Solids: 80.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			201660	10/13/15 12:14	LAM	TAL CAN
Total/NA	Analysis	8260B		1	201750	10/14/15 09:12	TJL2	TAL CAN
Total/NA	Prep	3540C			201566	10/13/15 08:07	SDE	TAL CAN
Total/NA	Analysis	8270C		1	202221	10/16/15 17:22	JMG	TAL CAN
Total/NA	Prep	3050B			201435	10/12/15 11:32	DEE	TAL CAN
Total/NA	Analysis	6010B		1	201786	10/13/15 18:54	KLC	TAL CAN
Total/NA	Prep	7471A			201445	10/12/15 17:25	DEE	TAL CAN
Total/NA	Analysis	7471A		1	201712	10/13/15 09:37	WAL	TAL CAN
Total/NA	Prep	3060A			202528	10/19/15 11:20	JMB	TAL CAN
Total/NA	Analysis	7196A		1	202731	10/20/15 11:24	JMB	TAL CAN

Client Sample ID: VAP-7-GW(13-14)
Date Collected: 10/09/15 08:45
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-24
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	202891	10/21/15 18:38	LEE	TAL CAN
Total/NA	Prep	3510C			201406	10/12/15 09:34	CS	TAL CAN
Total/NA	Analysis	8270C		1	201992	10/15/15 15:17	TMH	TAL CAN
Total Recoverable	Prep	3005A			201420	10/12/15 10:21	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201889	10/15/15 03:16	KLC	TAL CAN
Total/NA	Prep	7470A			201421	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 11:03	WAL	TAL CAN

Client Sample ID: VAP-7-GW(15-16)
Date Collected: 10/09/15 09:30
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-25
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	202688	10/20/15 12:01	LEE	TAL CAN
Total/NA	Prep	3510C			201406	10/12/15 09:34	CS	TAL CAN
Total/NA	Analysis	8270C		1	201992	10/15/15 15:40	TMH	TAL CAN
Total Recoverable	Prep	3005A			201420	10/12/15 10:21	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201889	10/15/15 03:20	KLC	TAL CAN
Total/NA	Prep	7470A			201421	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 10:53	WAL	TAL CAN

Client Sample ID: VAP-7-GW(20-21)

Lab Sample ID: 240-56464-26

Date Collected: 10/09/15 10:00

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	202688	10/20/15 12:23	LEE	TAL CAN
Total/NA	Prep	3510C			201406	10/12/15 09:34	CS	TAL CAN
Total/NA	Analysis	8270C		1	201992	10/15/15 16:04	TMH	TAL CAN
Total Recoverable	Prep	3005A			201420	10/12/15 10:21	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201889	10/15/15 03:24	KLC	TAL CAN
Total/NA	Prep	7470A			201421	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 10:55	WAL	TAL CAN

Client Sample ID: VAP-7-GW(25-26)

Lab Sample ID: 240-56464-27

Date Collected: 10/09/15 10:34

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		3.33	202688	10/20/15 13:22	LEE	TAL CAN
Total/NA	Prep	3510C			201406	10/12/15 09:34	CS	TAL CAN
Total/NA	Analysis	8270C		1	201992	10/15/15 16:27	TMH	TAL CAN
Total Recoverable	Prep	3005A			201393	10/12/15 08:36	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201786	10/13/15 23:01	KLC	TAL CAN
Total/NA	Prep	7470A			201395	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 07:31	WAL	TAL CAN

Client Sample ID: VAP-7-GW(30-31)

Lab Sample ID: 240-56464-28

Date Collected: 10/09/15 10:57

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	201894	10/14/15 21:31	LEE	TAL CAN
Total/NA	Prep	3510C			201406	10/12/15 09:34	CS	TAL CAN
Total/NA	Analysis	8270C		1	201992	10/15/15 16:51	TMH	TAL CAN
Total Recoverable	Prep	3005A			201393	10/12/15 08:36	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201786	10/13/15 23:05	KLC	TAL CAN
Total/NA	Prep	7470A			201395	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 07:37	WAL	TAL CAN

Client Sample ID: VAP-7-GW(35-36)

Lab Sample ID: 240-56464-29

Date Collected: 10/09/15 11:34

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	202688	10/20/15 13:45	LEE	TAL CAN
Total/NA	Prep	3510C			201406	10/12/15 09:34	CS	TAL CAN
Total/NA	Analysis	8270C		1	201992	10/15/15 17:14	TMH	TAL CAN
Total/NA	Prep	3510C	RE		202493	10/19/15 09:03	JDR	TAL CAN

Client Sample ID: VAP-7-GW(35-36)

Lab Sample ID: 240-56464-29

Date Collected: 10/09/15 11:34

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C	RE	1	202663	10/20/15 15:00	TMH	TAL CAN
Total Recoverable	Prep	3005A			201393	10/12/15 08:36	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201786	10/13/15 23:17	KLC	TAL CAN
Total/NA	Prep	7470A			201395	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 07:39	WAL	TAL CAN

Client Sample ID: VAP-7-GW(43-44)

Lab Sample ID: 240-56464-30

Date Collected: 10/09/15 11:57

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	202688	10/20/15 14:08	LEE	TAL CAN
Total/NA	Prep	3510C			201406	10/12/15 09:34	CS	TAL CAN
Total/NA	Analysis	8270C		1	201992	10/15/15 17:37	TMH	TAL CAN
Total/NA	Prep	3510C	RE		202493	10/19/15 09:03	JDR	TAL CAN
Total/NA	Analysis	8270C	RE	1	202663	10/20/15 15:23	TMH	TAL CAN
Total Recoverable	Prep	3005A			201393	10/12/15 08:36	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201786	10/13/15 23:21	KLC	TAL CAN
Total/NA	Prep	7470A			201395	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 07:41	WAL	TAL CAN

Client Sample ID: VAP-7-GW(48-49)

Lab Sample ID: 240-56464-31

Date Collected: 10/09/15 12:26

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	202688	10/20/15 14:30	LEE	TAL CAN
Total/NA	Prep	3510C			201406	10/12/15 09:34	CS	TAL CAN
Total/NA	Analysis	8270C		1	201992	10/15/15 18:01	TMH	TAL CAN
Total/NA	Prep	3510C	RE		202493	10/19/15 09:03	JDR	TAL CAN
Total/NA	Analysis	8270C	RE	1	202663	10/20/15 15:47	TMH	TAL CAN
Total Recoverable	Prep	3005A			201393	10/12/15 08:36	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201786	10/13/15 23:25	KLC	TAL CAN
Total/NA	Prep	7470A			201395	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 07:43	WAL	TAL CAN

Client Sample ID: TB-07(100915)

Lab Sample ID: 240-56464-32

Date Collected: 10/09/15 00:00

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	202688	10/20/15 14:53	LEE	TAL CAN

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Client Sample ID: DUP-3

Date Collected: 10/09/15 00:00
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-35

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	202688	10/20/15 15:16	LEE	TAL CAN
Total/NA	Prep	3510C			201406	10/12/15 09:34	CS	TAL CAN
Total/NA	Analysis	8270C		1	201992	10/15/15 18:24	TMH	TAL CAN
Total/NA	Prep	3510C	RE		202493	10/19/15 09:03	JDR	TAL CAN
Total/NA	Analysis	8270C	RE	1	202663	10/20/15 16:10	TMH	TAL CAN
Total Recoverable	Prep	3005A			201393	10/12/15 08:37	WKD	TAL CAN
Total Recoverable	Analysis	6010B		1	201786	10/13/15 23:29	KLC	TAL CAN
Total/NA	Prep	7470A			201395	10/12/15 14:00	WKD	TAL CAN
Total/NA	Analysis	7470A		1	201918	10/14/15 07:45	WAL	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-1

Laboratory: TestAmerica Canton

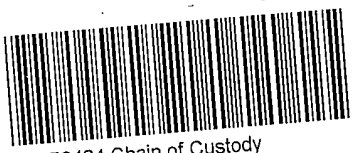
All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-15
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-26-16
Kentucky (WW)	State Program	4	98016	12-31-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-15
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	10-30-15 *
New York	NELAP	2	10975	03-31-16
Ohio VAP	State Program	5	CL0024	10-31-15 *
Oregon	NELAP	10	4062	02-23-16
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-16
West Virginia DEP	State Program	3	210	12-31-15
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS



TestAmerica Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

5.2/C1.1+ 4.2/C3.2+ 2.2/C0.1+ 1.6/C0.1 2.4/C0.9 3.6/C2.1 3.4/C1.9

Chain of Custody Record

089275

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: John Ellis	Site Contact: Greg Cook	Date:	COC No:
Company Name: Arcadis	Tel/Fax: John.Ellis@Arcadis-us	Lab Contact:	Carrier:	1 of 3 COCs
Address: 10352 Plaza American Dr	Analysis Turnaround Time			Sampler:
City/State/Zip: Baton Rouge, LA 70816	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 225-292-1004	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Grenada Manufacturing	☐ 1 week			
Site: Grenada MS	☐ 2 days			Job / SDG No.:
P O # LA00 3307.0001.0004	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Mn/Fe, SO4, Cl, NO3, Br, F by IC 300.0	7470A Hg	TOC 9060A	VOCs 8260B TCL+MNA+3 Xylenes	SVOCs 8270C 1,4-DioxaneSIM	PCB Aroclors 8082A	Sample Specific Notes:
TB-05(10-08-15)	10-08-15	—	—	W	2	N	N				2			
VAP-6 (2-4)	10-08-15		G	S	3	N	N	1	1	1				
VAP-6-GW(12-13)	"	0840	G	W	3	N	N				3			
VAP-6-GW(15-16)	"	0931	G	W	6	N	N				3	2	1	
VAP-6-GW(25-26) (20-21)	10-08-15	0942	G	W	6	N	N				3	2	1	
VAP-6-GW(25-26)	"	1010	G	W	6	N	N				3	2	1	
VAP-6-GW(30-31)	"	1035	G	W	6	N	N				3	2	1	
VAP-6-GW(30-31)	10-08-15	1115	G	W	6	N	N				3	2	1	
VAP-6-GW(40-41)	"	1140	G	W	6	N	N				B	B	B	963 MS/MSD
VAP-6-GW(45-46)	"	1223	G	W	6	N	N				3	2	1	
VAP-6-GW(49-50)	10-08-15	1247	G	W	6	N	N				3	2	1	
Dup-02 (10-08-15)	10-08-15	—	G	W	6	N	N				3	2	1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
VAP-6-GW(12-13) - only VOCs

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: _____ Corr'd: _____	Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
George Elcock	Arcadis	10/9/15 1330			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time: 10/10/15 948

Dec 02, 2015 07:29:19 PM

10/29/2015

TestAmerica Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

Chain of Custody Record

089276

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: John Ellis	Site Contact: Gary Cook	Date:	COC No:
Company Name: Arcadis	Tel/Fax: John.Ellis@Arcadis-us.com	Lab Contact:	Carrier:	2 of 3 COCs
Address: 10352 Plaza Americana Dr.	Analysis Turnaround Time			Sampler:
City/State/Zip: Baton Rouge, LA 70816	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 225-292-1004	TAT if different from Below			Walk-in Client:
Fax:	☑ 2 weeks			Lab Sampling:
Project Name: Grenada Manufacturing	☐ 1 week			
Site: Grenada MS	☐ 2 days			Job / SDG No.:
PO # LA00 3367.001.0004	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Moisture SD20C 6010B	7471A 7196A 8260	Trona Cor. Kit	VOC 8260B TCLP M3/4	SVOC 8270C TCLP M3/4	Aluminum Cobalt Mercury 7470	Sample Specific Notes:
VAP-8(1-2)	10-08-15	1330	G	S	3	N	N	1	1	1	—	—		
VAP-8-Gw(18-18)	"	1400	G	W	6	Y	Y	—	—	—	3	2	1	
VAP-8-Gw(20-21)	"	1440	G	W	6	Y	Y	—	—	—	3	2	1	
VAP-8-Gw(25-26)	10-08-15	1501	G	W	6	Y	Y	—	—	—	3	2	1	
VAP-8-Gw(30-31)	"	1527	G	W	6	Y	Y	—	—	—	3	2	1	
VAP-8-Gw(35-36)	"	1555	G	W	6	Y	Y	—	—	—	3	2	1	
VAP-8-Gw(40-41)	10-08-15	1636	G	W	6	Y	N	—	—	—	3	2	1	
VAP-8-Gw(45-46)	"	1708	G	W	6	Y	Y	—	—	—	3	2	1	
VAP-8-Gw-(49-50)	"	1740	G	W	C	Y	Y	—	—	—	3	2	1	
TB-06(10-08-15)	10-08-15	—	G	W	C	X	X	—	—	—	2	—		
~~VAP-7-Gw(13-14)~~ VAP-7(13-14)	10/09/15	0807	G	W	B	X	X	1	1	1	—	—		
VAP-7-Gw(13-14)	"	0845	G	W	6	Y	Y	—	—	—	3	2	1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: _____ Corr'd: _____	Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
George E Cook	Arcadis	10/09/15 1330			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TAL	10/10/15 945

TestAmerica Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

Chain of Custody Record

089278

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: John Ellis	Site Contact: George Cook	Date:	COC No:
Company Name: Arcadis	Tel/Fax: John.Ellis@Arcadis.com	Lab Contact:	Carrier:	3 of 3 COCs
Address: 10352 Plaza America Dr	Analysis Turnaround Time			Sampler:
City/State/Zip: Baton Rouge, LA 70816	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 225-292-1004	TAT if different from Below _____			Walk-in Client:
Fax:	☑ 2 weeks			Lab Sampling:
Project Name: Arcadis Manufacturing	☐ 1 week			
Site: Arcadis MCS	☐ 2 days			Job / SDG No.:
PO# LA0G3302.0001.00005	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Mosher 8270C, 625B, 8270C SIM	8270A, 8260B	Target Analytes	VOC 8260B TCL + 3 Xylenes	SVOC 8270C TCL + 10 Tentatively Identified Compounds	Alkalinity, Chloride, Sulfate, Nitrate-Nitrite, Total Dissolved Solids	TCLP VOC, SVOC, Pesticides, Herbicides	TCLP Metals (As, Ba, Cd, Cr, Pb, Se, Ag, Hg)	Mercury	pH Soil	TCLP VOC, SVOC, Pesticides, Herbicides	Mercury	Flash point	Sample Specific Notes:
VMP-7-GW (15-16)	10-09-15	0930	G	W	6	Y	N				3	2	1								
VMP-7-GW (20-21)	"	1000	G	W	6	Y	N				3	2	1								
VMP-7-GW (25-26)	"	1034	G	W	6	Y	N				3	2	1								
VMP-7-GW (30-31)	10-09-15	1053	G	W	18	Y	N				9	6	3								MS/MSD
VMP-7-GW (35-36)	"	1134	G	W	6	Y	N				3	2	1								
VMP-7-GW (43-44)	"	1157	G	W	6	Y	N				3	2	1								
VMP-7-GW (48-49)	"	1226	G	W	6	Y	N				3	2	1								
TB07 (10/9/15)	10-09-15	—	G	W	2	Y	N				2										
Drum 501 Cuttings	10-09-15	1315	G	SS	3								1	2							
Drum Decon/Purge Wtr	10-09-15	1325	G	W	5										1	3	1				
															1	3	1				

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
George E Cook	Arcadis	10/09/15 1530			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TAN	10/10/15 945

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10/20/2015

TestAmerica Canton Sample Receipt Form/Narrative — Login # : 56464
Canton Facility

Client ARCADIS — Site Name Grenada — Cooler unpacked by: Keathy

Cooler Received on 10/10/15 — Opened on 10/10/15

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other NER

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A (CF +1.0 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

~~IR GUN# 4 (CF +0.5 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C~~

~~IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C~~

☒ See Multiple Cooler Form

IR GUN# 8 (CF -1.5 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2.	Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 each	(Yes)	No	
	-Were custody seals on the outside of the cooler(s) signed & dated?	(Yes)	No	NA
	-Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	(No)	
3.	Shippers' packing slip attached to the cooler(s)?	(Yes)	No	
4.	Did custody papers accompany the sample(s)?	(Yes)	No	
5.	Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No	
6.	Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	(No)	
7.	Did all bottles arrive in good condition (Unbroken)?	(Yes)	No	
8.	Could all bottle labels be reconciled with the COC?	(Yes)	No	
9.	Were correct bottle(s) used for the test(s) indicated?	(Yes)	No	
10.	Sufficient quantity received to perform indicated analyses?	(Yes)	No	
11.	Were sample(s) at the correct pH upon receipt?	(Yes)	No	NA pH Strip Lot# HC554612
12.	Were VOAs on the COC?	(Yes)	No	
13.	Were air bubbles >6 mm in any VOA vials?	Yes	(No)	NA
14.	Was a trip blank present in the cooler(s)? Trip Blank Lot # Covered	(Yes)	No	

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

Received Sample Dup-3 on 10/9/15 @ not on COC

~~Rec~~ Received only 3x40mL HCL vials for sample VAP-6-GW(12-13)

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

TestAmerica Multiple Cooler Receipt Form/Narrative **Login # :** 56464

Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
Client	8	3.2	1.7	ICE
		1.6	0.1	
		3.4	1.9	
		4.2	3.7	
		2.4	0.9	
		2.2	0.7	
		3.6	2.1	

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
VAP-6-GW(12-13)	240-56464-F-3	Plastic 500ml - with Nitric Acid	<2		
VAP-6-GW(15-16)	240-56464-F-4	Plastic 500ml - with Nitric Acid	<2		
VAP-6-GW(20-21)	240-56464-F-5	Plastic 500ml - with Nitric Acid	<2		
VAP-6-GW(25-26)	240-56464-F-6	Plastic 500ml - with Nitric Acid	<2		
VAP-6-GW(30-31)	240-56464-F-7	Plastic 500ml - with Nitric Acid	<2		
VAP-6-GW(30-35)	240-56464-F-8	Plastic 500ml - with Nitric Acid	<2		
VAP-6-GW(40-41)	240-56464-P-9	Plastic 500ml - with Nitric Acid	<2		
VAP-6-GW(40-41)	240-56464-Q-9	Plastic 500ml - with Nitric Acid	<2		
VAP-6-GW(40-41)	240-56464-R-9	Plastic 500ml - with Nitric Acid	<2		
VAP-6-GW(45-46)	240-56464-F-10	Plastic 500ml - with Nitric Acid	<2		
VAP-6-GW(49-50)	240-56464-F-11	Plastic 500ml - with Nitric Acid	<2		
DUP-02(100815)	240-56464-F-12	Plastic 500ml - with Nitric Acid	<2		
VAP-8-GW(18-19)	240-56464-F-14	Plastic 500ml - with Nitric Acid	<2		
VAP-8-GW(20-21)	240-56464-F-15	Plastic 500ml - with Nitric Acid	<2		
VAP-8-GW(25-26)	240-56464-F-16	Plastic 500ml - with Nitric Acid	<2		
VAP-8-GW(30-31)	240-56464-F-17	Plastic 500ml - with Nitric Acid	<2		
VAP-8-GW(35-36)	240-56464-F-18	Plastic 500ml - with Nitric Acid	<2		
VAP-8-GW(40-41)	240-56464-F-19	Plastic 500ml - with Nitric Acid	<2		
VAP-8-GW(45-46)	240-56464-F-20	Plastic 500ml - with Nitric Acid	<2		
VAP-8-GW(49-50)	240-56464-F-21	Plastic 500ml - with Nitric Acid	<2		
VAP-7-GW(13-14)	240-56464-F-24	Plastic 500ml - with Nitric Acid	<2		
VAP-7-GW(15-16)	240-56464-F-25	Plastic 500ml - with Nitric Acid	<2		
VAP-7-GW(20-21)	240-56464-F-26	Plastic 500ml - with Nitric Acid	<2		
VAP-7-GW(25-26)	240-56464-F-27	Plastic 500ml - with Nitric Acid	<2		
VAP-7-GW(30-31)	240-56464-P-28	Plastic 500ml - with Nitric Acid	<2		
VAP-7-GW(30-31)	240-56464-Q-28	Plastic 500ml - with Nitric Acid	<2		
VAP-7-GW(30-31)	240-56464-R-28	Plastic 500ml - with Nitric Acid	<2		
VAP-7-GW(35-36)	240-56464-F-29	Plastic 500ml - with Nitric Acid	<2		
VAP-7-GW(43-44)	240-56464-F-30	Plastic 500ml - with Nitric Acid	<2		
VAP-7-GW(48-49)	240-56464-F-31	Plastic 500ml - with Nitric Acid	<2		
DUP-3	240-56464-F-35	Plastic 500ml - with Nitric Acid	<2		

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-56464-2
Client Project/Site: Grenada Manufacturing

For:
ARCADIS U.S., Inc.
10352 Plaza Americana Dr.
Baton Rouge, Louisiana 70816

Attn: Mr. John Ellis

Denise Pohl

Authorized for release by:
10/26/2015 8:36:21 AM

Denise Pohl, Project Manager II
(330)966-9789
denise.pohl@testamericainc.com

LINKS

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Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 240-56464-2

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Grenada Manufacturing

Report Number: 240-56464-2

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 10/10/2015 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 7 coolers at receipt time were 0.1º C, 0.7º C, 0.9º C, 1.7º C, 1.9º C, 2.1º C and 3.7º C.

TCLP VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DRUM SOIL CUTTING (240-56464-33) and DRUM DECON/PURGE WATER (240-56464-34) were analyzed for TCLP volatile organic compounds (GCMS) in accordance with EPA SW-846 Methods 1311/8260B. The samples were leached on 10/11/2015 and 10/14/2015 and analyzed on 10/14/2015 and 10/15/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TCLP SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Samples DRUM SOIL CUTTING (240-56464-33) and DRUM DECON/PURGE WATER (240-56464-34) were analyzed for TCLP semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Methods 1311/8270C. The samples were leached on 10/12/2015 and 10/15/2015, prepared on 10/13/2015 and 10/16/2015 and analyzed on 10/15/2015 and 10/19/2015.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

Job ID: 240-56464-2 (Continued)

Laboratory: TestAmerica Canton (Continued)

Method(s) 8270C: The continuing calibration verification (CCV) associated with batch 202478 recovered above the upper control limit for Pentachlorophenol. The samples associated with this CCV were non-detect for the affected analyte; therefore, the data have been reported. The following sample is impacted: DRUM SOIL CUTTING (240-56464-33).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TCLP METALS (ICP)

Samples DRUM SOIL CUTTING (240-56464-33) and DRUM DECON/PURGE WATER (240-56464-34) were analyzed for TCLP metals (ICP) in accordance with EPA SW-846 Methods 1311/6010B. The samples were leached on 10/12/2015 and 10/15/2015, prepared on 10/13/2015 and 10/16/2015 and analyzed on 10/14/2015 and 10/19/2015.

Chromium was detected in method blank LB 240-201518/1-B at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Arsenic and Chromium were detected in method blank LB 240-202152/1-B at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Silver was detected in method blank MB 240-202258/2-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TCLP MERCURY

Samples DRUM SOIL CUTTING (240-56464-33) and DRUM DECON/PURGE WATER (240-56464-34) were analyzed for TCLP mercury in accordance with EPA SW-846 Methods 1311/7470A. The samples were leached on 10/12/2015 and 10/15/2015, prepared on 10/13/2015 and 10/16/2015 and analyzed on 10/14/2015 and 10/21/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

FLASHPOINT

Sample DRUM SOIL CUTTING (240-56464-33) was analyzed for flashpoint in accordance with EPA SW-846 Method 1010. The samples were analyzed on 10/14/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

FLASHPOINT

Sample DRUM DECON/PURGE WATER (240-56464-34) was analyzed for flashpoint in accordance with EPA SW-846 Method 1010. The samples were analyzed on 10/14/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PH

Sample DRUM DECON/PURGE WATER (240-56464-34) was analyzed for pH in accordance with EPA SW-846 Method 9040C. The samples were analyzed on 10/10/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PH

Sample DRUM SOIL CUTTING (240-56464-33) was analyzed for pH in accordance with EPA SW-846 Method 9045C. The samples were analyzed on 10/13/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-2

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN
1010	Ignitability, Pensky-Martens Closed-Cup Method	SW846	TAL CAN
9040C	pH	SW846	TAL CAN
9045C	pH	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-56464-33	DRUM SOIL CUTTING	Solid	10/09/15 13:15	10/10/15 09:45
240-56464-34	DRUM DECON/PURGE WATER	Water	10/09/15 13:25	10/10/15 09:45

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-2

Client Sample ID: DRUM SOIL CUTTING — Lab Sample ID: 240-56464-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0060	J B	0.50	0.0029	mg/L	1		6010B	TCLP
Barium	0.78	J	10	0.0010	mg/L	1		6010B	TCLP
Cadmium	0.00014	J	0.10	0.00014	mg/L	1		6010B	TCLP
Chromium	0.0029	J B	0.50	0.00055	mg/L	1		6010B	TCLP
Lead	0.0054	J	0.50	0.0019	mg/L	1		6010B	TCLP
Flashpoint	>200		1.00	1.00	Degrees F	1		1010	Total/NA
Corrosivity	7.34		0.100	0.100	SU	1		9045C	Total/NA
pH	7.34		0.100	0.100	SU	1		9045C	Total/NA

Client Sample ID: DRUM DECON/PURGE WATER — Lab Sample ID: 240-56464-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0062	J	0.50	0.0029	mg/L	1		6010B	TCLP
Barium	0.0094	J	10	0.0010	mg/L	1		6010B	TCLP
Cadmium	0.00025	J	0.10	0.00014	mg/L	1		6010B	TCLP
Chromium	0.020	J B	0.50	0.00055	mg/L	1		6010B	TCLP
Flashpoint	>200		1.00	1.00	Degrees F	1		1010	Total/NA
Corrosivity	10.3		0.100	0.100	SU	1		9040C	Total/NA
pH	10.3		0.100	0.100	SU	1		9040C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: DRUM SOIL CUTTING

Lab Sample ID: 240-56464-33

Date Collected: 10/09/15 13:15

Matrix: Solid

Date Received: 10/10/15 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.025	U	0.025	0.0065	mg/L			10/15/15 23:35	1
2-Butanone (MEK)	0.25	U	0.25	0.029	mg/L			10/15/15 23:35	1
Carbon tetrachloride	0.025	U	0.025	0.0065	mg/L			10/15/15 23:35	1
Chlorobenzene	0.025	U	0.025	0.0075	mg/L			10/15/15 23:35	1
Chloroform	0.025	U	0.025	0.0080	mg/L			10/15/15 23:35	1
1,2-Dichloroethane	0.025	U	0.025	0.011	mg/L			10/15/15 23:35	1
1,1-Dichloroethene	0.025	U	0.025	0.0095	mg/L			10/15/15 23:35	1
Tetrachloroethene	0.025	U	0.025	0.015	mg/L			10/15/15 23:35	1
Trichloroethene	0.025	U	0.025	0.0085	mg/L			10/15/15 23:35	1
Vinyl chloride	0.025	U	0.025	0.011	mg/L			10/15/15 23:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 124*		*10/15/15 23:35*	*1*
Dibromofluoromethane (Surr)	*91*		*80 - 128*		*10/15/15 23:35*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*80 - 121*		*10/15/15 23:35*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*10/15/15 23:35*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.0040	U	0.0040	0.00034	mg/L		10/16/15 12:04	10/19/15 14:19	1
2,4-Dinitrotoluene	0.0040	U	0.0040	0.00025	mg/L		10/16/15 12:04	10/19/15 14:19	1
Hexachlorobenzene	0.00080	U	0.00080	0.000085	mg/L		10/16/15 12:04	10/19/15 14:19	1
Hexachlorobutadiene	0.0040	U	0.0040	0.00027	mg/L		10/16/15 12:04	10/19/15 14:19	1
Hexachloroethane	0.0040	U	0.0040	0.00019	mg/L		10/16/15 12:04	10/19/15 14:19	1
2-Methylphenol	0.0040	U	0.0040	0.00017	mg/L		10/16/15 12:04	10/19/15 14:19	1
3 & 4 Methylphenol	0.0040	U	0.0040	0.00080	mg/L		10/16/15 12:04	10/19/15 14:19	1
Nitrobenzene	0.0040	U	0.0040	0.000040	mg/L		10/16/15 12:04	10/19/15 14:19	1
Pentachlorophenol	0.016	U	0.016	0.00027	mg/L		10/16/15 12:04	10/19/15 14:19	1
Pyridine	0.0040	U	0.0040	0.00035	mg/L		10/16/15 12:04	10/19/15 14:19	1
2,4,5-Trichlorophenol	0.0040	U	0.0040	0.00030	mg/L		10/16/15 12:04	10/19/15 14:19	1
2,4,6-Trichlorophenol	0.0040	U	0.0040	0.00024	mg/L		10/16/15 12:04	10/19/15 14:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*72*		*30 - 110*	*10/16/15 12:04*	*10/19/15 14:19*	*1*
2-Fluorophenol (Surr)	*51*		*20 - 110*	*10/16/15 12:04*	*10/19/15 14:19*	*1*
Nitrobenzene-d5 (Surr)	*75*		*28 - 110*	*10/16/15 12:04*	*10/19/15 14:19*	*1*
Phenol-d5 (Surr)	*42*		*21 - 110*	*10/16/15 12:04*	*10/19/15 14:19*	*1*
Terphenyl-d14 (Surr)	*82*		*48 - 110*	*10/16/15 12:04*	*10/19/15 14:19*	*1*
2,4,6-Tribromophenol (Surr)	*58*		*23 - 110*	*10/16/15 12:04*	*10/19/15 14:19*	*1*

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0060**	**J B**	0.50	0.0029	mg/L		10/16/15 10:35	10/19/15 02:35	1
Barium	**0.78**	**J**	10	0.0010	mg/L		10/16/15 10:35	10/19/15 02:35	1
Cadmium	**0.00014**	**J**	0.10	0.00014	mg/L		10/16/15 10:35	10/19/15 02:35	1
Chromium	**0.0029**	**J B**	0.50	0.00055	mg/L		10/16/15 10:35	10/19/15 02:35	1
Lead	**0.0054**	**J**	0.50	0.0019	mg/L		10/16/15 10:35	10/19/15 02:35	1
Selenium	0.25	U	0.25	0.0040	mg/L		10/16/15 10:35	10/19/15 02:35	1
Silver	0.50	U	0.50	0.00092	mg/L		10/16/15 10:35	10/19/15 02:35	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-2

Client Sample ID: DRUM SOIL CUTTING
Date Collected: 10/09/15 13:15
Date Received: 10/10/15 09:45

Lab Sample ID: 240-56464-33
Matrix: Solid

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.000090	mg/L		10/16/15 14:00	10/21/15 17:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>200		1.00	1.00	Degrees F			10/14/15 15:13	1
Corrosivity	7.34		0.100	0.100	SU			10/13/15 15:20	1
pH	7.34		0.100	0.100	SU			10/13/15 15:20	1

Client Sample ID: DRUM DECON/PURGE WATER

Lab Sample ID: 240-56464-34

Date Collected: 10/09/15 13:25

Matrix: Water

Date Received: 10/10/15 09:45

Method: 8260B - Volatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.025	U	0.025	0.0065	mg/L			10/14/15 03:45	1
2-Butanone (MEK)	0.25	U	0.25	0.029	mg/L			10/14/15 03:45	1
Carbon tetrachloride	0.025	U	0.025	0.0065	mg/L			10/14/15 03:45	1
Chlorobenzene	0.025	U	0.025	0.0075	mg/L			10/14/15 03:45	1
Chloroform	0.025	U	0.025	0.0080	mg/L			10/14/15 03:45	1
1,2-Dichloroethane	0.025	U	0.025	0.011	mg/L			10/14/15 03:45	1
1,1-Dichloroethene	0.025	U	0.025	0.0095	mg/L			10/14/15 03:45	1
Tetrachloroethene	0.025	U	0.025	0.015	mg/L			10/14/15 03:45	1
Trichloroethene	0.025	U	0.025	0.0085	mg/L			10/14/15 03:45	1
Vinyl chloride	0.025	U	0.025	0.011	mg/L			10/14/15 03:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 124*		*10/14/15 03:45*	*1*
Dibromofluoromethane (Surr)	*93*		*80 - 128*		*10/14/15 03:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*80 - 121*		*10/14/15 03:45*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/14/15 03:45*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.0040	U	0.0040	0.00034	mg/L		10/13/15 11:17	10/15/15 17:00	1
2,4-Dinitrotoluene	0.0040	U	0.0040	0.00025	mg/L		10/13/15 11:17	10/15/15 17:00	1
Hexachlorobenzene	0.00080	U	0.00080	0.000085	mg/L		10/13/15 11:17	10/15/15 17:00	1
Hexachlorobutadiene	0.0040	U	0.0040	0.00027	mg/L		10/13/15 11:17	10/15/15 17:00	1
Hexachloroethane	0.0040	U	0.0040	0.00019	mg/L		10/13/15 11:17	10/15/15 17:00	1
2-Methylphenol	0.0040	U	0.0040	0.00017	mg/L		10/13/15 11:17	10/15/15 17:00	1
3 & 4 Methylphenol	0.0040	U	0.0040	0.00080	mg/L		10/13/15 11:17	10/15/15 17:00	1
Nitrobenzene	0.0040	U	0.0040	0.000040	mg/L		10/13/15 11:17	10/15/15 17:00	1
Pentachlorophenol	0.016	U	0.016	0.00027	mg/L		10/13/15 11:17	10/15/15 17:00	1
Pyridine	0.0040	U	0.0040	0.00035	mg/L		10/13/15 11:17	10/15/15 17:00	1
2,4,5-Trichlorophenol	0.0040	U	0.0040	0.00030	mg/L		10/13/15 11:17	10/15/15 17:00	1
2,4,6-Trichlorophenol	0.0040	U	0.0040	0.00024	mg/L		10/13/15 11:17	10/15/15 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*53*		*30 - 110*	*10/13/15 11:17*	*10/15/15 17:00*	*1*
2-Fluorophenol (Surr)	*43*		*20 - 110*	*10/13/15 11:17*	*10/15/15 17:00*	*1*
Nitrobenzene-d5 (Surr)	*51*		*28 - 110*	*10/13/15 11:17*	*10/15/15 17:00*	*1*
Phenol-d5 (Surr)	*36*		*21 - 110*	*10/13/15 11:17*	*10/15/15 17:00*	*1*
Terphenyl-d14 (Surr)	*77*		*48 - 110*	*10/13/15 11:17*	*10/15/15 17:00*	*1*
2,4,6-Tribromophenol (Surr)	*52*		*23 - 110*	*10/13/15 11:17*	*10/15/15 17:00*	*1*

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0062**	**J**	0.50	0.0029	mg/L		10/13/15 11:43	10/14/15 16:54	1
Barium	**0.0094**	**J**	10	0.0010	mg/L		10/13/15 11:43	10/14/15 16:54	1
Cadmium	**0.00025**	**J**	0.10	0.00014	mg/L		10/13/15 11:43	10/14/15 16:54	1
Chromium	**0.020**	**J B**	0.50	0.00055	mg/L		10/13/15 11:43	10/14/15 16:54	1
Lead	0.50	U	0.50	0.0019	mg/L		10/13/15 11:43	10/14/15 16:54	1
Selenium	0.25	U	0.25	0.0040	mg/L		10/13/15 11:43	10/14/15 16:54	1
Silver	0.50	U	0.50	0.00092	mg/L		10/13/15 11:43	10/14/15 16:54	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-2

Client Sample ID: DRUM DECON/PURGE WATER
Lab Sample ID: 240-56464-34
Date Collected: 10/09/15 13:25
Matrix: Water
Date Received: 10/10/15 09:45

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.000090	mg/L		10/13/15 14:00	10/14/15 12:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Flashpoint	>200		1.00	1.00	Degrees F			10/14/15 10:20	1
Corrosivity	10.3		0.100	0.100	SU			10/10/15 11:45	1
pH	10.3		0.100	0.100	SU			10/10/15 11:45	1

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(70-124)	(80-128)	(80-121)	(80-120)
LCS 240-202139/9	Lab Control Sample	85	99	99	99

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(70-124)	(80-128)	(80-121)	(80-120)
240-56464-33	DRUM SOIL CUTTING	78	91	92	92
LB 240-202030/1-A MB	Method Blank	86	92	87	91

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(70-124)	(80-128)	(80-121)	(80-120)
LCS 240-201734/20	Lab Control Sample	82	105	98	96

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(70-124)	(80-128)	(80-121)	(80-120)
240-56464-34	DRUM DECON/PURGE WATEF	87	93	90	96
LB 240-201379/1-A MB	Method Blank	86	94	91	96

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-2

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPH	TBP
Lab Sample ID	Client Sample ID	(30-110)	(20-110)	(28-110)	(21-110)	(48-110)	(23-110)
LCS 240-202290/12-A	Lab Control Sample	74	70	80	61	81	84
MB 240-202290/11-A	Method Blank	72	71	73	62	83	78

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPH	TBP
Lab Sample ID	Client Sample ID	(30-110)	(20-110)	(28-110)	(21-110)	(48-110)	(23-110)
240-56464-33	DRUM SOIL CUTTING	72	51	75	42	82	58

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPH	TBP
Lab Sample ID	Client Sample ID	(30-110)	(20-110)	(28-110)	(21-110)	(48-110)	(23-110)
LCS 240-201625/18-A	Lab Control Sample	83	74	85	62	92	90
MB 240-201625/17-A	Method Blank	80	74	77	74	91	83

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-2

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)							
		FBP	2FP	NBZ	PHL	TPH	TBP		
Lab Sample ID	Client Sample ID	(30-110)	(20-110)	(28-110)	(21-110)	(48-110)	(23-110)		
240-56464-34	DRUM DECON/PURGE WATEF	53	43	51	36	77	52		

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: LCS 240-201734/20
Matrix: Water
Analysis Batch: 201734

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	1.00	1.01		mg/L		101	80 - 120
2-Butanone (MEK)	2.00	1.81		mg/L		90	49 - 120
Carbon tetrachloride	1.00	0.951		mg/L		95	54 - 122
Chlorobenzene	1.00	0.958		mg/L		96	80 - 120
Chloroform	1.00	0.979		mg/L		98	80 - 123
1,2-Dichloroethane	1.00	1.02		mg/L		102	80 - 120
1,1-Dichloroethene	1.00	1.07		mg/L		107	71 - 133
Tetrachloroethene	1.00	0.942		mg/L		94	79 - 134
Trichloroethene	1.00	1.00		mg/L		100	78 - 130
Vinyl chloride	1.00	0.686		mg/L		69	56 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*82*		*70 - 124*
Dibromofluoromethane (Surr)	*105*		*80 - 128*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 121*
Toluene-d8 (Surr)	*96*		*80 - 120*

Lab Sample ID: LCS 240-202139/9
Matrix: Solid
Analysis Batch: 202139

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	1.00	0.999		mg/L		100	80 - 120
2-Butanone (MEK)	2.00	1.76		mg/L		88	49 - 120
Carbon tetrachloride	1.00	1.20		mg/L		120	54 - 122
Chlorobenzene	1.00	0.982		mg/L		98	80 - 120
Chloroform	1.00	0.989		mg/L		99	80 - 123
1,2-Dichloroethane	1.00	1.01		mg/L		101	80 - 120
1,1-Dichloroethene	1.00	1.08		mg/L		108	71 - 133
Tetrachloroethene	1.00	0.987		mg/L		99	79 - 134
Trichloroethene	1.00	0.975		mg/L		97	78 - 130
Vinyl chloride	1.00	0.986		mg/L		99	56 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*85*		*70 - 124*
Dibromofluoromethane (Surr)	*99*		*80 - 128*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 121*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: LB 240-201379/1-A MB
Matrix: Water
Analysis Batch: 201734

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.025	U	0.025	0.0065	mg/L			10/13/15 21:32	1
2-Butanone (MEK)	0.25	U	0.25	0.029	mg/L			10/13/15 21:32	1
Carbon tetrachloride	0.025	U	0.025	0.0065	mg/L			10/13/15 21:32	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LB 240-201379/1-A MB
Matrix: Water
Analysis Batch: 201734

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	0.025	U	0.025	0.0075	mg/L			10/13/15 21:32	1
Chloroform	0.025	U	0.025	0.0080	mg/L			10/13/15 21:32	1
1,2-Dichloroethane	0.025	U	0.025	0.011	mg/L			10/13/15 21:32	1
1,1-Dichloroethene	0.025	U	0.025	0.0095	mg/L			10/13/15 21:32	1
Tetrachloroethene	0.025	U	0.025	0.015	mg/L			10/13/15 21:32	1
Trichloroethene	0.025	U	0.025	0.0085	mg/L			10/13/15 21:32	1
Vinyl chloride	0.025	U	0.025	0.011	mg/L			10/13/15 21:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 124*		*10/13/15 21:32*	*1*
Dibromofluoromethane (Surr)	*94*		*80 - 128*		*10/13/15 21:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*80 - 121*		*10/13/15 21:32*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/13/15 21:32*	*1*

Lab Sample ID: LB 240-202030/1-A MB
Matrix: Solid
Analysis Batch: 202139

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.025	U	0.025	0.0065	mg/L			10/15/15 19:48	1
2-Butanone (MEK)	0.25	U	0.25	0.029	mg/L			10/15/15 19:48	1
Carbon tetrachloride	0.025	U	0.025	0.0065	mg/L			10/15/15 19:48	1
Chlorobenzene	0.025	U	0.025	0.0075	mg/L			10/15/15 19:48	1
Chloroform	0.025	U	0.025	0.0080	mg/L			10/15/15 19:48	1
1,2-Dichloroethane	0.025	U	0.025	0.011	mg/L			10/15/15 19:48	1
1,1-Dichloroethene	0.025	U	0.025	0.0095	mg/L			10/15/15 19:48	1
Tetrachloroethene	0.025	U	0.025	0.015	mg/L			10/15/15 19:48	1
Trichloroethene	0.025	U	0.025	0.0085	mg/L			10/15/15 19:48	1
Vinyl chloride	0.025	U	0.025	0.011	mg/L			10/15/15 19:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 124*		*10/15/15 19:48*	*1*
Dibromofluoromethane (Surr)	*92*		*80 - 128*		*10/15/15 19:48*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*80 - 121*		*10/15/15 19:48*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*10/15/15 19:48*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-201625/17-A
Matrix: Water
Analysis Batch: 201807

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201625

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.0040	U	0.0040	0.00034	mg/L		10/13/15 11:17	10/14/15 11:04	1
2,4-Dinitrotoluene	0.0040	U	0.0040	0.00025	mg/L		10/13/15 11:17	10/14/15 11:04	1
Hexachlorobenzene	0.00080	U	0.00080	0.000085	mg/L		10/13/15 11:17	10/14/15 11:04	1
Hexachlorobutadiene	0.0040	U	0.0040	0.00027	mg/L		10/13/15 11:17	10/14/15 11:04	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-201625/17-A
Matrix: Water
Analysis Batch: 201807

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201625

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	0.0040	U	0.0040	0.00019	mg/L		10/13/15 11:17	10/14/15 11:04	1
2-Methylphenol	0.0040	U	0.0040	0.00017	mg/L		10/13/15 11:17	10/14/15 11:04	1
3 & 4 Methylphenol	0.0040	U	0.0040	0.00080	mg/L		10/13/15 11:17	10/14/15 11:04	1
Nitrobenzene	0.0040	U	0.0040	0.000040	mg/L		10/13/15 11:17	10/14/15 11:04	1
Pentachlorophenol	0.016	U	0.016	0.00027	mg/L		10/13/15 11:17	10/14/15 11:04	1
Pyridine	0.0040	U	0.0040	0.00035	mg/L		10/13/15 11:17	10/14/15 11:04	1
2,4,5-Trichlorophenol	0.0040	U	0.0040	0.00030	mg/L		10/13/15 11:17	10/14/15 11:04	1
2,4,6-Trichlorophenol	0.0040	U	0.0040	0.00024	mg/L		10/13/15 11:17	10/14/15 11:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*80*		*30 - 110*	*10/13/15 11:17*	*10/14/15 11:04*	*1*
2-Fluorophenol (Surr)	*74*		*20 - 110*	*10/13/15 11:17*	*10/14/15 11:04*	*1*
Nitrobenzene-d5 (Surr)	*77*		*28 - 110*	*10/13/15 11:17*	*10/14/15 11:04*	*1*
Phenol-d5 (Surr)	*74*		*21 - 110*	*10/13/15 11:17*	*10/14/15 11:04*	*1*
Terphenyl-d14 (Surr)	*91*		*48 - 110*	*10/13/15 11:17*	*10/14/15 11:04*	*1*
2,4,6-Tribromophenol (Surr)	*83*		*23 - 110*	*10/13/15 11:17*	*10/14/15 11:04*	*1*

Lab Sample ID: LCS 240-201625/18-A
Matrix: Water
Analysis Batch: 201807

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201625

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.0800	0.0626		mg/L		78	52 - 110
2,4-Dinitrotoluene	0.0800	0.0710		mg/L		89	54 - 110
Hexachlorobenzene	0.0800	0.0625		mg/L		78	50 - 110
Hexachlorobutadiene	0.0800	0.0610		mg/L		76	34 - 110
Hexachloroethane	0.0800	0.0627		mg/L		78	41 - 110
2-Methylphenol	0.0800	0.0631		mg/L		79	44 - 111
3 & 4 Methylphenol	0.0800	0.0615		mg/L		77	48 - 110
Nitrobenzene	0.0800	0.0644		mg/L		81	40 - 110
Pentachlorophenol	0.160	0.136		mg/L		85	12 - 110
Pyridine	0.0800	0.0514		mg/L		64	30 - 110
2,4,5-Trichlorophenol	0.0800	0.0662		mg/L		83	51 - 110
2,4,6-Trichlorophenol	0.0800	0.0676		mg/L		85	46 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*83*		*30 - 110*
2-Fluorophenol (Surr)	*74*		*20 - 110*
Nitrobenzene-d5 (Surr)	*85*		*28 - 110*
Phenol-d5 (Surr)	*62*		*21 - 110*
Terphenyl-d14 (Surr)	*92*		*48 - 110*
2,4,6-Tribromophenol (Surr)	*90*		*23 - 110*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-202290/11-A
Matrix: Solid
Analysis Batch: 202478

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 202290

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.0040	U	0.0040	0.00034	mg/L		10/16/15 12:04	10/19/15 09:52	1
2,4-Dinitrotoluene	0.0040	U	0.0040	0.00025	mg/L		10/16/15 12:04	10/19/15 09:52	1
Hexachlorobenzene	0.00080	U	0.00080	0.000085	mg/L		10/16/15 12:04	10/19/15 09:52	1
Hexachlorobutadiene	0.0040	U	0.0040	0.00027	mg/L		10/16/15 12:04	10/19/15 09:52	1
Hexachloroethane	0.0040	U	0.0040	0.00019	mg/L		10/16/15 12:04	10/19/15 09:52	1
2-Methylphenol	0.0040	U	0.0040	0.00017	mg/L		10/16/15 12:04	10/19/15 09:52	1
3 & 4 Methylphenol	0.0040	U	0.0040	0.00080	mg/L		10/16/15 12:04	10/19/15 09:52	1
Nitrobenzene	0.0040	U	0.0040	0.000040	mg/L		10/16/15 12:04	10/19/15 09:52	1
Pentachlorophenol	0.016	U	0.016	0.00027	mg/L		10/16/15 12:04	10/19/15 09:52	1
Pyridine	0.0040	U	0.0040	0.00035	mg/L		10/16/15 12:04	10/19/15 09:52	1
2,4,5-Trichlorophenol	0.0040	U	0.0040	0.00030	mg/L		10/16/15 12:04	10/19/15 09:52	1
2,4,6-Trichlorophenol	0.0040	U	0.0040	0.00024	mg/L		10/16/15 12:04	10/19/15 09:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*72*		*30 - 110*	*10/16/15 12:04*	*10/19/15 09:52*	*1*
2-Fluorophenol (Surr)	*71*		*20 - 110*	*10/16/15 12:04*	*10/19/15 09:52*	*1*
Nitrobenzene-d5 (Surr)	*73*		*28 - 110*	*10/16/15 12:04*	*10/19/15 09:52*	*1*
Phenol-d5 (Surr)	*62*		*21 - 110*	*10/16/15 12:04*	*10/19/15 09:52*	*1*
Terphenyl-d14 (Surr)	*83*		*48 - 110*	*10/16/15 12:04*	*10/19/15 09:52*	*1*
2,4,6-Tribromophenol (Surr)	*78*		*23 - 110*	*10/16/15 12:04*	*10/19/15 09:52*	*1*

Lab Sample ID: LCS 240-202290/12-A
Matrix: Solid
Analysis Batch: 202478

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 202290

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.0800	0.0572		mg/L		71	52 - 110
2,4-Dinitrotoluene	0.0800	0.0648		mg/L		81	54 - 110
Hexachlorobenzene	0.0800	0.0576		mg/L		72	50 - 110
Hexachlorobutadiene	0.0800	0.0566		mg/L		71	34 - 110
Hexachloroethane	0.0800	0.0601		mg/L		75	41 - 110
2-Methylphenol	0.0800	0.0655		mg/L		82	44 - 111
3 & 4 Methylphenol	0.0800	0.0570		mg/L		71	48 - 110
Nitrobenzene	0.0800	0.0593		mg/L		74	40 - 110
Pentachlorophenol	0.160	0.118		mg/L		74	12 - 110
Pyridine	0.0800	0.0512		mg/L		64	30 - 110
2,4,5-Trichlorophenol	0.0800	0.0572		mg/L		72	51 - 110
2,4,6-Trichlorophenol	0.0800	0.0607		mg/L		76	46 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*74*		*30 - 110*
2-Fluorophenol (Surr)	*70*		*20 - 110*
Nitrobenzene-d5 (Surr)	*80*		*28 - 110*
Phenol-d5 (Surr)	*61*		*21 - 110*
Terphenyl-d14 (Surr)	*81*		*48 - 110*
2,4,6-Tribromophenol (Surr)	*84*		*23 - 110*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-201642/2-A
Matrix: Water
Analysis Batch: 201889

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201642

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.50	U	0.50	0.0029	mg/L		10/13/15 11:42	10/14/15 11:20	1
Barium	10	U	10	0.0010	mg/L		10/13/15 11:42	10/14/15 11:20	1
Cadmium	0.10	U	0.10	0.00014	mg/L		10/13/15 11:42	10/14/15 11:20	1
Chromium	0.50	U	0.50	0.00055	mg/L		10/13/15 11:42	10/14/15 11:20	1
Lead	0.50	U	0.50	0.0019	mg/L		10/13/15 11:42	10/14/15 11:20	1
Selenium	0.25	U	0.25	0.0040	mg/L		10/13/15 11:42	10/14/15 11:20	1
Silver	0.50	U	0.50	0.00092	mg/L		10/13/15 11:42	10/14/15 11:20	1

Lab Sample ID: LCS 240-201642/3-A
Matrix: Water
Analysis Batch: 201889

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201642

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2.00	2.07		mg/L		103	50 - 150
Barium	2.00	1.96	J	mg/L		98	50 - 150
Cadmium	0.0500	0.0521	J	mg/L		104	50 - 150
Chromium	0.200	0.199	J	mg/L		99	50 - 150
Lead	0.500	0.487	J	mg/L		97	50 - 150
Selenium	2.00	2.11		mg/L		106	50 - 150
Silver	0.0500	0.0504	J	mg/L		101	50 - 150

Lab Sample ID: MB 240-202258/2-A
Matrix: Solid
Analysis Batch: 202498

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 202258

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.50	U	0.50	0.0029	mg/L		10/16/15 10:35	10/18/15 14:34	1
Barium	10	U	10	0.0010	mg/L		10/16/15 10:35	10/18/15 14:34	1
Cadmium	0.10	U	0.10	0.00014	mg/L		10/16/15 10:35	10/18/15 14:34	1
Chromium	0.50	U	0.50	0.00055	mg/L		10/16/15 10:35	10/18/15 14:34	1
Lead	0.50	U	0.50	0.0019	mg/L		10/16/15 10:35	10/18/15 14:34	1
Selenium	0.25	U	0.25	0.0040	mg/L		10/16/15 10:35	10/18/15 14:34	1
Silver	0.000951	J	0.50	0.00092	mg/L		10/16/15 10:35	10/18/15 14:34	1

Lab Sample ID: LCS 240-202258/3-A
Matrix: Solid
Analysis Batch: 202498

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 202258

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2.00	2.08		mg/L		104	50 - 150
Barium	2.00	1.86	J	mg/L		93	50 - 150
Cadmium	0.0500	0.0500	J	mg/L		100	50 - 150
Chromium	0.200	0.194	J	mg/L		97	50 - 150
Lead	0.500	0.448	J	mg/L		90	50 - 150
Selenium	2.00	2.11		mg/L		106	50 - 150
Silver	0.0500	0.0542	J	mg/L		108	50 - 150

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LB 240-201518/1-B
Matrix: Water
Analysis Batch: 201889

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 201642

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.50	U	0.50	0.0029	mg/L		10/13/15 11:42	10/14/15 11:16	1
Barium	10	U	10	0.0010	mg/L		10/13/15 11:42	10/14/15 11:16	1
Cadmium	0.10	U	0.10	0.00014	mg/L		10/13/15 11:42	10/14/15 11:16	1
Chromium	0.00110	J	0.50	0.00055	mg/L		10/13/15 11:42	10/14/15 11:16	1
Lead	0.50	U	0.50	0.0019	mg/L		10/13/15 11:42	10/14/15 11:16	1
Selenium	0.25	U	0.25	0.0040	mg/L		10/13/15 11:42	10/14/15 11:16	1
Silver	0.50	U	0.50	0.00092	mg/L		10/13/15 11:42	10/14/15 11:16	1

Lab Sample ID: LB 240-202152/1-B
Matrix: Solid
Analysis Batch: 202498

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 202258

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00477	J	0.50	0.0029	mg/L		10/16/15 10:35	10/18/15 14:29	1
Barium	10	U	10	0.0010	mg/L		10/16/15 10:35	10/18/15 14:29	1
Cadmium	0.10	U	0.10	0.00014	mg/L		10/16/15 10:35	10/18/15 14:29	1
Chromium	0.000689	J	0.50	0.00055	mg/L		10/16/15 10:35	10/18/15 14:29	1
Lead	0.50	U	0.50	0.0019	mg/L		10/16/15 10:35	10/18/15 14:29	1
Selenium	0.25	U	0.25	0.0040	mg/L		10/16/15 10:35	10/18/15 14:29	1
Silver	0.50	U	0.50	0.00092	mg/L		10/16/15 10:35	10/18/15 14:29	1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-201643/2-A
Matrix: Water
Analysis Batch: 201918

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 201643

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.000090	mg/L		10/13/15 14:00	10/14/15 11:49	1

Lab Sample ID: LCS 240-201643/3-A
Matrix: Water
Analysis Batch: 201918

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 201643

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00500	0.00484		mg/L		97	80 - 120

Lab Sample ID: MB 240-202262/2-A
Matrix: Solid
Analysis Batch: 203012

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 202262

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.000090	mg/L		10/16/15 14:00	10/21/15 16:56	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-202262/3-A
Matrix: Solid
Analysis Batch: 203012

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 202262

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00500	0.00516		mg/L		103	80 - 120

Lab Sample ID: LB 240-201518/1-C
Matrix: Water
Analysis Batch: 201918

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 201643

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.000090	mg/L		10/13/15 14:00	10/14/15 11:47	1

Lab Sample ID: LB 240-202152/1-C
Matrix: Solid
Analysis Batch: 203012

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 202262

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.000090	mg/L		10/16/15 14:00	10/21/15 16:53	1

Method: 1010 - Ignitability, Pensky-Martens Closed-Cup Method

Lab Sample ID: LCS 240-201798/1
Matrix: Water
Analysis Batch: 201798

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Flashpoint	81.0	81.00		Degrees F		100	97 - 103

Lab Sample ID: LCS 240-201798/2
Matrix: Water
Analysis Batch: 201798

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Flashpoint	81.0	79.00		Degrees F		98	97 - 103

Lab Sample ID: LCS 240-201798/3
Matrix: Water
Analysis Batch: 201798

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Flashpoint	81.0	79.00		Degrees F		98	97 - 103

Lab Sample ID: LCS 240-201798/4
Matrix: Solid
Analysis Batch: 201798

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Flashpoint	81.0	79.00		Degrees F		98	97 - 103

Method: 9040C - pH

Lab Sample ID: LCS 240-201310/2
Matrix: Water
Analysis Batch: 201310

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Corrosivity	6.15	6.190		SU		101	97 - 103
pH	6.15	6.190		SU		101	97 - 103

Method: 9045C - pH

Lab Sample ID: LCS 240-201706/2
Matrix: Solid
Analysis Batch: 201706

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Corrosivity	6.15	6.110		SU		99	97 - 103
pH	6.15	6.110		SU		99	97 - 103

GC/MS VOA

Leach Batch: 201379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-34	DRUM DECON/PURGE WATER	TCLP	Water	1311	
LB 240-201379/1-A MB	Method Blank	TCLP	Water	1311	

Analysis Batch: 201734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-34	DRUM DECON/PURGE WATER	TCLP	Water	8260B	201379
LB 240-201379/1-A MB	Method Blank	TCLP	Water	8260B	201379
LCS 240-201734/20	Lab Control Sample	Total/NA	Water	8260B	

Leach Batch: 202030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-33	DRUM SOIL CUTTING	TCLP	Solid	1311	
LB 240-202030/1-A MB	Method Blank	TCLP	Solid	1311	

Analysis Batch: 202139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-33	DRUM SOIL CUTTING	TCLP	Solid	8260B	202030
LB 240-202030/1-A MB	Method Blank	TCLP	Solid	8260B	202030
LCS 240-202139/9	Lab Control Sample	Total/NA	Solid	8260B	

GC/MS Semi VOA

Leach Batch: 201518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-34	DRUM DECON/PURGE WATER	TCLP	Water	1311	

Prep Batch: 201625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-34	DRUM DECON/PURGE WATER	TCLP	Water	3510C	201518
LCS 240-201625/18-A	Lab Control Sample	Total/NA	Water	3510C	
MB 240-201625/17-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 201807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-201625/18-A	Lab Control Sample	Total/NA	Water	8270C	201625
MB 240-201625/17-A	Method Blank	Total/NA	Water	8270C	201625

Analysis Batch: 202045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-34	DRUM DECON/PURGE WATER	TCLP	Water	8270C	201625

Leach Batch: 202152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-33	DRUM SOIL CUTTING	TCLP	Solid	1311	

Prep Batch: 202290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-33	DRUM SOIL CUTTING	TCLP	Solid	3510C	202152
LCS 240-202290/12-A	Lab Control Sample	Total/NA	Solid	3510C	
MB 240-202290/11-A	Method Blank	Total/NA	Solid	3510C	

GC/MS Semi VOA (Continued)

Analysis Batch: 202478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-33	DRUM SOIL CUTTING	TCLP	Solid	8270C	202290
LCS 240-202290/12-A	Lab Control Sample	Total/NA	Solid	8270C	202290
MB 240-202290/11-A	Method Blank	Total/NA	Solid	8270C	202290

Metals

Leach Batch: 201518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-34	DRUM DECON/PURGE WATER	TCLP	Water	1311	
LB 240-201518/1-B	Method Blank	TCLP	Water	1311	
LB 240-201518/1-C	Method Blank	TCLP	Water	1311	

Prep Batch: 201642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-34	DRUM DECON/PURGE WATER	TCLP	Water	3010A	201518
LB 240-201518/1-B	Method Blank	TCLP	Water	3010A	201518
LCS 240-201642/3-A	Lab Control Sample	Total/NA	Water	3010A	
MB 240-201642/2-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 201643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-34	DRUM DECON/PURGE WATER	TCLP	Water	7470A	201518
LB 240-201518/1-C	Method Blank	TCLP	Water	7470A	201518
LCS 240-201643/3-A	Lab Control Sample	Total/NA	Water	7470A	
MB 240-201643/2-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 201889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-34	DRUM DECON/PURGE WATER	TCLP	Water	6010B	201642
LB 240-201518/1-B	Method Blank	TCLP	Water	6010B	201642
LCS 240-201642/3-A	Lab Control Sample	Total/NA	Water	6010B	201642
MB 240-201642/2-A	Method Blank	Total/NA	Water	6010B	201642

Analysis Batch: 201918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-34	DRUM DECON/PURGE WATER	TCLP	Water	7470A	201643
LB 240-201518/1-C	Method Blank	TCLP	Water	7470A	201643
LCS 240-201643/3-A	Lab Control Sample	Total/NA	Water	7470A	201643
MB 240-201643/2-A	Method Blank	Total/NA	Water	7470A	201643

Leach Batch: 202152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-33	DRUM SOIL CUTTING	TCLP	Solid	1311	
LB 240-202152/1-B	Method Blank	TCLP	Solid	1311	
LB 240-202152/1-C	Method Blank	TCLP	Solid	1311	

Prep Batch: 202258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-33	DRUM SOIL CUTTING	TCLP	Solid	3010A	202152
LB 240-202152/1-B	Method Blank	TCLP	Solid	3010A	202152

Metals (Continued)

Prep Batch: 202258 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-202258/3-A	Lab Control Sample	Total/NA	Solid	3010A	
MB 240-202258/2-A	Method Blank	Total/NA	Solid	3010A	

Prep Batch: 202262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-33	DRUM SOIL CUTTING	TCLP	Solid	7470A	202152
LB 240-202152/1-C	Method Blank	TCLP	Solid	7470A	202152
LCS 240-202262/3-A	Lab Control Sample	Total/NA	Solid	7470A	
MB 240-202262/2-A	Method Blank	Total/NA	Solid	7470A	

Analysis Batch: 202498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-33	DRUM SOIL CUTTING	TCLP	Solid	6010B	202258
LB 240-202152/1-B	Method Blank	TCLP	Solid	6010B	202258
LCS 240-202258/3-A	Lab Control Sample	Total/NA	Solid	6010B	202258
MB 240-202258/2-A	Method Blank	Total/NA	Solid	6010B	202258

Analysis Batch: 203012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-33	DRUM SOIL CUTTING	TCLP	Solid	7470A	202262
LB 240-202152/1-C	Method Blank	TCLP	Solid	7470A	202262
LCS 240-202262/3-A	Lab Control Sample	Total/NA	Solid	7470A	202262
MB 240-202262/2-A	Method Blank	Total/NA	Solid	7470A	202262

General Chemistry

Analysis Batch: 201310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-34	DRUM DECON/PURGE WATER	Total/NA	Water	9040C	
LCS 240-201310/2	Lab Control Sample	Total/NA	Water	9040C	

Analysis Batch: 201706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-33	DRUM SOIL CUTTING	Total/NA	Solid	9045C	
LCS 240-201706/2	Lab Control Sample	Total/NA	Solid	9045C	

Analysis Batch: 201798

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56464-33	DRUM SOIL CUTTING	Total/NA	Solid	1010	
240-56464-34	DRUM DECON/PURGE WATER	Total/NA	Water	1010	
LCS 240-201798/1	Lab Control Sample	Total/NA	Water	1010	
LCS 240-201798/2	Lab Control Sample	Total/NA	Water	1010	
LCS 240-201798/3	Lab Control Sample	Total/NA	Water	1010	
LCS 240-201798/4	Lab Control Sample	Total/NA	Solid	1010	

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-2

Client Sample ID: DRUM SOIL CUTTING

Lab Sample ID: 240-56464-33

Date Collected: 10/09/15 13:15

Matrix: Solid

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			202030	10/14/15 19:05	DRJ	TAL CAN
TCLP	Analysis	8260B		1	202139	10/15/15 23:35	TJL1	TAL CAN
TCLP	Leach	1311			202152	10/15/15 16:50	DRJ	TAL CAN
TCLP	Prep	3510C			202290	10/16/15 12:04	JDR	TAL CAN
TCLP	Analysis	8270C		1	202478	10/19/15 14:19	JMG	TAL CAN
TCLP	Leach	1311			202152	10/15/15 16:50	DRJ	TAL CAN
TCLP	Prep	3010A			202258	10/16/15 10:35	DEE	TAL CAN
TCLP	Analysis	6010B		1	202498	10/19/15 02:35	KLC	TAL CAN
TCLP	Leach	1311			202152	10/15/15 16:50	DRJ	TAL CAN
TCLP	Prep	7470A			202262	10/16/15 14:00	DEE	TAL CAN
TCLP	Analysis	7470A		1	203012	10/21/15 17:56	WAL	TAL CAN
Total/NA	Analysis	1010		1	201798	10/14/15 15:13	DTN	TAL CAN
Total/NA	Analysis	9045C		1	201706	10/13/15 15:20	BLW	TAL CAN

Client Sample ID: DRUM DECON/PURGE WATER

Lab Sample ID: 240-56464-34

Date Collected: 10/09/15 13:25

Matrix: Water

Date Received: 10/10/15 09:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			201379	10/11/15 14:45	KAS1	TAL CAN
TCLP	Analysis	8260B		1	201734	10/14/15 03:45	TJL1	TAL CAN
TCLP	Leach	1311			201518	10/12/15 17:30	DRJ	TAL CAN
TCLP	Prep	3510C			201625	10/13/15 11:17	CS	TAL CAN
TCLP	Analysis	8270C		1	202045	10/15/15 17:00	JMG	TAL CAN
TCLP	Leach	1311			201518	10/12/15 17:30	DRJ	TAL CAN
TCLP	Prep	3010A			201642	10/13/15 11:43	WKD	TAL CAN
TCLP	Analysis	6010B		1	201889	10/14/15 16:54	KLC	TAL CAN
TCLP	Leach	1311			201518	10/12/15 17:30	DRJ	TAL CAN
TCLP	Prep	7470A			201643	10/13/15 14:00	WKD	TAL CAN
TCLP	Analysis	7470A		1	201918	10/14/15 12:34	WAL	TAL CAN
Total/NA	Analysis	1010		1	201798	10/14/15 10:20	DTN	TAL CAN
Total/NA	Analysis	9040C		1	201310	10/10/15 11:45	LCN	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56464-2

Laboratory: TestAmerica Canton

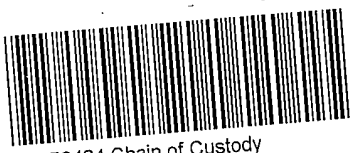
All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-15
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-26-16
Kentucky (WW)	State Program	4	98016	12-31-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-15
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	10-30-15 *
New York	NELAP	2	10975	03-31-16
Ohio VAP	State Program	5	CL0024	10-31-15 *
Oregon	NELAP	10	4062	02-23-16
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-16
West Virginia DEP	State Program	3	210	12-31-15
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS



TestAmerica Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

5.2/C1.1+ 4.2/C3.2+ 2.2/C0.1+ 1.6/C0.1 2.4/C0.9 3.6/C2.1 3.4/C1.9

Chain of Custody Record

089275

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: John Ellis	Site Contact: Greg Cook	Date:	COC No:
Company Name: Arcadis	Tel/Fax: John.Ellis@Arcadis.us	Lab Contact:	Carrier:	1 of 3 COCs
Address: 10352 Plaza American Dr	Analysis Turnaround Time			Sampler:
City/State/Zip: Baton Rouge, LA 70816	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 225-292-1004	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Graceland Manufacturing	☐ 1 week			
Site: Grenada MS	☐ 2 days			Job / SDG No.:
P O # LA00 3307.0001.0004	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	Mn/Fe, SO4, Cl, NO3, Br, F by IC 300.0	7470A Hg	TOC 9060A	VOC 8260B TCL+MS+3 VL	SVOC 8270C 625 MS+3 VL	PCB/Pesticides 608/8081 Sep Funnel	Sample Specific Notes:
TB-05(10.0-15)	10-08-15	—	—	W	2	N	N				2			
VAP-6 (2-4)	10-08-15		G	S	3	N	N	1	1	1				
VAP-6-GW(12-13)	"	0840	G	W	3	N	N				3			
VAP-6-GW(15-16)	"	0931	G	W	6	N	N				3	2	1	
VAP-6-GW(20-21)	10-08-15	0942	G	W	6	N	N				3	2	1	
VAP-6-GW(25-26)	"	1010	G	W	6	N	N				3	2	1	
VAP-6-GW(30-31)	"	1035	G	W	6	N	N				3	2	1	
VAP-6-GW(30-31)	10-08-15	1115	G	W	6	N	N				3	2	1	
VAP-6-GW(40-41)	"	1140	G	W	6	N	N				B	B	B	9 6 3 MS/MSD
VAP-6-GW(45-46)	"	1223	G	W	6	N	N				3	2	1	
VAP-6-GW(49-50)	10-08-15	1247	G	W	6	N	N				3	2	1	
Dup-02 (10.0-15)	10-08-15	—	G	W	6	N	N				3	2	1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:
VAP-6-GW(12-13) - only VOCs

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: _____ Corr'd: _____	Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
George Elcock	Arcadis	10/9/15 1330			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time: 10/10/15 948

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10/20/2015

TestAmerica Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

Chain of Custody Record

089276

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: John Ellis	Site Contact: Gary Cook	Date:	COC No:
Company Name: Arcadis	Tel/Fax: John.Ellis@Arcadis-us.com	Lab Contact:	Carrier:	2 of 3 COCs
Address: 10352 Plaza Americana Dr.	Analysis Turnaround Time			Sampler:
City/State/Zip: Baton Rouge, La 70816	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 225-292-1004	TAT if different from Below _____			Walk-in Client:
Fax:	☑ 2 weeks			Lab Sampling:
Project Name: Grenada Manufacturing	☐ 1 week			
Site: Grenada MS	☐ 2 days			Job / SDG No.:
PO # LA00 3367.001.0004	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Moisture SD702C 6010B	7471A 7196A 8260	Trace Cvc Ket	VOC 8260B TCLP M3X	SVOC 8270C TCLP M3X	Arsenic TCLP Mercury 7470	Sample Specific Notes:
VAP-8(1-2)	10-08-15	1330	G	S	3	N	N	1	1	1	—	—		
VAP-8-Gw(18-18)	"	1400	G	W	6	Y	Y	—	—	—	3	2	1	
VAP-8-Gw(20-21)	"	1440	G	W	6	Y	Y	—	—	—	3	2	1	
VAP-8-Gw(25-26)	10-08-15	1501	G	W	6	Y	Y	—	—	—	3	2	1	
VAP-8-Gw(30-31)	"	1527	G	W	6	Y	Y	—	—	—	3	2	1	
VAP-8-Gw(35-36)	"	1555	G	W	6	Y	Y	—	—	—	3	2	1	
VAP-8-Gw(40-41)	10-08-15	1636	G	W	6	Y	N	—	—	—	3	2	1	
VAP-8-Gw(45-46)	"	1708	G	W	6	Y	Y	—	—	—	3	2	1	
VAP-8-Gw-(49-50)	"	1740	G	W	C	Y	Y	—	—	—	3	2	1	
TB-06(10-08-15)	10-08-15	—	G	W	C	X	X	—	—	—	2	—		
~~VAP-7-Gw(13-14)~~ VAP-7(13-14)	10/09/15	0807	G	W	B	Y	Y	1	1	1	—	—		
VAP-7-Gw(13-14)	"	0845	G	W	6	Y	N	—	—	—	3	2	1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☑ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd: _____ Corr'd: _____	Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
George E Cook	Arcadis	10/09/15 1330			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
				TAL	10/10/15 945

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10/26/2015

TestAmerica Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

Chain of Custody Record

089278

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: John Ellis	Site Contact: George Cook	Date:	COC No:
Company Name: Arcadis	Tel/Fax: John.Ellis@Arcadis.com	Lab Contact:	Carrier:	3 of 3 COCs
Address: 10352 Plaza America Dr	Analysis Turnaround Time			Sampler:
City/State/Zip: Baton Rouge, LA 70816	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 225-292-1004	TAT if different from Below _____			Walk-in Client:
Fax:	☑ 2 weeks			Lab Sampling:
Project Name: Arcadis Manufacturing	☐ 1 week			
Site: Arcadis MCS	☐ 2 days			Job / SDG No.:
PO# LA0G3302.0001.00005	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Method 8260B, 8260C, 624	Method 8270C, 625	Target Analytes	Method 8260B TCL VOA 3 VL	Method 8260C VOA 3 VL	Method 8270C SIM (LL) 1,4-Dioxane	Method 8270C SIM (LL) 1,4-Dioxane	TCLP VOC, SVOC, Pesticides, Herbicides	TCLP Metals (any 8) TCLP	Mercury	pH Soil	TCLP VOC, SVOC, Pesticides, Herbicides	Mercury	Flash point	Sample Specific Notes:
VMP-7-GW (15-16)	10-09-15	0930	G	W	6	Y	N				3	2	1									
VMP-7-GW (20-21)	"	1000	G	W	6	Y	N				3	2	1									
VMP-7-GW (25-26)	"	1034	G	W	6	Y	N				3	2	1									
VMP-7-GW (30-31)	10-09-15	1057	G	W	18	Y	N				9	6	3									MS/MSD
VMP-7-GW (35-36)	"	1134	G	W	6	Y	N				3	2	1									
VMP-7-GW (43-44)	"	1157	G	W	6	Y	N				3	2	1									
VMP-7-GW (48-49)	"	1226	G	W	6	Y	N				3	2	1									
TB07 (10-09-15)	10-09-15	—	G	W	2	Y	N				2											
Drum 501 Cuttings	10-09-15	1315	G	S	3								1	2								
Drum Decon/Purge Wtr	10-09-15	1325	G	W	5										1	3	1	5				

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
George E Cook	Arcadis	10/09/15 1530			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time: 10/10/15 945

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10/20/2015

14 13 12 11 10 9 8 7 6 5 4 3 2 1

TestAmerica Canton Sample Receipt Form/Narrative — Login # : 56464
Canton Facility

Client ARCADIS — Site Name Grenada — Cooler unpacked by: Keathy

Cooler Received on 10/10/15 — Opened on 10/10/15

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other NER

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt
   - IR GUN# A (CF +1.0 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
   - ~~IR GUN# 4 (CF +0.5 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C~~
   - ~~IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C~~
   - IR GUN# 8 (CF -1.5 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

   ~~See Multiple Cooler Form~~

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 each (Yes) No
   - -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   - -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes (No)
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels be reconciled with the COC? (Yes) No
9. Were correct bottle(s) used for the test(s) indicated? (Yes) No
10. Sufficient quantity received to perform indicated analyses? (Yes) No
11. Were sample(s) at the correct pH upon receipt? (Yes) No NA pH Strip Lot# HC554612
12. Were VOAs on the COC? (Yes) No
13. Were air bubbles >6 mm in any VOA vials? Yes (No) NA
14. Was a trip blank present in the cooler(s)? Trip Blank Lot # Covered (Yes) No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

Received Sample Dup-3 on 10/9/15 @ not on COC

~~Rec~~ Received only 3x40mL HCL vials for sample VAP-6-GW(12-13)

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

TestAmerica Multiple Cooler Receipt Form/Narrative **Login # : 56464**

Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
Client	8	3.2	1.7	ICE
		1.6	0.1	
		3.4	1.9	
		4.2	3.7	
		2.4	0.9	
		2.2	0.7	
		3.6	2.1	

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
VAP-6-GW(12-13)	240-56464-F-3	Plastic 500ml - with Nitric Acid	<2		
VAP-6-GW(15-16)	240-56464-F-4	Plastic 500ml - with Nitric Acid	<2		
VAP-6-GW(20-21)	240-56464-F-5	Plastic 500ml - with Nitric Acid	<2		
VAP-6-GW(25-26)	240-56464-F-6	Plastic 500ml - with Nitric Acid	<2		
VAP-6-GW(30-31)	240-56464-F-7	Plastic 500ml - with Nitric Acid	<2		
VAP-6-GW(30-35)	240-56464-F-8	Plastic 500ml - with Nitric Acid	<2		
VAP-6-GW(40-41)	240-56464-P-9	Plastic 500ml - with Nitric Acid	<2		
VAP-6-GW(40-41)	240-56464-Q-9	Plastic 500ml - with Nitric Acid	<2		
VAP-6-GW(40-41)	240-56464-R-9	Plastic 500ml - with Nitric Acid	<2		
VAP-6-GW(45-46)	240-56464-F-10	Plastic 500ml - with Nitric Acid	<2		
VAP-6-GW(49-50)	240-56464-F-11	Plastic 500ml - with Nitric Acid	<2		
DUP-02(100815)	240-56464-F-12	Plastic 500ml - with Nitric Acid	<2		
VAP-8-GW(18-19)	240-56464-F-14	Plastic 500ml - with Nitric Acid	<2		
VAP-8-GW(20-21)	240-56464-F-15	Plastic 500ml - with Nitric Acid	<2		
VAP-8-GW(25-26)	240-56464-F-16	Plastic 500ml - with Nitric Acid	<2		
VAP-8-GW(30-31)	240-56464-F-17	Plastic 500ml - with Nitric Acid	<2		
VAP-8-GW(35-36)	240-56464-F-18	Plastic 500ml - with Nitric Acid	<2		
VAP-8-GW(40-41)	240-56464-F-19	Plastic 500ml - with Nitric Acid	<2		
VAP-8-GW(45-46)	240-56464-F-20	Plastic 500ml - with Nitric Acid	<2		
VAP-8-GW(49-50)	240-56464-F-21	Plastic 500ml - with Nitric Acid	<2		
VAP-7-GW(13-14)	240-56464-F-24	Plastic 500ml - with Nitric Acid	<2		
VAP-7-GW(15-16)	240-56464-F-25	Plastic 500ml - with Nitric Acid	<2		
VAP-7-GW(20-21)	240-56464-F-26	Plastic 500ml - with Nitric Acid	<2		
VAP-7-GW(25-26)	240-56464-F-27	Plastic 500ml - with Nitric Acid	<2		
VAP-7-GW(30-31)	240-56464-P-28	Plastic 500ml - with Nitric Acid	<2		
VAP-7-GW(30-31)	240-56464-Q-28	Plastic 500ml - with Nitric Acid	<2		
VAP-7-GW(30-31)	240-56464-R-28	Plastic 500ml - with Nitric Acid	<2		
VAP-7-GW(35-36)	240-56464-F-29	Plastic 500ml - with Nitric Acid	<2		
VAP-7-GW(43-44)	240-56464-F-30	Plastic 500ml - with Nitric Acid	<2		
VAP-7-GW(48-49)	240-56464-F-31	Plastic 500ml - with Nitric Acid	<2		
DUP-3	240-56464-F-35	Plastic 500ml - with Nitric Acid	<2		

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-56876-1
Client Project/Site: Grenada Manufacturing

For:
ARCADIS U.S., Inc.
10352 Plaza Americana Dr.
Baton Rouge, Louisiana 70816

Attn: Mr. John Ellis

Denise Pohl

Authorized for release by:
10/30/2015 4:47:24 PM

Denise Pohl, Project Manager II
(330)966-9789
denise.pohl@testamericainc.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
E	Result exceeded calibration range.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
L	A negative instrument reading had an absolute value greater than the reporting limit

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 240-56876-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Grenada Manufacturing

Report Number: 240-56876-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 10/21/2015 10:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.9º C and 2.1º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Sample VAP-10 (0-2) (240-56876-1) was analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The sample was prepared on 10/21/2015 and analyzed on 10/25/2015.

2-Butanone (MEK) and Acetone were detected in method blank MB 240-203518/9 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Method(s) 8260B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 240-202984 and analytical batch 240-203518.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Job ID: 240-56876-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

Samples TB-01 (101915) (240-56876-2), VAP-10-GW (16-17) (240-56876-3), VAP-10-GW (20-21) (240-56876-4), VAP-10-GW (25-26) (240-56876-5), VAP-10-GW (30-31) (240-56876-6), VAP-10-GW (35-36) (240-56876-7), VAP-10-GW (40-41) (240-56876-8), VAP-10-GW (45-46) (240-56876-9) and VAP-10-GW (49-50) (240-56876-10) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 10/28/2015.

Methylene Chloride was detected in method blank MB 240-204102/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Sample VAP-10 (0-2) (240-56876-1) was analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270C. The sample was prepared on 10/22/2015 and analyzed on 10/26/2015.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

2,4,6-Tribromophenol (Surr), 2-Fluorobiphenyl (Surr), 2-Fluorophenol (Surr), Nitrobenzene-d5 (Surr), Phenol-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for 240-56823-F-1-B MS. 2,4,6-Tribromophenol (Surr), 2-Fluorobiphenyl (Surr), 2-Fluorophenol (Surr), Nitrobenzene-d5 (Surr), Phenol-d5 (Surr) and Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for 240-56823-F-1-C MSD. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Samples VAP-10-GW (16-17) (240-56876-3), VAP-10-GW (20-21) (240-56876-4), VAP-10-GW (25-26) (240-56876-5), VAP-10-GW (30-31) (240-56876-6), VAP-10-GW (35-36) (240-56876-7), VAP-10-GW (40-41) (240-56876-8), VAP-10-GW (45-46) (240-56876-9) and VAP-10-GW (49-50) (240-56876-10) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 10/22/2015 and analyzed on 10/29/2015.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

3,3'-Dichlorobenzidine and 4-Chloroaniline failed the recovery criteria low for LCS 240-203051/10-A. Benzaldehyde failed the recovery criteria high. Refer to the QC report for details.

Method(s) 8270C: The LCS for prep batch 203051 recovered low for the following analytes: 3,3' - Dichlorobenzidine and 4-Chloroaniline. Since the LVI recovery limits are advisory only, no corrective action was taken. Batch includes: VAP-10-GW (16-17) (240-56876-3), VAP-10-GW (20-21) (240-56876-4), VAP-10-GW (25-26) (240-56876-5), VAP-10-GW (30-31) (240-56876-6), VAP-10-GW (35-36) (240-56876-7), VAP-10-GW (40-41) (240-56876-8), VAP-10-GW (45-46) (240-56876-9) and VAP-10-GW (49-50) (240-56876-10).

Method(s) 8270C: The laboratory control sample (LCS) for prep batch 203051 recovered outside control limits for the following analytes: Benzaldehyde. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method(s) 3520C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 240-203051.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)

Sample VAP-10 (0-2) (240-56876-1) was analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The sample was prepared on 10/23/2015 and analyzed on 10/27/2015.

Job ID: 240-56876-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED METALS (ICP)

Samples VAP-10-GW (16-17) (240-56876-3), VAP-10-GW (20-21) (240-56876-4), VAP-10-GW (25-26) (240-56876-5), VAP-10-GW (30-31) (240-56876-6), VAP-10-GW (35-36) (240-56876-7) and VAP-10-GW (45-46) (240-56876-9) were analyzed for dissolved metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 10/22/2015 and analyzed on 10/23/2015 and 10/26/2015.

Barium was detected in method blank MB 240-203125/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

DISSOLVED MERCURY (CVAA)

Samples VAP-10-GW (16-17) (240-56876-3), VAP-10-GW (20-21) (240-56876-4), VAP-10-GW (25-26) (240-56876-5), VAP-10-GW (30-31) (240-56876-6), VAP-10-GW (35-36) (240-56876-7) and VAP-10-GW (45-46) (240-56876-9) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 10/22/2015 and analyzed on 10/26/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY

Sample VAP-10 (0-2) (240-56876-1) was analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The sample was prepared on 10/23/2015 and analyzed on 10/26/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

HEXAVALENT CHROMIUM

Sample VAP-10 (0-2) (240-56876-1) was analyzed for hexavalent chromium in accordance with EPA SW-846 Method 3060A/7196A. The sample was prepared on 10/23/2015 and analyzed on 10/27/2015.

Sample VAP-10 (0-2) (240-56876-1)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Method(s) 7196A: The following sample was diluted due to the nature of the sample matrix: VAP-10 (0-2) (240-56876-1). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

PERCENT SOLIDS

Sample VAP-10 (0-2) (240-56876-1) was analyzed for percent solids in accordance with EPA Method 160.3 MOD. The sample was analyzed on 10/22/2015.

Percent Moisture exceeded the RPD limit for the duplicate of sample 240-56917-7. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56876-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN
7471A	Mercury (CVAA)	SW846	TAL CAN
7196A	Chromium, Hexavalent	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56876-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-56876-1	VAP-10 (0-2)	Solid	10/19/15 16:20	10/21/15 10:30
240-56876-2	TB-01 (101915)	Water	10/19/15 00:00	10/21/15 10:30
240-56876-3	VAP-10-GW (16-17)	Water	10/20/15 08:10	10/21/15 10:30
240-56876-4	VAP-10-GW (20-21)	Water	10/20/15 09:00	10/21/15 10:30
240-56876-5	VAP-10-GW (25-26)	Water	10/20/15 09:41	10/21/15 10:30
240-56876-6	VAP-10-GW (30-31)	Water	10/20/15 10:00	10/21/15 10:30
240-56876-7	VAP-10-GW (35-36)	Water	10/20/15 10:34	10/21/15 10:30
240-56876-8	VAP-10-GW (40-41)	Water	10/20/15 11:09	10/21/15 10:30
240-56876-9	VAP-10-GW (45-46)	Water	10/20/15 12:01	10/21/15 10:30
240-56876-10	VAP-10-GW (49-50)	Water	10/20/15 12:32	10/21/15 10:30

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56876-1

Client Sample ID: VAP-10 (0-2) — Lab Sample ID: 240-56876-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	210	B	24	1.9	ug/Kg	1	☼	8260B	Total/NA
Benzene	0.37	J	6.0	0.29	ug/Kg	1	☼	8260B	Total/NA
2-Butanone (MEK)	16	J B	24	0.58	ug/Kg	1	☼	8260B	Total/NA
Methyl acetate	15		12	2.8	ug/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	4.8	J	7.3	0.55	ug/Kg	1	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	35	J	77	21	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	6.0	J	7.3	0.90	ug/Kg	1	☼	8270C	Total/NA
Arsenic	5.9		0.94	0.39	mg/Kg	1	☼	6010B	Total/NA
Barium	78		19	0.39	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.072	J	0.19	0.020	mg/Kg	1	☼	6010B	Total/NA
Chromium	9.6		0.47	0.070	mg/Kg	1	☼	6010B	Total/NA
Lead	11		0.28	0.19	mg/Kg	1	☼	6010B	Total/NA
Selenium	0.32	J	0.47	0.32	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.020	J	0.11	0.016	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: TB-01 (101915) — Lab Sample ID: 240-56876-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.0	J	10	0.94	ug/L	1		8260B	Total/NA

Client Sample ID: VAP-10-GW (16-17) — Lab Sample ID: 240-56876-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.2	J	10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	0.64	J	10	0.53	ug/L	1		8260B	Total/NA
Toluene	0.28	J	1.0	0.23	ug/L	1		8260B	Total/NA
Caprolactam	8.5		4.6	0.34	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.31	J	0.93	0.12	ug/L	1		8270C	Total/NA
Arsenic	24		10	2.9	ug/L	1		6010B	Dissolved
Barium	460	B	200	1.0	ug/L	1		6010B	Dissolved
Cadmium	0.77	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	130		5.0	0.55	ug/L	1		6010B	Dissolved
Lead	34		3.0	1.9	ug/L	1		6010B	Dissolved
Mercury	0.17	J	0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-10-GW (20-21) — Lab Sample ID: 240-56876-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.1	J	10	0.94	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.6	J	1.9	1.4	ug/L	1		8270C	Total/NA
Caprolactam	30		4.6	0.34	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.78	J	0.93	0.12	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.93		0.93	0.37	ug/L	1		8270C	Total/NA
Arsenic	4.2	J	10	2.9	ug/L	1		6010B	Dissolved
Barium	43	J B	200	1.0	ug/L	1		6010B	Dissolved
Cadmium	0.18	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	5.0		5.0	0.55	ug/L	1		6010B	Dissolved

Client Sample ID: VAP-10-GW (25-26) — Lab Sample ID: 240-56876-5

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-10-GW (25-26) (Continued) — Lab Sample ID: 240-56876-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	0.33		0.19	0.055	ug/L	1		8270C	Total/NA
Benzo[g,h,i]perylene	0.22		0.19	0.046	ug/L	1		8270C	Total/NA
Benzo[k]fluoranthene	0.20		0.19	0.044	ug/L	1		8270C	Total/NA
Bis(2-ethylhexyl) phthalate	1.7	J	1.9	1.4	ug/L	1		8270C	Total/NA
Caprolactam	0.82	J	4.6	0.34	ug/L	1		8270C	Total/NA
Chrysene	0.29		0.19	0.032	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.21	J	0.93	0.12	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.69	J	0.93	0.37	ug/L	1		8270C	Total/NA
Fluoranthene	0.35		0.19	0.025	ug/L	1		8270C	Total/NA
Indeno[1,2,3-cd]pyrene	0.20		0.19	0.044	ug/L	1		8270C	Total/NA
Phenanthrene	0.27		0.19	0.029	ug/L	1		8270C	Total/NA
Pyrene	0.37		0.19	0.026	ug/L	1		8270C	Total/NA
Arsenic	49		10	2.9	ug/L	1		6010B	Dissolved
Barium	490	B	200	1.0	ug/L	1		6010B	Dissolved
Cadmium	1.2	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	410		5.0	0.55	ug/L	1		6010B	Dissolved
Lead	76		3.0	1.9	ug/L	1		6010B	Dissolved
Mercury	0.43		0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-10-GW (30-31) — Lab Sample ID: 240-56876-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetophenone	0.20	J	0.93	0.13	ug/L	1		8270C	Total/NA
Bis(2-ethylhexyl) phthalate	1.8	J	1.9	1.4	ug/L	1		8270C	Total/NA
Caprolactam	0.85	J	4.6	0.34	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.29	J	0.93	0.12	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.85	J	0.93	0.37	ug/L	1		8270C	Total/NA
Isophorone	0.22	J	0.93	0.039	ug/L	1		8270C	Total/NA
Arsenic	16		10	2.9	ug/L	1		6010B	Dissolved
Barium	720	B	200	1.0	ug/L	1		6010B	Dissolved
Cadmium	1.0	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	400		5.0	0.55	ug/L	1		6010B	Dissolved
Lead	64		3.0	1.9	ug/L	1		6010B	Dissolved
Selenium	4.4	J	5.0	4.0	ug/L	1		6010B	Dissolved
Mercury	0.82		0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-10-GW (35-36) — Lab Sample ID: 240-56876-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	1.4	J	1.8	1.4	ug/L	1		8270C	Total/NA
Caprolactam	0.72	J	4.5	0.33	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.76	J	0.89	0.36	ug/L	1		8270C	Total/NA
Naphthalene	0.22		0.18	0.038	ug/L	1		8270C	Total/NA
Arsenic	3.7	J	10	2.9	ug/L	1		6010B	Dissolved
Barium	330	B	200	1.0	ug/L	1		6010B	Dissolved
Cadmium	0.57	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	96		5.0	0.55	ug/L	1		6010B	Dissolved
Lead	43		3.0	1.9	ug/L	1		6010B	Dissolved
Selenium	4.4	J	5.0	4.0	ug/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56876-1

Client Sample ID: VAP-10-GW (40-41) — Lab Sample ID: 240-56876-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.5	J	10	0.94	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	1.9	J	10	0.53	ug/L	1		8260B	Total/NA
Chloroform	0.37	J	1.0	0.25	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.8	J	1.9	1.4	ug/L	1		8270C	Total/NA
Caprolactam	0.85	J	4.6	0.34	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.25	J	0.93	0.12	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.65	J	0.93	0.37	ug/L	1		8270C	Total/NA

Client Sample ID: VAP-10-GW (45-46) — Lab Sample ID: 240-56876-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.59	J	1.0	0.38	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.8	J	1.9	1.5	ug/L	1		8270C	Total/NA
Caprolactam	0.91	J	4.8	0.36	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.33	J	0.96	0.12	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	1.2		0.96	0.38	ug/L	1		8270C	Total/NA
Arsenic	36		10	2.9	ug/L	1		6010B	Dissolved
Barium	750	B	200	1.0	ug/L	1		6010B	Dissolved
Cadmium	1.6	J	2.0	0.14	ug/L	1		6010B	Dissolved
Chromium	570		5.0	0.55	ug/L	1		6010B	Dissolved
Lead	73		3.0	1.9	ug/L	1		6010B	Dissolved
Selenium	4.8	J	5.0	4.0	ug/L	1		6010B	Dissolved
Mercury	0.15	J	0.20	0.090	ug/L	1		7470A	Dissolved

Client Sample ID: VAP-10-GW (49-50) — Lab Sample ID: 240-56876-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.43	J	1.0	0.38	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.5	J	1.9	1.4	ug/L	1		8270C	Total/NA
Caprolactam	0.68	J	4.6	0.34	ug/L	1		8270C	Total/NA
Diethyl phthalate	0.25	J	0.93	0.12	ug/L	1		8270C	Total/NA
Di-n-butyl phthalate	0.70	J	0.93	0.37	ug/L	1		8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: VAP-10 (0-2)
Date Collected: 10/19/15 16:20
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-1
Matrix: Solid
Percent Solids: 90.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**210**	**B**	24	1.9	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Benzene	**0.37**	**J**	6.0	0.29	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Dichlorobromomethane	6.0	U	6.0	0.25	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Bromoform	6.0	U	6.0	0.46	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Bromomethane	6.0	U	6.0	0.86	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
2-Butanone (MEK)	**16**	**J B**	24	0.58	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Carbon disulfide	6.0	U	6.0	0.41	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Carbon tetrachloride	6.0	U	6.0	0.40	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Chlorobenzene	6.0	U	6.0	0.35	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Chloroethane	6.0	U	6.0	0.41	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Chloroform	6.0	U	6.0	0.25	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Chloromethane	6.0	U	6.0	1.6	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
1,1-Dichloroethane	6.0	U	6.0	1.5	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
1,2-Dichloroethane	6.0	U	6.0	0.24	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
1,1-Dichloroethene	6.0	U	6.0	0.59	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
1,2-Dichloropropane	6.0	U	6.0	0.34	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
cis-1,3-Dichloropropene	6.0	U	6.0	0.33	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
trans-1,3-Dichloropropene	6.0	U	6.0	0.25	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Ethylbenzene	6.0	U	6.0	0.39	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
2-Hexanone	24	U	24	0.85	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Methylene Chloride	6.0	U	6.0	1.3	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
4-Methyl-2-pentanone (MIBK)	24	U	24	0.35	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Styrene	6.0	U	6.0	0.33	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
1,1,2,2-Tetrachloroethane	6.0	U	6.0	0.19	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Tetrachloroethene	6.0	U	6.0	0.40	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Toluene	6.0	U	6.0	0.33	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Trichloroethene	6.0	U	6.0	0.31	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Vinyl chloride	6.0	U	6.0	0.47	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Xylenes, Total	12	U	12	0.76	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
1,1,1-Trichloroethane	6.0	U	6.0	0.31	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
1,1,2-Trichloroethane	6.0	U	6.0	0.59	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Cyclohexane	12	U	12	0.35	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
1,2-Dibromo-3-Chloropropane	12	U	12	2.2	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Ethylene Dibromide	6.0	U	6.0	0.30	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Dichlorodifluoromethane	6.0	U	6.0	0.48	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
cis-1,2-Dichloroethene	6.0	U	6.0	0.34	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
trans-1,2-Dichloroethene	6.0	U	6.0	0.45	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Isopropylbenzene	6.0	U	6.0	0.36	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Methyl acetate	**15**		12	2.8	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Methyl tert-butyl ether	6.0	U	6.0	0.18	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	6.0	U	6.0	0.47	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
1,2,4-Trichlorobenzene	6.0	U	6.0	0.47	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
1,2-Dichlorobenzene	6.0	U	6.0	0.46	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
1,3-Dichlorobenzene	6.0	U	6.0	0.48	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
1,4-Dichlorobenzene	6.0	U	6.0	0.50	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Trichlorofluoromethane	6.0	U	6.0	0.31	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Chlorodibromomethane	6.0	U	6.0	0.19	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1
Methylcyclohexane	12	U	12	0.40	ug/Kg	☼	10/21/15 20:30	10/25/15 06:47	1

Client Sample ID: VAP-10 (0-2)

Date Collected: 10/19/15 16:20
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-1

Matrix: Solid
Percent Solids: 90.9

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*96*		*64 - 120*	*10/21/15 20:30*	*10/25/15 06:47*	*1*
4-Bromofluorobenzene (Surr)	*114*		*64 - 130*	*10/21/15 20:30*	*10/25/15 06:47*	*1*
Toluene-d8 (Surr)	*101*		*69 - 128*	*10/21/15 20:30*	*10/25/15 06:47*	*1*
Dibromofluoromethane (Surr)	*101*		*68 - 120*	*10/21/15 20:30*	*10/25/15 06:47*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	55	U	55	3.9	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
bis (2-chloroisopropyl) ether	110	U	110	10	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
2,4,5-Trichlorophenol	170	U	170	28	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
2,4,6-Trichlorophenol	170	U	170	9.8	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
2,4-Dichlorophenol	170	U	170	22	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
2,4-Dimethylphenol	170	U	170	22	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
2,4-Dinitrophenol	360	U	360	23	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
2,4-Dinitrotoluene	220	U	220	19	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
2,6-Dinitrotoluene	220	U	220	23	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
2-Chloronaphthalene	55	U	55	0.50	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
2-Chlorophenol	55	U	55	9.0	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
2-Methylnaphthalene	**4.8**	**J**	7.3	0.55	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
2-Methylphenol	220	U	220	12	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
2-Nitroaniline	220	U	220	10	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
2-Nitrophenol	55	U	55	9.1	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
3,3'-Dichlorobenzidine	110	U	110	20	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
3-Nitroaniline	220	U	220	18	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
4,6-Dinitro-2-methylphenol	170	U	170	10	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
4-Bromophenyl phenyl ether	55	U	55	14	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
4-Chloro-3-methylphenol	170	U	170	23	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
4-Chloroaniline	170	U	170	19	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
4-Chlorophenyl phenyl ether	55	U	55	14	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
4-Nitroaniline	220	U	220	29	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
4-Nitrophenol	360	U	360	19	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Acenaphthene	7.3	U	7.3	0.84	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Acenaphthylene	7.3	U	7.3	0.39	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Acetophenone	110	U	110	10	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Anthracene	7.3	U	7.3	0.86	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Atrazine	220	U	220	10	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Benzaldehyde	110	U	110	13	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Benzo[a]anthracene	7.3	U	7.3	0.69	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Benzo[a]pyrene	7.3	U	7.3	0.70	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Benzo[b]fluoranthene	7.3	U	7.3	0.65	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Benzo[g,h,i]perylene	7.3	U	7.3	0.39	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Benzo[k]fluoranthene	7.3	U	7.3	0.75	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Bis(2-chloroethoxy)methane	110	U	110	24	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Bis(2-chloroethyl)ether	110	U	110	2.2	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Bis(2-ethylhexyl) phthalate	**35**	**J**	77	21	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Butyl benzyl phthalate	77	U	77	11	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Caprolactam	360	U	360	41	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Carbazole	55	U	55	30	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Chrysene	7.3	U	7.3	1.2	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Dibenz(a,h)anthracene	7.3	U	7.3	0.73	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1

Client Sample ID: VAP-10 (0-2)
Date Collected: 10/19/15 16:20
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-1
Matrix: Solid
Percent Solids: 90.9

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenzofuran	55	U	55	0.73	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Diethyl phthalate	77	U	77	18	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Dimethyl phthalate	77	U	77	19	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Di-n-butyl phthalate	77	U	77	17	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Di-n-octyl phthalate	77	U	77	8.7	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Fluoranthene	7.3	U	7.3	0.61	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Fluorene	7.3	U	7.3	0.58	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Hexachlorobenzene	7.3	U	7.3	2.3	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Hexachlorobutadiene	55	U	55	6.2	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Hexachlorocyclopentadiene	360	U	360	8.9	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Hexachloroethane	55	U	55	9.9	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Indeno[1,2,3-cd]pyrene	7.3	U	7.3	0.39	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Isophorone	55	U	55	14	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Naphthalene	**6.0**	**J**	7.3	0.90	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Nitrobenzene	110	U	110	2.4	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
N-Nitrosodi-n-propylamine	55	U	55	6.9	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
N-Nitrosodiphenylamine	55	U	55	23	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Pentachlorophenol	170	U	170	10	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Phenol	55	U	55	8.0	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Phenanthrene	7.3	U	7.3	0.80	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
Pyrene	7.3	U	7.3	0.48	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1
3 & 4 Methylphenol	440	U	440	22	ug/Kg	☼	10/22/15 07:03	10/26/15 12:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*76*		*24 - 110*	*10/22/15 07:03*	*10/26/15 12:49*	*1*
2-Fluorophenol (Surr)	*72*		*24 - 110*	*10/22/15 07:03*	*10/26/15 12:49*	*1*
2,4,6-Tribromophenol (Surr)	*26*		*10 - 110*	*10/22/15 07:03*	*10/26/15 12:49*	*1*
Nitrobenzene-d5 (Surr)	*73*		*20 - 110*	*10/22/15 07:03*	*10/26/15 12:49*	*1*
Phenol-d5 (Surr)	*78*		*26 - 110*	*10/22/15 07:03*	*10/26/15 12:49*	*1*
Terphenyl-d14 (Surr)	*88*		*36 - 110*	*10/22/15 07:03*	*10/26/15 12:49*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.9**		0.94	0.39	mg/Kg	☼	10/23/15 12:49	10/27/15 04:16	1
Barium	**78**		19	0.39	mg/Kg	☼	10/23/15 12:49	10/27/15 04:16	1
Cadmium	**0.072**	**J**	0.19	0.020	mg/Kg	☼	10/23/15 12:49	10/27/15 04:16	1
Chromium	**9.6**		0.47	0.070	mg/Kg	☼	10/23/15 12:49	10/27/15 04:16	1
Lead	**11**		0.28	0.19	mg/Kg	☼	10/23/15 12:49	10/27/15 04:16	1
Selenium	**0.32**	**J**	0.47	0.32	mg/Kg	☼	10/23/15 12:49	10/27/15 18:00	1
Silver	0.47	U	0.47	0.059	mg/Kg	☼	10/23/15 12:49	10/27/15 04:16	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.020**	**J**	0.11	0.016	mg/Kg	☼	10/23/15 16:55	10/26/15 15:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	1.7	U	1.7	0.56	mg/Kg	☼	10/23/15 10:00	10/27/15 15:59	2
Percent Solids	**91**		0.10	0.10	%			10/22/15 14:13	1
Percent Moisture	**9.1**		0.10	0.10	%			10/22/15 14:13	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56876-1

Client Sample ID: TB-01 (101915)
Date Collected: 10/19/15 00:00
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	3.0	J	10	0.94	ug/L			10/28/15 01:16	1
Benzene	1.0	U	1.0	0.35	ug/L			10/28/15 01:16	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/28/15 01:16	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/28/15 01:16	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/28/15 01:16	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/28/15 01:16	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/28/15 01:16	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/28/15 01:16	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/28/15 01:16	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/28/15 01:16	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/28/15 01:16	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/28/15 01:16	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/28/15 01:16	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/28/15 01:16	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/28/15 01:16	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/28/15 01:16	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/28/15 01:16	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/28/15 01:16	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/28/15 01:16	1
2-Hexanone	10	U	10	0.48	ug/L			10/28/15 01:16	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/28/15 01:16	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/28/15 01:16	1
Styrene	1.0	U	1.0	0.45	ug/L			10/28/15 01:16	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/28/15 01:16	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/28/15 01:16	1
Toluene	1.0	U	1.0	0.23	ug/L			10/28/15 01:16	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/28/15 01:16	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/28/15 01:16	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/28/15 01:16	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/28/15 01:16	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/28/15 01:16	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/28/15 01:16	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/28/15 01:16	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/28/15 01:16	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/28/15 01:16	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/28/15 01:16	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/28/15 01:16	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/28/15 01:16	1
Methyl acetate	10	U	10	2.3	ug/L			10/28/15 01:16	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/28/15 01:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/28/15 01:16	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/28/15 01:16	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/28/15 01:16	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/28/15 01:16	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/28/15 01:16	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/28/15 01:16	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/28/15 01:16	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/28/15 01:16	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56876-1

Client Sample ID: TB-01 (101915)
Date Collected: 10/19/15 00:00
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		78 - 125		10/28/15 01:16	1
4-Bromofluorobenzene (Surr)	92		61 - 120		10/28/15 01:16	1
Toluene-d8 (Surr)	94		80 - 120		10/28/15 01:16	1
Dibromofluoromethane (Surr)	93		79 - 120		10/28/15 01:16	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56876-1

Client Sample ID: VAP-10-GW (16-17)
Date Collected: 10/20/15 08:10
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**2.2**	**J**	10	0.94	ug/L			10/28/15 14:39	1
Benzene	1.0	U	1.0	0.35	ug/L			10/28/15 14:39	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/28/15 14:39	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/28/15 14:39	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/28/15 14:39	1
2-Butanone (MEK)	**0.64**	**J**	10	0.53	ug/L			10/28/15 14:39	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/28/15 14:39	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/28/15 14:39	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/28/15 14:39	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/28/15 14:39	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/28/15 14:39	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/28/15 14:39	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/28/15 14:39	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/28/15 14:39	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/28/15 14:39	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/28/15 14:39	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/28/15 14:39	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/28/15 14:39	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/28/15 14:39	1
2-Hexanone	10	U	10	0.48	ug/L			10/28/15 14:39	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/28/15 14:39	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/28/15 14:39	1
Styrene	1.0	U	1.0	0.45	ug/L			10/28/15 14:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/28/15 14:39	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/28/15 14:39	1
Toluene	**0.28**	**J**	1.0	0.23	ug/L			10/28/15 14:39	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/28/15 14:39	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/28/15 14:39	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/28/15 14:39	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/28/15 14:39	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/28/15 14:39	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/28/15 14:39	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/28/15 14:39	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/28/15 14:39	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/28/15 14:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/28/15 14:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/28/15 14:39	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/28/15 14:39	1
Methyl acetate	10	U	10	2.3	ug/L			10/28/15 14:39	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/28/15 14:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/28/15 14:39	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/28/15 14:39	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/28/15 14:39	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/28/15 14:39	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/28/15 14:39	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/28/15 14:39	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/28/15 14:39	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/28/15 14:39	1

Client Sample ID: VAP-10-GW (16-17)

Date Collected: 10/20/15 08:10
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-3

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*78 - 125*		*10/28/15 14:39*	*1*
4-Bromofluorobenzene (Surr)	*88*		*61 - 120*		*10/28/15 14:39*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/28/15 14:39*	*1*
Dibromofluoromethane (Surr)	*91*		*79 - 120*		*10/28/15 14:39*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/22/15 05:45	10/29/15 09:13	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/22/15 05:45	10/29/15 09:13	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/22/15 05:45	10/29/15 09:13	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/22/15 05:45	10/29/15 09:13	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 09:13	1
Benzaldehyde	0.93	U *	0.93	0.27	ug/L		10/22/15 05:45	10/29/15 09:13	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/22/15 05:45	10/29/15 09:13	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/22/15 05:45	10/29/15 09:13	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/22/15 05:45	10/29/15 09:13	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/22/15 05:45	10/29/15 09:13	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/22/15 05:45	10/29/15 09:13	1
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 09:13	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/22/15 05:45	10/29/15 09:13	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/22/15 05:45	10/29/15 09:13	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/22/15 05:45	10/29/15 09:13	1
Bis(2-ethylhexyl) phthalate	1.9	U	1.9	1.4	ug/L		10/22/15 05:45	10/29/15 09:13	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/22/15 05:45	10/29/15 09:13	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/22/15 05:45	10/29/15 09:13	1
Caprolactam	**8.5**		4.6	0.34	ug/L		10/22/15 05:45	10/29/15 09:13	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/22/15 05:45	10/29/15 09:13	1
4-Chloroaniline	1.9	U *	1.9	0.14	ug/L		10/22/15 05:45	10/29/15 09:13	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/22/15 05:45	10/29/15 09:13	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 09:13	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/22/15 05:45	10/29/15 09:13	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/22/15 05:45	10/29/15 09:13	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/22/15 05:45	10/29/15 09:13	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/22/15 05:45	10/29/15 09:13	1
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/22/15 05:45	10/29/15 09:13	1
3,3'-Dichlorobenzidine	4.6	U *	4.6	0.33	ug/L		10/22/15 05:45	10/29/15 09:13	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/22/15 05:45	10/29/15 09:13	1
Diethyl phthalate	**0.31**	**J**	0.93	0.12	ug/L		10/22/15 05:45	10/29/15 09:13	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/22/15 05:45	10/29/15 09:13	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/22/15 05:45	10/29/15 09:13	1
Di-n-butyl phthalate	0.93	U	0.93	0.37	ug/L		10/22/15 05:45	10/29/15 09:13	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/22/15 05:45	10/29/15 09:13	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/22/15 05:45	10/29/15 09:13	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/22/15 05:45	10/29/15 09:13	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/22/15 05:45	10/29/15 09:13	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/22/15 05:45	10/29/15 09:13	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/22/15 05:45	10/29/15 09:13	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/22/15 05:45	10/29/15 09:13	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 09:13	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/22/15 05:45	10/29/15 09:13	1

Client Sample ID: VAP-10-GW (16-17)

Date Collected: 10/20/15 08:10
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-3
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/22/15 05:45	10/29/15 09:13	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/22/15 05:45	10/29/15 09:13	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/22/15 05:45	10/29/15 09:13	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/22/15 05:45	10/29/15 09:13	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/22/15 05:45	10/29/15 09:13	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/22/15 05:45	10/29/15 09:13	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/22/15 05:45	10/29/15 09:13	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/22/15 05:45	10/29/15 09:13	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/22/15 05:45	10/29/15 09:13	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/22/15 05:45	10/29/15 09:13	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/22/15 05:45	10/29/15 09:13	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 09:13	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/22/15 05:45	10/29/15 09:13	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/22/15 05:45	10/29/15 09:13	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/22/15 05:45	10/29/15 09:13	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/22/15 05:45	10/29/15 09:13	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/22/15 05:45	10/29/15 09:13	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/22/15 05:45	10/29/15 09:13	1
Phenol	0.93	U	0.93	0.14	ug/L		10/22/15 05:45	10/29/15 09:13	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/22/15 05:45	10/29/15 09:13	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/22/15 05:45	10/29/15 09:13	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/22/15 05:45	10/29/15 09:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*76*		*29 - 110*	*10/22/15 05:45*	*10/29/15 09:13*	*1*
2-Fluorophenol (Surr)	*77*		*15 - 110*	*10/22/15 05:45*	*10/29/15 09:13*	*1*
Nitrobenzene-d5 (Surr)	*77*		*31 - 110*	*10/22/15 05:45*	*10/29/15 09:13*	*1*
Phenol-d5 (Surr)	*74*		*10 - 110*	*10/22/15 05:45*	*10/29/15 09:13*	*1*
Terphenyl-d14 (Surr)	*86*		*31 - 115*	*10/22/15 05:45*	*10/29/15 09:13*	*1*
2,4,6-Tribromophenol (Surr)	*59*		*21 - 128*	*10/22/15 05:45*	*10/29/15 09:13*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**24**		10	2.9	ug/L		10/22/15 10:43	10/23/15 16:47	1
Barium	**460**	**B**	200	1.0	ug/L		10/22/15 10:43	10/23/15 16:47	1
Cadmium	**0.77**	**J**	2.0	0.14	ug/L		10/22/15 10:43	10/23/15 16:47	1
Chromium	**130**		5.0	0.55	ug/L		10/22/15 10:43	10/23/15 16:47	1
Lead	**34**		3.0	1.9	ug/L		10/22/15 10:43	10/23/15 16:47	1
Selenium	5.0	U	5.0	4.0	ug/L		10/22/15 10:43	10/23/15 16:47	1
Silver	5.0	U	5.0	0.92	ug/L		10/22/15 10:43	10/23/15 16:47	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.17**	**J**	0.20	0.090	ug/L		10/22/15 12:00	10/26/15 15:38	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56876-1

Client Sample ID: VAP-10-GW (20-21)
Date Collected: 10/20/15 09:00
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1.1	J	10	0.94	ug/L			10/28/15 15:01	1
Benzene	1.0	U	1.0	0.35	ug/L			10/28/15 15:01	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/28/15 15:01	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/28/15 15:01	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/28/15 15:01	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/28/15 15:01	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/28/15 15:01	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/28/15 15:01	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/28/15 15:01	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/28/15 15:01	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/28/15 15:01	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/28/15 15:01	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/28/15 15:01	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/28/15 15:01	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/28/15 15:01	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/28/15 15:01	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/28/15 15:01	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/28/15 15:01	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/28/15 15:01	1
2-Hexanone	10	U	10	0.48	ug/L			10/28/15 15:01	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/28/15 15:01	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/28/15 15:01	1
Styrene	1.0	U	1.0	0.45	ug/L			10/28/15 15:01	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/28/15 15:01	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/28/15 15:01	1
Toluene	1.0	U	1.0	0.23	ug/L			10/28/15 15:01	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/28/15 15:01	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/28/15 15:01	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/28/15 15:01	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/28/15 15:01	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/28/15 15:01	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/28/15 15:01	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/28/15 15:01	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/28/15 15:01	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/28/15 15:01	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/28/15 15:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/28/15 15:01	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/28/15 15:01	1
Methyl acetate	10	U	10	2.3	ug/L			10/28/15 15:01	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/28/15 15:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/28/15 15:01	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/28/15 15:01	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/28/15 15:01	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/28/15 15:01	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/28/15 15:01	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/28/15 15:01	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/28/15 15:01	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/28/15 15:01	1

Client Sample ID: VAP-10-GW (20-21)

Date Collected: 10/20/15 09:00
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-4

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*78 - 125*		*10/28/15 15:01*	*1*
4-Bromofluorobenzene (Surr)	*92*		*61 - 120*		*10/28/15 15:01*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/28/15 15:01*	*1*
Dibromofluoromethane (Surr)	*91*		*79 - 120*		*10/28/15 15:01*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/22/15 05:45	10/29/15 09:36	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/22/15 05:45	10/29/15 09:36	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/22/15 05:45	10/29/15 09:36	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/22/15 05:45	10/29/15 09:36	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 09:36	1
Benzaldehyde	0.93	U *	0.93	0.27	ug/L		10/22/15 05:45	10/29/15 09:36	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/22/15 05:45	10/29/15 09:36	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/22/15 05:45	10/29/15 09:36	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/22/15 05:45	10/29/15 09:36	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/22/15 05:45	10/29/15 09:36	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/22/15 05:45	10/29/15 09:36	1
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 09:36	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/22/15 05:45	10/29/15 09:36	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/22/15 05:45	10/29/15 09:36	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/22/15 05:45	10/29/15 09:36	1
Bis(2-ethylhexyl) phthalate	**1.6**	**J**	1.9	1.4	ug/L		10/22/15 05:45	10/29/15 09:36	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/22/15 05:45	10/29/15 09:36	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/22/15 05:45	10/29/15 09:36	1
Caprolactam	**30**		4.6	0.34	ug/L		10/22/15 05:45	10/29/15 09:36	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/22/15 05:45	10/29/15 09:36	1
4-Chloroaniline	1.9	U *	1.9	0.14	ug/L		10/22/15 05:45	10/29/15 09:36	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/22/15 05:45	10/29/15 09:36	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 09:36	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/22/15 05:45	10/29/15 09:36	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/22/15 05:45	10/29/15 09:36	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/22/15 05:45	10/29/15 09:36	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/22/15 05:45	10/29/15 09:36	1
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/22/15 05:45	10/29/15 09:36	1
3,3'-Dichlorobenzidine	4.6	U *	4.6	0.33	ug/L		10/22/15 05:45	10/29/15 09:36	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/22/15 05:45	10/29/15 09:36	1
Diethyl phthalate	**0.78**	**J**	0.93	0.12	ug/L		10/22/15 05:45	10/29/15 09:36	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/22/15 05:45	10/29/15 09:36	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/22/15 05:45	10/29/15 09:36	1
Di-n-butyl phthalate	**0.93**		0.93	0.37	ug/L		10/22/15 05:45	10/29/15 09:36	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/22/15 05:45	10/29/15 09:36	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/22/15 05:45	10/29/15 09:36	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/22/15 05:45	10/29/15 09:36	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/22/15 05:45	10/29/15 09:36	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/22/15 05:45	10/29/15 09:36	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/22/15 05:45	10/29/15 09:36	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/22/15 05:45	10/29/15 09:36	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 09:36	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/22/15 05:45	10/29/15 09:36	1

Client Sample ID: VAP-10-GW (20-21)

Date Collected: 10/20/15 09:00
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-4
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/22/15 05:45	10/29/15 09:36	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/22/15 05:45	10/29/15 09:36	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/22/15 05:45	10/29/15 09:36	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/22/15 05:45	10/29/15 09:36	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/22/15 05:45	10/29/15 09:36	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/22/15 05:45	10/29/15 09:36	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/22/15 05:45	10/29/15 09:36	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/22/15 05:45	10/29/15 09:36	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/22/15 05:45	10/29/15 09:36	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/22/15 05:45	10/29/15 09:36	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/22/15 05:45	10/29/15 09:36	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 09:36	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/22/15 05:45	10/29/15 09:36	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/22/15 05:45	10/29/15 09:36	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/22/15 05:45	10/29/15 09:36	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/22/15 05:45	10/29/15 09:36	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/22/15 05:45	10/29/15 09:36	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/22/15 05:45	10/29/15 09:36	1
Phenol	0.93	U	0.93	0.14	ug/L		10/22/15 05:45	10/29/15 09:36	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/22/15 05:45	10/29/15 09:36	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/22/15 05:45	10/29/15 09:36	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/22/15 05:45	10/29/15 09:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*29 - 110*	*10/22/15 05:45*	*10/29/15 09:36*	*1*
2-Fluorophenol (Surr)	*73*		*15 - 110*	*10/22/15 05:45*	*10/29/15 09:36*	*1*
Nitrobenzene-d5 (Surr)	*72*		*31 - 110*	*10/22/15 05:45*	*10/29/15 09:36*	*1*
Phenol-d5 (Surr)	*71*		*10 - 110*	*10/22/15 05:45*	*10/29/15 09:36*	*1*
Terphenyl-d14 (Surr)	*80*		*31 - 115*	*10/22/15 05:45*	*10/29/15 09:36*	*1*
2,4,6-Tribromophenol (Surr)	*59*		*21 - 128*	*10/22/15 05:45*	*10/29/15 09:36*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**4.2**	**J**	10	2.9	ug/L		10/22/15 10:43	10/23/15 16:13	1
Barium	**43**	**J B**	200	1.0	ug/L		10/22/15 10:43	10/23/15 16:13	1
Cadmium	**0.18**	**J**	2.0	0.14	ug/L		10/22/15 10:43	10/23/15 16:13	1
Chromium	**5.0**		5.0	0.55	ug/L		10/22/15 10:43	10/23/15 16:13	1
Lead	3.0	U	3.0	1.9	ug/L		10/22/15 10:43	10/23/15 16:13	1
Selenium	5.0	U	5.0	4.0	ug/L		10/22/15 10:43	10/23/15 16:13	1
Silver	5.0	U	5.0	0.92	ug/L		10/22/15 10:43	10/23/15 16:13	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/22/15 12:00	10/26/15 15:27	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56876-1

Client Sample ID: VAP-10-GW (25-26)
Date Collected: 10/20/15 09:41
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/28/15 15:24	1
Benzene	1.0	U	1.0	0.35	ug/L			10/28/15 15:24	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/28/15 15:24	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/28/15 15:24	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/28/15 15:24	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/28/15 15:24	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/28/15 15:24	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/28/15 15:24	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/28/15 15:24	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/28/15 15:24	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/28/15 15:24	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/28/15 15:24	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/28/15 15:24	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/28/15 15:24	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/28/15 15:24	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/28/15 15:24	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/28/15 15:24	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/28/15 15:24	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/28/15 15:24	1
2-Hexanone	10	U	10	0.48	ug/L			10/28/15 15:24	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/28/15 15:24	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/28/15 15:24	1
Styrene	1.0	U	1.0	0.45	ug/L			10/28/15 15:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/28/15 15:24	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/28/15 15:24	1
Toluene	1.0	U	1.0	0.23	ug/L			10/28/15 15:24	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/28/15 15:24	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/28/15 15:24	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/28/15 15:24	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/28/15 15:24	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/28/15 15:24	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/28/15 15:24	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/28/15 15:24	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/28/15 15:24	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/28/15 15:24	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/28/15 15:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/28/15 15:24	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/28/15 15:24	1
Methyl acetate	10	U	10	2.3	ug/L			10/28/15 15:24	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/28/15 15:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/28/15 15:24	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/28/15 15:24	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/28/15 15:24	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/28/15 15:24	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/28/15 15:24	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/28/15 15:24	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/28/15 15:24	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/28/15 15:24	1

Client Sample ID: VAP-10-GW (25-26)

Date Collected: 10/20/15 09:41
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-5

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*78 - 125*		*10/28/15 15:24*	*1*
4-Bromofluorobenzene (Surr)	*91*		*61 - 120*		*10/28/15 15:24*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/28/15 15:24*	*1*
Dibromofluoromethane (Surr)	*94*		*79 - 120*		*10/28/15 15:24*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/22/15 05:45	10/29/15 09:59	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/22/15 05:45	10/29/15 09:59	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/22/15 05:45	10/29/15 09:59	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/22/15 05:45	10/29/15 09:59	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 09:59	1
Benzaldehyde	0.93	U *	0.93	0.27	ug/L		10/22/15 05:45	10/29/15 09:59	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/22/15 05:45	10/29/15 09:59	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/22/15 05:45	10/29/15 09:59	1
Benzo[b]fluoranthene	**0.33**		0.19	0.055	ug/L		10/22/15 05:45	10/29/15 09:59	1
Benzo[g,h,i]perylene	**0.22**		0.19	0.046	ug/L		10/22/15 05:45	10/29/15 09:59	1
Benzo[k]fluoranthene	**0.20**		0.19	0.044	ug/L		10/22/15 05:45	10/29/15 09:59	1
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 09:59	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/22/15 05:45	10/29/15 09:59	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/22/15 05:45	10/29/15 09:59	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/22/15 05:45	10/29/15 09:59	1
Bis(2-ethylhexyl) phthalate	**1.7**	**J**	1.9	1.4	ug/L		10/22/15 05:45	10/29/15 09:59	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/22/15 05:45	10/29/15 09:59	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/22/15 05:45	10/29/15 09:59	1
Caprolactam	**0.82**	**J**	4.6	0.34	ug/L		10/22/15 05:45	10/29/15 09:59	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/22/15 05:45	10/29/15 09:59	1
4-Chloroaniline	1.9	U *	1.9	0.14	ug/L		10/22/15 05:45	10/29/15 09:59	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/22/15 05:45	10/29/15 09:59	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 09:59	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/22/15 05:45	10/29/15 09:59	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/22/15 05:45	10/29/15 09:59	1
Chrysene	**0.29**		0.19	0.032	ug/L		10/22/15 05:45	10/29/15 09:59	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/22/15 05:45	10/29/15 09:59	1
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/22/15 05:45	10/29/15 09:59	1
3,3'-Dichlorobenzidine	4.6	U *	4.6	0.33	ug/L		10/22/15 05:45	10/29/15 09:59	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/22/15 05:45	10/29/15 09:59	1
Diethyl phthalate	**0.21**	**J**	0.93	0.12	ug/L		10/22/15 05:45	10/29/15 09:59	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/22/15 05:45	10/29/15 09:59	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/22/15 05:45	10/29/15 09:59	1
Di-n-butyl phthalate	**0.69**	**J**	0.93	0.37	ug/L		10/22/15 05:45	10/29/15 09:59	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/22/15 05:45	10/29/15 09:59	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/22/15 05:45	10/29/15 09:59	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/22/15 05:45	10/29/15 09:59	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/22/15 05:45	10/29/15 09:59	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/22/15 05:45	10/29/15 09:59	1
Fluoranthene	**0.35**		0.19	0.025	ug/L		10/22/15 05:45	10/29/15 09:59	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/22/15 05:45	10/29/15 09:59	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 09:59	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/22/15 05:45	10/29/15 09:59	1

Client Sample ID: VAP-10-GW (25-26)

Date Collected: 10/20/15 09:41
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-5
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/22/15 05:45	10/29/15 09:59	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/22/15 05:45	10/29/15 09:59	1
Indeno[1,2,3-cd]pyrene	**0.20**		0.19	0.044	ug/L		10/22/15 05:45	10/29/15 09:59	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/22/15 05:45	10/29/15 09:59	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/22/15 05:45	10/29/15 09:59	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/22/15 05:45	10/29/15 09:59	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/22/15 05:45	10/29/15 09:59	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/22/15 05:45	10/29/15 09:59	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/22/15 05:45	10/29/15 09:59	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/22/15 05:45	10/29/15 09:59	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/22/15 05:45	10/29/15 09:59	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 09:59	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/22/15 05:45	10/29/15 09:59	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/22/15 05:45	10/29/15 09:59	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/22/15 05:45	10/29/15 09:59	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/22/15 05:45	10/29/15 09:59	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/22/15 05:45	10/29/15 09:59	1
Phenanthrene	**0.27**		0.19	0.029	ug/L		10/22/15 05:45	10/29/15 09:59	1
Phenol	0.93	U	0.93	0.14	ug/L		10/22/15 05:45	10/29/15 09:59	1
Pyrene	**0.37**		0.19	0.026	ug/L		10/22/15 05:45	10/29/15 09:59	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/22/15 05:45	10/29/15 09:59	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/22/15 05:45	10/29/15 09:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*69*		*29 - 110*	*10/22/15 05:45*	*10/29/15 09:59*	*1*
2-Fluorophenol (Surr)	*68*		*15 - 110*	*10/22/15 05:45*	*10/29/15 09:59*	*1*
Nitrobenzene-d5 (Surr)	*67*		*31 - 110*	*10/22/15 05:45*	*10/29/15 09:59*	*1*
Phenol-d5 (Surr)	*66*		*10 - 110*	*10/22/15 05:45*	*10/29/15 09:59*	*1*
Terphenyl-d14 (Surr)	*56*		*31 - 115*	*10/22/15 05:45*	*10/29/15 09:59*	*1*
2,4,6-Tribromophenol (Surr)	*50*		*21 - 128*	*10/22/15 05:45*	*10/29/15 09:59*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**49**		10	2.9	ug/L		10/22/15 10:43	10/23/15 16:51	1
Barium	**490**	**B**	200	1.0	ug/L		10/22/15 10:43	10/23/15 16:51	1
Cadmium	**1.2**	**J**	2.0	0.14	ug/L		10/22/15 10:43	10/23/15 16:51	1
Chromium	**410**		5.0	0.55	ug/L		10/22/15 10:43	10/23/15 16:51	1
Lead	**76**		3.0	1.9	ug/L		10/22/15 10:43	10/23/15 16:51	1
Selenium	5.0	U	5.0	4.0	ug/L		10/22/15 10:43	10/23/15 16:51	1
Silver	5.0	U	5.0	0.92	ug/L		10/22/15 10:43	10/23/15 16:51	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.43**		0.20	0.090	ug/L		10/22/15 12:00	10/26/15 15:40	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56876-1

Client Sample ID: VAP-10-GW (30-31)
Date Collected: 10/20/15 10:00
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/28/15 15:47	1
Benzene	1.0	U	1.0	0.35	ug/L			10/28/15 15:47	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/28/15 15:47	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/28/15 15:47	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/28/15 15:47	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/28/15 15:47	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/28/15 15:47	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/28/15 15:47	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/28/15 15:47	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/28/15 15:47	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/28/15 15:47	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/28/15 15:47	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/28/15 15:47	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/28/15 15:47	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/28/15 15:47	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/28/15 15:47	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/28/15 15:47	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/28/15 15:47	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/28/15 15:47	1
2-Hexanone	10	U	10	0.48	ug/L			10/28/15 15:47	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/28/15 15:47	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/28/15 15:47	1
Styrene	1.0	U	1.0	0.45	ug/L			10/28/15 15:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/28/15 15:47	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/28/15 15:47	1
Toluene	1.0	U	1.0	0.23	ug/L			10/28/15 15:47	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/28/15 15:47	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/28/15 15:47	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/28/15 15:47	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/28/15 15:47	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/28/15 15:47	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/28/15 15:47	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/28/15 15:47	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/28/15 15:47	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/28/15 15:47	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/28/15 15:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/28/15 15:47	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/28/15 15:47	1
Methyl acetate	10	U	10	2.3	ug/L			10/28/15 15:47	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/28/15 15:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/28/15 15:47	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/28/15 15:47	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/28/15 15:47	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/28/15 15:47	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/28/15 15:47	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/28/15 15:47	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/28/15 15:47	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/28/15 15:47	1

Client Sample ID: VAP-10-GW (30-31)

Date Collected: 10/20/15 10:00
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-6

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*78 - 125*		*10/28/15 15:47*	*1*
4-Bromofluorobenzene (Surr)	*91*		*61 - 120*		*10/28/15 15:47*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/28/15 15:47*	*1*
Dibromofluoromethane (Surr)	*91*		*79 - 120*		*10/28/15 15:47*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/22/15 05:45	10/29/15 10:23	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/22/15 05:45	10/29/15 10:23	1
Acetophenone	**0.20**	**J**	0.93	0.13	ug/L		10/22/15 05:45	10/29/15 10:23	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/22/15 05:45	10/29/15 10:23	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 10:23	1
Benzaldehyde	0.93	U *	0.93	0.27	ug/L		10/22/15 05:45	10/29/15 10:23	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/22/15 05:45	10/29/15 10:23	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/22/15 05:45	10/29/15 10:23	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/22/15 05:45	10/29/15 10:23	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/22/15 05:45	10/29/15 10:23	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/22/15 05:45	10/29/15 10:23	1
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 10:23	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/22/15 05:45	10/29/15 10:23	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/22/15 05:45	10/29/15 10:23	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/22/15 05:45	10/29/15 10:23	1
Bis(2-ethylhexyl) phthalate	**1.8**	**J**	1.9	1.4	ug/L		10/22/15 05:45	10/29/15 10:23	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/22/15 05:45	10/29/15 10:23	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/22/15 05:45	10/29/15 10:23	1
Caprolactam	**0.85**	**J**	4.6	0.34	ug/L		10/22/15 05:45	10/29/15 10:23	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/22/15 05:45	10/29/15 10:23	1
4-Chloroaniline	1.9	U *	1.9	0.14	ug/L		10/22/15 05:45	10/29/15 10:23	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/22/15 05:45	10/29/15 10:23	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 10:23	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/22/15 05:45	10/29/15 10:23	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/22/15 05:45	10/29/15 10:23	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/22/15 05:45	10/29/15 10:23	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/22/15 05:45	10/29/15 10:23	1
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/22/15 05:45	10/29/15 10:23	1
3,3'-Dichlorobenzidine	4.6	U *	4.6	0.33	ug/L		10/22/15 05:45	10/29/15 10:23	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/22/15 05:45	10/29/15 10:23	1
Diethyl phthalate	**0.29**	**J**	0.93	0.12	ug/L		10/22/15 05:45	10/29/15 10:23	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/22/15 05:45	10/29/15 10:23	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/22/15 05:45	10/29/15 10:23	1
Di-n-butyl phthalate	**0.85**	**J**	0.93	0.37	ug/L		10/22/15 05:45	10/29/15 10:23	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/22/15 05:45	10/29/15 10:23	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/22/15 05:45	10/29/15 10:23	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/22/15 05:45	10/29/15 10:23	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/22/15 05:45	10/29/15 10:23	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/22/15 05:45	10/29/15 10:23	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/22/15 05:45	10/29/15 10:23	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/22/15 05:45	10/29/15 10:23	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 10:23	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/22/15 05:45	10/29/15 10:23	1

Client Sample ID: VAP-10-GW (30-31)

Date Collected: 10/20/15 10:00
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-6
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/22/15 05:45	10/29/15 10:23	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/22/15 05:45	10/29/15 10:23	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/22/15 05:45	10/29/15 10:23	1
Isophorone	**0.22**	**J**	0.93	0.039	ug/L		10/22/15 05:45	10/29/15 10:23	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/22/15 05:45	10/29/15 10:23	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/22/15 05:45	10/29/15 10:23	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/22/15 05:45	10/29/15 10:23	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/22/15 05:45	10/29/15 10:23	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/22/15 05:45	10/29/15 10:23	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/22/15 05:45	10/29/15 10:23	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/22/15 05:45	10/29/15 10:23	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 10:23	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/22/15 05:45	10/29/15 10:23	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/22/15 05:45	10/29/15 10:23	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/22/15 05:45	10/29/15 10:23	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/22/15 05:45	10/29/15 10:23	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/22/15 05:45	10/29/15 10:23	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/22/15 05:45	10/29/15 10:23	1
Phenol	0.93	U	0.93	0.14	ug/L		10/22/15 05:45	10/29/15 10:23	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/22/15 05:45	10/29/15 10:23	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/22/15 05:45	10/29/15 10:23	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/22/15 05:45	10/29/15 10:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*59*		*29 - 110*	*10/22/15 05:45*	*10/29/15 10:23*	*1*
2-Fluorophenol (Surr)	*60*		*15 - 110*	*10/22/15 05:45*	*10/29/15 10:23*	*1*
Nitrobenzene-d5 (Surr)	*60*		*31 - 110*	*10/22/15 05:45*	*10/29/15 10:23*	*1*
Phenol-d5 (Surr)	*62*		*10 - 110*	*10/22/15 05:45*	*10/29/15 10:23*	*1*
Terphenyl-d14 (Surr)	*50*		*31 - 115*	*10/22/15 05:45*	*10/29/15 10:23*	*1*
2,4,6-Tribromophenol (Surr)	*48*		*21 - 128*	*10/22/15 05:45*	*10/29/15 10:23*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**16**		10	2.9	ug/L		10/22/15 10:43	10/23/15 16:55	1
Barium	**720**	**B**	200	1.0	ug/L		10/22/15 10:43	10/23/15 16:55	1
Cadmium	**1.0**	**J**	2.0	0.14	ug/L		10/22/15 10:43	10/23/15 16:55	1
Chromium	**400**		5.0	0.55	ug/L		10/22/15 10:43	10/23/15 16:55	1
Lead	**64**		3.0	1.9	ug/L		10/22/15 10:43	10/23/15 16:55	1
Selenium	**4.4**	**J**	5.0	4.0	ug/L		10/22/15 10:43	10/23/15 21:11	1
Silver	5.0	U L	5.0	0.92	ug/L		10/22/15 10:43	10/23/15 16:55	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.82**		0.20	0.090	ug/L		10/22/15 12:00	10/26/15 15:36	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56876-1

Client Sample ID: VAP-10-GW (35-36)
Date Collected: 10/20/15 10:34
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/28/15 01:39	1
Benzene	1.0	U	1.0	0.35	ug/L			10/28/15 01:39	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/28/15 01:39	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/28/15 01:39	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/28/15 01:39	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/28/15 01:39	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/28/15 01:39	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/28/15 01:39	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/28/15 01:39	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/28/15 01:39	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/28/15 01:39	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/28/15 01:39	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/28/15 01:39	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/28/15 01:39	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/28/15 01:39	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/28/15 01:39	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/28/15 01:39	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/28/15 01:39	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/28/15 01:39	1
2-Hexanone	10	U	10	0.48	ug/L			10/28/15 01:39	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/28/15 01:39	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/28/15 01:39	1
Styrene	1.0	U	1.0	0.45	ug/L			10/28/15 01:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/28/15 01:39	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/28/15 01:39	1
Toluene	1.0	U	1.0	0.23	ug/L			10/28/15 01:39	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/28/15 01:39	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/28/15 01:39	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/28/15 01:39	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/28/15 01:39	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/28/15 01:39	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/28/15 01:39	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/28/15 01:39	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/28/15 01:39	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/28/15 01:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/28/15 01:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/28/15 01:39	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/28/15 01:39	1
Methyl acetate	10	U	10	2.3	ug/L			10/28/15 01:39	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/28/15 01:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/28/15 01:39	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/28/15 01:39	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/28/15 01:39	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/28/15 01:39	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/28/15 01:39	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/28/15 01:39	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/28/15 01:39	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/28/15 01:39	1

Client Sample ID: VAP-10-GW (35-36)

Lab Sample ID: 240-56876-7

Date Collected: 10/20/15 10:34

Matrix: Water

Date Received: 10/21/15 10:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*78 - 125*		*10/28/15 01:39*	*1*
4-Bromofluorobenzene (Surr)	*92*		*61 - 120*		*10/28/15 01:39*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/28/15 01:39*	*1*
Dibromofluoromethane (Surr)	*92*		*79 - 120*		*10/28/15 01:39*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.18	U	0.18	0.039	ug/L		10/22/15 05:45	10/29/15 10:46	1
Acenaphthylene	0.18	U	0.18	0.018	ug/L		10/22/15 05:45	10/29/15 10:46	1
Acetophenone	0.89	U	0.89	0.13	ug/L		10/22/15 05:45	10/29/15 10:46	1
Anthracene	0.18	U	0.18	0.028	ug/L		10/22/15 05:45	10/29/15 10:46	1
Atrazine	0.89	U	0.89	0.10	ug/L		10/22/15 05:45	10/29/15 10:46	1
Benzaldehyde	0.89	U *	0.89	0.26	ug/L		10/22/15 05:45	10/29/15 10:46	1
Benzo[a]anthracene	0.18	U	0.18	0.053	ug/L		10/22/15 05:45	10/29/15 10:46	1
Benzo[a]pyrene	0.18	U	0.18	0.027	ug/L		10/22/15 05:45	10/29/15 10:46	1
Benzo[b]fluoranthene	0.18	U	0.18	0.053	ug/L		10/22/15 05:45	10/29/15 10:46	1
Benzo[g,h,i]perylene	0.18	U	0.18	0.045	ug/L		10/22/15 05:45	10/29/15 10:46	1
Benzo[k]fluoranthene	0.18	U	0.18	0.043	ug/L		10/22/15 05:45	10/29/15 10:46	1
1,1'-Biphenyl	0.89	U	0.89	0.11	ug/L		10/22/15 05:45	10/29/15 10:46	1
Bis(2-chloroethoxy)methane	0.89	U	0.89	0.033	ug/L		10/22/15 05:45	10/29/15 10:46	1
Bis(2-chloroethyl)ether	0.89	U	0.89	0.17	ug/L		10/22/15 05:45	10/29/15 10:46	1
bis (2-chloroisopropyl) ether	0.89	U	0.89	0.16	ug/L		10/22/15 05:45	10/29/15 10:46	1
Bis(2-ethylhexyl) phthalate	**1.4**	**J**	1.8	1.4	ug/L		10/22/15 05:45	10/29/15 10:46	1
4-Bromophenyl phenyl ether	1.8	U	1.8	0.31	ug/L		10/22/15 05:45	10/29/15 10:46	1
Butyl benzyl phthalate	0.89	U	0.89	0.19	ug/L		10/22/15 05:45	10/29/15 10:46	1
Caprolactam	**0.72**	**J**	4.5	0.33	ug/L		10/22/15 05:45	10/29/15 10:46	1
Carbazole	0.89	U	0.89	0.094	ug/L		10/22/15 05:45	10/29/15 10:46	1
4-Chloroaniline	1.8	U *	1.8	0.13	ug/L		10/22/15 05:45	10/29/15 10:46	1
4-Chloro-3-methylphenol	1.8	U	1.8	0.25	ug/L		10/22/15 05:45	10/29/15 10:46	1
2-Chloronaphthalene	0.89	U	0.89	0.10	ug/L		10/22/15 05:45	10/29/15 10:46	1
2-Chlorophenol	0.89	U	0.89	0.12	ug/L		10/22/15 05:45	10/29/15 10:46	1
4-Chlorophenyl phenyl ether	1.8	U	1.8	0.26	ug/L		10/22/15 05:45	10/29/15 10:46	1
Chrysene	0.18	U	0.18	0.031	ug/L		10/22/15 05:45	10/29/15 10:46	1
Dibenz(a,h)anthracene	0.18	U	0.18	0.036	ug/L		10/22/15 05:45	10/29/15 10:46	1
Dibenzofuran	0.89	U	0.89	0.12	ug/L		10/22/15 05:45	10/29/15 10:46	1
3,3'-Dichlorobenzidine	4.5	U *	4.5	0.32	ug/L		10/22/15 05:45	10/29/15 10:46	1
2,4-Dichlorophenol	1.8	U	1.8	0.26	ug/L		10/22/15 05:45	10/29/15 10:46	1
Diethyl phthalate	0.89	U	0.89	0.11	ug/L		10/22/15 05:45	10/29/15 10:46	1
2,4-Dimethylphenol	1.8	U	1.8	0.28	ug/L		10/22/15 05:45	10/29/15 10:46	1
Dimethyl phthalate	0.89	U	0.89	0.090	ug/L		10/22/15 05:45	10/29/15 10:46	1
Di-n-butyl phthalate	**0.76**	**J**	0.89	0.36	ug/L		10/22/15 05:45	10/29/15 10:46	1
4,6-Dinitro-2-methylphenol	4.5	U	4.5	0.47	ug/L		10/22/15 05:45	10/29/15 10:46	1
2,4-Dinitrophenol	36	U	36	5.5	ug/L		10/22/15 05:45	10/29/15 10:46	1
2,4-Dinitrotoluene	4.5	U	4.5	0.23	ug/L		10/22/15 05:45	10/29/15 10:46	1
2,6-Dinitrotoluene	4.5	U	4.5	0.21	ug/L		10/22/15 05:45	10/29/15 10:46	1
Di-n-octyl phthalate	0.89	U	0.89	0.33	ug/L		10/22/15 05:45	10/29/15 10:46	1
Fluoranthene	0.18	U	0.18	0.024	ug/L		10/22/15 05:45	10/29/15 10:46	1
Fluorene	0.18	U	0.18	0.030	ug/L		10/22/15 05:45	10/29/15 10:46	1
Hexachlorobenzene	0.89	U	0.89	0.10	ug/L		10/22/15 05:45	10/29/15 10:46	1
Hexachlorobutadiene	0.89	U	0.89	0.13	ug/L		10/22/15 05:45	10/29/15 10:46	1

Client Sample ID: VAP-10-GW (35-36)

Date Collected: 10/20/15 10:34
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-7

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	8.9	U	8.9	2.2	ug/L		10/22/15 05:45	10/29/15 10:46	1
Hexachloroethane	0.89	U	0.89	0.20	ug/L		10/22/15 05:45	10/29/15 10:46	1
Indeno[1,2,3-cd]pyrene	0.18	U	0.18	0.043	ug/L		10/22/15 05:45	10/29/15 10:46	1
Isophorone	0.89	U	0.89	0.038	ug/L		10/22/15 05:45	10/29/15 10:46	1
2-Methylnaphthalene	0.18	U	0.18	0.033	ug/L		10/22/15 05:45	10/29/15 10:46	1
2-Methylphenol	0.89	U	0.89	0.17	ug/L		10/22/15 05:45	10/29/15 10:46	1
3 & 4 Methylphenol	1.8	U	1.8	0.30	ug/L		10/22/15 05:45	10/29/15 10:46	1
Naphthalene	**0.22**		0.18	0.038	ug/L		10/22/15 05:45	10/29/15 10:46	1
2-Nitroaniline	1.8	U	1.8	0.28	ug/L		10/22/15 05:45	10/29/15 10:46	1
3-Nitroaniline	1.8	U	1.8	0.24	ug/L		10/22/15 05:45	10/29/15 10:46	1
4-Nitroaniline	1.8	U	1.8	0.22	ug/L		10/22/15 05:45	10/29/15 10:46	1
Nitrobenzene	0.89	U	0.89	0.10	ug/L		10/22/15 05:45	10/29/15 10:46	1
2-Nitrophenol	1.8	U	1.8	0.18	ug/L		10/22/15 05:45	10/29/15 10:46	1
4-Nitrophenol	4.5	U	4.5	0.52	ug/L		10/22/15 05:45	10/29/15 10:46	1
N-Nitrosodi-n-propylamine	0.89	U	0.89	0.14	ug/L		10/22/15 05:45	10/29/15 10:46	1
N-Nitrosodiphenylamine	0.89	U	0.89	0.10	ug/L		10/22/15 05:45	10/29/15 10:46	1
Pentachlorophenol	36	U	36	4.9	ug/L		10/22/15 05:45	10/29/15 10:46	1
Phenanthrene	0.18	U	0.18	0.028	ug/L		10/22/15 05:45	10/29/15 10:46	1
Phenol	0.89	U	0.89	0.13	ug/L		10/22/15 05:45	10/29/15 10:46	1
Pyrene	0.18	U	0.18	0.025	ug/L		10/22/15 05:45	10/29/15 10:46	1
2,4,5-Trichlorophenol	4.5	U	4.5	0.33	ug/L		10/22/15 05:45	10/29/15 10:46	1
2,4,6-Trichlorophenol	4.5	U	4.5	0.23	ug/L		10/22/15 05:45	10/29/15 10:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*79*		*29 - 110*	*10/22/15 05:45*	*10/29/15 10:46*	*1*
2-Fluorophenol (Surr)	*78*		*15 - 110*	*10/22/15 05:45*	*10/29/15 10:46*	*1*
Nitrobenzene-d5 (Surr)	*77*		*31 - 110*	*10/22/15 05:45*	*10/29/15 10:46*	*1*
Phenol-d5 (Surr)	*79*		*10 - 110*	*10/22/15 05:45*	*10/29/15 10:46*	*1*
Terphenyl-d14 (Surr)	*78*		*31 - 115*	*10/22/15 05:45*	*10/29/15 10:46*	*1*
2,4,6-Tribromophenol (Surr)	*61*		*21 - 128*	*10/22/15 05:45*	*10/29/15 10:46*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.7**	**J**	10	2.9	ug/L		10/22/15 10:43	10/23/15 16:59	1
Barium	**330**	**B**	200	1.0	ug/L		10/22/15 10:43	10/23/15 16:59	1
Cadmium	**0.57**	**J**	2.0	0.14	ug/L		10/22/15 10:43	10/23/15 16:59	1
Chromium	**96**		5.0	0.55	ug/L		10/22/15 10:43	10/23/15 16:59	1
Lead	**43**		3.0	1.9	ug/L		10/22/15 10:43	10/23/15 16:59	1
Selenium	**4.4**	**J**	5.0	4.0	ug/L		10/22/15 10:43	10/23/15 16:59	1
Silver	5.0	U	5.0	0.92	ug/L		10/22/15 10:43	10/23/15 16:59	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/22/15 12:00	10/26/15 15:37	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56876-1

Client Sample ID: VAP-10-GW (40-41)
Date Collected: 10/20/15 11:09
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**4.5**	**J**	10	0.94	ug/L			10/28/15 16:10	1
Benzene	1.0	U	1.0	0.35	ug/L			10/28/15 16:10	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/28/15 16:10	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/28/15 16:10	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/28/15 16:10	1
2-Butanone (MEK)	**1.9**	**J**	10	0.53	ug/L			10/28/15 16:10	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/28/15 16:10	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/28/15 16:10	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/28/15 16:10	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/28/15 16:10	1
Chloroform	**0.37**	**J**	1.0	0.25	ug/L			10/28/15 16:10	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/28/15 16:10	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/28/15 16:10	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/28/15 16:10	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/28/15 16:10	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/28/15 16:10	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/28/15 16:10	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/28/15 16:10	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/28/15 16:10	1
2-Hexanone	10	U	10	0.48	ug/L			10/28/15 16:10	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/28/15 16:10	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/28/15 16:10	1
Styrene	1.0	U	1.0	0.45	ug/L			10/28/15 16:10	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/28/15 16:10	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/28/15 16:10	1
Toluene	1.0	U	1.0	0.23	ug/L			10/28/15 16:10	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/28/15 16:10	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/28/15 16:10	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/28/15 16:10	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/28/15 16:10	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/28/15 16:10	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/28/15 16:10	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/28/15 16:10	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/28/15 16:10	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/28/15 16:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/28/15 16:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/28/15 16:10	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/28/15 16:10	1
Methyl acetate	10	U	10	2.3	ug/L			10/28/15 16:10	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/28/15 16:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/28/15 16:10	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/28/15 16:10	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/28/15 16:10	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/28/15 16:10	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/28/15 16:10	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/28/15 16:10	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/28/15 16:10	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/28/15 16:10	1

Client Sample ID: VAP-10-GW (40-41)

Date Collected: 10/20/15 11:09
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-8

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*78 - 125*		*10/28/15 16:10*	*1*
4-Bromofluorobenzene (Surr)	*91*		*61 - 120*		*10/28/15 16:10*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/28/15 16:10*	*1*
Dibromofluoromethane (Surr)	*92*		*79 - 120*		*10/28/15 16:10*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/22/15 05:45	10/29/15 11:09	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/22/15 05:45	10/29/15 11:09	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/22/15 05:45	10/29/15 11:09	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/22/15 05:45	10/29/15 11:09	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 11:09	1
Benzaldehyde	0.93	U *	0.93	0.27	ug/L		10/22/15 05:45	10/29/15 11:09	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/22/15 05:45	10/29/15 11:09	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/22/15 05:45	10/29/15 11:09	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/22/15 05:45	10/29/15 11:09	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/22/15 05:45	10/29/15 11:09	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/22/15 05:45	10/29/15 11:09	1
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 11:09	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/22/15 05:45	10/29/15 11:09	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/22/15 05:45	10/29/15 11:09	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/22/15 05:45	10/29/15 11:09	1
Bis(2-ethylhexyl) phthalate	**1.8**	**J**	1.9	1.4	ug/L		10/22/15 05:45	10/29/15 11:09	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/22/15 05:45	10/29/15 11:09	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/22/15 05:45	10/29/15 11:09	1
Caprolactam	**0.85**	**J**	4.6	0.34	ug/L		10/22/15 05:45	10/29/15 11:09	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/22/15 05:45	10/29/15 11:09	1
4-Chloroaniline	1.9	U *	1.9	0.14	ug/L		10/22/15 05:45	10/29/15 11:09	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/22/15 05:45	10/29/15 11:09	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 11:09	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/22/15 05:45	10/29/15 11:09	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/22/15 05:45	10/29/15 11:09	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/22/15 05:45	10/29/15 11:09	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/22/15 05:45	10/29/15 11:09	1
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/22/15 05:45	10/29/15 11:09	1
3,3'-Dichlorobenzidine	4.6	U *	4.6	0.33	ug/L		10/22/15 05:45	10/29/15 11:09	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/22/15 05:45	10/29/15 11:09	1
Diethyl phthalate	**0.25**	**J**	0.93	0.12	ug/L		10/22/15 05:45	10/29/15 11:09	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/22/15 05:45	10/29/15 11:09	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/22/15 05:45	10/29/15 11:09	1
Di-n-butyl phthalate	**0.65**	**J**	0.93	0.37	ug/L		10/22/15 05:45	10/29/15 11:09	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/22/15 05:45	10/29/15 11:09	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/22/15 05:45	10/29/15 11:09	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/22/15 05:45	10/29/15 11:09	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/22/15 05:45	10/29/15 11:09	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/22/15 05:45	10/29/15 11:09	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/22/15 05:45	10/29/15 11:09	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/22/15 05:45	10/29/15 11:09	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 11:09	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/22/15 05:45	10/29/15 11:09	1

Client Sample ID: VAP-10-GW (40-41)
Date Collected: 10/20/15 11:09
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-8
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/22/15 05:45	10/29/15 11:09	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/22/15 05:45	10/29/15 11:09	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/22/15 05:45	10/29/15 11:09	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/22/15 05:45	10/29/15 11:09	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/22/15 05:45	10/29/15 11:09	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/22/15 05:45	10/29/15 11:09	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/22/15 05:45	10/29/15 11:09	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/22/15 05:45	10/29/15 11:09	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/22/15 05:45	10/29/15 11:09	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/22/15 05:45	10/29/15 11:09	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/22/15 05:45	10/29/15 11:09	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 11:09	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/22/15 05:45	10/29/15 11:09	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/22/15 05:45	10/29/15 11:09	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/22/15 05:45	10/29/15 11:09	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/22/15 05:45	10/29/15 11:09	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/22/15 05:45	10/29/15 11:09	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/22/15 05:45	10/29/15 11:09	1
Phenol	0.93	U	0.93	0.14	ug/L		10/22/15 05:45	10/29/15 11:09	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/22/15 05:45	10/29/15 11:09	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/22/15 05:45	10/29/15 11:09	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/22/15 05:45	10/29/15 11:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*63*		*29 - 110*	*10/22/15 05:45*	*10/29/15 11:09*	*1*
2-Fluorophenol (Surr)	*63*		*15 - 110*	*10/22/15 05:45*	*10/29/15 11:09*	*1*
Nitrobenzene-d5 (Surr)	*39*		*31 - 110*	*10/22/15 05:45*	*10/29/15 11:09*	*1*
Phenol-d5 (Surr)	*64*		*10 - 110*	*10/22/15 05:45*	*10/29/15 11:09*	*1*
Terphenyl-d14 (Surr)	*32*		*31 - 115*	*10/22/15 05:45*	*10/29/15 11:09*	*1*
2,4,6-Tribromophenol (Surr)	*51*		*21 - 128*	*10/22/15 05:45*	*10/29/15 11:09*	*1*

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56876-1

Client Sample ID: VAP-10-GW (45-46)
Date Collected: 10/20/15 12:01
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/28/15 02:01	1
Benzene	1.0	U	1.0	0.35	ug/L			10/28/15 02:01	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/28/15 02:01	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/28/15 02:01	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/28/15 02:01	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/28/15 02:01	1
Carbon disulfide	**0.59**	**J**	1.0	0.38	ug/L			10/28/15 02:01	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/28/15 02:01	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/28/15 02:01	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/28/15 02:01	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/28/15 02:01	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/28/15 02:01	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/28/15 02:01	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/28/15 02:01	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/28/15 02:01	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/28/15 02:01	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/28/15 02:01	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/28/15 02:01	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/28/15 02:01	1
2-Hexanone	10	U	10	0.48	ug/L			10/28/15 02:01	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/28/15 02:01	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/28/15 02:01	1
Styrene	1.0	U	1.0	0.45	ug/L			10/28/15 02:01	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/28/15 02:01	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/28/15 02:01	1
Toluene	1.0	U	1.0	0.23	ug/L			10/28/15 02:01	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/28/15 02:01	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/28/15 02:01	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/28/15 02:01	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/28/15 02:01	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/28/15 02:01	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/28/15 02:01	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/28/15 02:01	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/28/15 02:01	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/28/15 02:01	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/28/15 02:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/28/15 02:01	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/28/15 02:01	1
Methyl acetate	10	U	10	2.3	ug/L			10/28/15 02:01	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/28/15 02:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/28/15 02:01	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/28/15 02:01	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/28/15 02:01	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/28/15 02:01	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/28/15 02:01	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/28/15 02:01	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/28/15 02:01	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/28/15 02:01	1

Client Sample ID: VAP-10-GW (45-46)

Date Collected: 10/20/15 12:01
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-9

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*78 - 125*		*10/28/15 02:01*	*1*
4-Bromofluorobenzene (Surr)	*92*		*61 - 120*		*10/28/15 02:01*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/28/15 02:01*	*1*
Dibromofluoromethane (Surr)	*94*		*79 - 120*		*10/28/15 02:01*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.19	U	0.19	0.042	ug/L		10/22/15 05:45	10/29/15 11:33	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/22/15 05:45	10/29/15 11:33	1
Acetophenone	0.96	U	0.96	0.13	ug/L		10/22/15 05:45	10/29/15 11:33	1
Anthracene	0.19	U	0.19	0.030	ug/L		10/22/15 05:45	10/29/15 11:33	1
Atrazine	0.96	U	0.96	0.11	ug/L		10/22/15 05:45	10/29/15 11:33	1
Benzaldehyde	0.96	U *	0.96	0.28	ug/L		10/22/15 05:45	10/29/15 11:33	1
Benzo[a]anthracene	0.19	U	0.19	0.057	ug/L		10/22/15 05:45	10/29/15 11:33	1
Benzo[a]pyrene	0.19	U	0.19	0.029	ug/L		10/22/15 05:45	10/29/15 11:33	1
Benzo[b]fluoranthene	0.19	U	0.19	0.057	ug/L		10/22/15 05:45	10/29/15 11:33	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.048	ug/L		10/22/15 05:45	10/29/15 11:33	1
Benzo[k]fluoranthene	0.19	U	0.19	0.046	ug/L		10/22/15 05:45	10/29/15 11:33	1
1,1'-Biphenyl	0.96	U	0.96	0.12	ug/L		10/22/15 05:45	10/29/15 11:33	1
Bis(2-chloroethoxy)methane	0.96	U	0.96	0.036	ug/L		10/22/15 05:45	10/29/15 11:33	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.18	ug/L		10/22/15 05:45	10/29/15 11:33	1
bis (2-chloroisopropyl) ether	0.96	U	0.96	0.18	ug/L		10/22/15 05:45	10/29/15 11:33	1
Bis(2-ethylhexyl) phthalate	**1.8**	**J**	1.9	1.5	ug/L		10/22/15 05:45	10/29/15 11:33	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.33	ug/L		10/22/15 05:45	10/29/15 11:33	1
Butyl benzyl phthalate	0.96	U	0.96	0.21	ug/L		10/22/15 05:45	10/29/15 11:33	1
Caprolactam	**0.91**	**J**	4.8	0.36	ug/L		10/22/15 05:45	10/29/15 11:33	1
Carbazole	0.96	U	0.96	0.10	ug/L		10/22/15 05:45	10/29/15 11:33	1
4-Chloroaniline	1.9	U *	1.9	0.14	ug/L		10/22/15 05:45	10/29/15 11:33	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.27	ug/L		10/22/15 05:45	10/29/15 11:33	1
2-Chloronaphthalene	0.96	U	0.96	0.11	ug/L		10/22/15 05:45	10/29/15 11:33	1
2-Chlorophenol	0.96	U	0.96	0.13	ug/L		10/22/15 05:45	10/29/15 11:33	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.28	ug/L		10/22/15 05:45	10/29/15 11:33	1
Chrysene	0.19	U	0.19	0.034	ug/L		10/22/15 05:45	10/29/15 11:33	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.038	ug/L		10/22/15 05:45	10/29/15 11:33	1
Dibenzofuran	0.96	U	0.96	0.13	ug/L		10/22/15 05:45	10/29/15 11:33	1
3,3'-Dichlorobenzidine	4.8	U *	4.8	0.34	ug/L		10/22/15 05:45	10/29/15 11:33	1
2,4-Dichlorophenol	1.9	U	1.9	0.28	ug/L		10/22/15 05:45	10/29/15 11:33	1
Diethyl phthalate	**0.33**	**J**	0.96	0.12	ug/L		10/22/15 05:45	10/29/15 11:33	1
2,4-Dimethylphenol	1.9	U	1.9	0.30	ug/L		10/22/15 05:45	10/29/15 11:33	1
Dimethyl phthalate	0.96	U	0.96	0.097	ug/L		10/22/15 05:45	10/29/15 11:33	1
Di-n-butyl phthalate	**1.2**		0.96	0.38	ug/L		10/22/15 05:45	10/29/15 11:33	1
4,6-Dinitro-2-methylphenol	4.8	U	4.8	0.50	ug/L		10/22/15 05:45	10/29/15 11:33	1
2,4-Dinitrophenol	38	U	38	5.9	ug/L		10/22/15 05:45	10/29/15 11:33	1
2,4-Dinitrotoluene	4.8	U	4.8	0.25	ug/L		10/22/15 05:45	10/29/15 11:33	1
2,6-Dinitrotoluene	4.8	U	4.8	0.23	ug/L		10/22/15 05:45	10/29/15 11:33	1
Di-n-octyl phthalate	0.96	U	0.96	0.35	ug/L		10/22/15 05:45	10/29/15 11:33	1
Fluoranthene	0.19	U	0.19	0.026	ug/L		10/22/15 05:45	10/29/15 11:33	1
Fluorene	0.19	U	0.19	0.033	ug/L		10/22/15 05:45	10/29/15 11:33	1
Hexachlorobenzene	0.96	U	0.96	0.11	ug/L		10/22/15 05:45	10/29/15 11:33	1
Hexachlorobutadiene	0.96	U	0.96	0.14	ug/L		10/22/15 05:45	10/29/15 11:33	1

Client Sample ID: VAP-10-GW (45-46)

Date Collected: 10/20/15 12:01
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-9

Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	9.6	U	9.6	2.4	ug/L		10/22/15 05:45	10/29/15 11:33	1
Hexachloroethane	0.96	U	0.96	0.21	ug/L		10/22/15 05:45	10/29/15 11:33	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.046	ug/L		10/22/15 05:45	10/29/15 11:33	1
Isophorone	0.96	U	0.96	0.040	ug/L		10/22/15 05:45	10/29/15 11:33	1
2-Methylnaphthalene	0.19	U	0.19	0.036	ug/L		10/22/15 05:45	10/29/15 11:33	1
2-Methylphenol	0.96	U	0.96	0.18	ug/L		10/22/15 05:45	10/29/15 11:33	1
3 & 4 Methylphenol	1.9	U	1.9	0.32	ug/L		10/22/15 05:45	10/29/15 11:33	1
Naphthalene	0.19	U	0.19	0.041	ug/L		10/22/15 05:45	10/29/15 11:33	1
2-Nitroaniline	1.9	U	1.9	0.30	ug/L		10/22/15 05:45	10/29/15 11:33	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/22/15 05:45	10/29/15 11:33	1
4-Nitroaniline	1.9	U	1.9	0.23	ug/L		10/22/15 05:45	10/29/15 11:33	1
Nitrobenzene	0.96	U	0.96	0.11	ug/L		10/22/15 05:45	10/29/15 11:33	1
2-Nitrophenol	1.9	U	1.9	0.20	ug/L		10/22/15 05:45	10/29/15 11:33	1
4-Nitrophenol	4.8	U	4.8	0.56	ug/L		10/22/15 05:45	10/29/15 11:33	1
N-Nitrosodi-n-propylamine	0.96	U	0.96	0.15	ug/L		10/22/15 05:45	10/29/15 11:33	1
N-Nitrosodiphenylamine	0.96	U	0.96	0.11	ug/L		10/22/15 05:45	10/29/15 11:33	1
Pentachlorophenol	38	U	38	5.3	ug/L		10/22/15 05:45	10/29/15 11:33	1
Phenanthrene	0.19	U	0.19	0.030	ug/L		10/22/15 05:45	10/29/15 11:33	1
Phenol	0.96	U	0.96	0.14	ug/L		10/22/15 05:45	10/29/15 11:33	1
Pyrene	0.19	U	0.19	0.027	ug/L		10/22/15 05:45	10/29/15 11:33	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.35	ug/L		10/22/15 05:45	10/29/15 11:33	1
2,4,6-Trichlorophenol	4.8	U	4.8	0.25	ug/L		10/22/15 05:45	10/29/15 11:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*77*		*29 - 110*	*10/22/15 05:45*	*10/29/15 11:33*	*1*
2-Fluorophenol (Surr)	*77*		*15 - 110*	*10/22/15 05:45*	*10/29/15 11:33*	*1*
Nitrobenzene-d5 (Surr)	*75*		*31 - 110*	*10/22/15 05:45*	*10/29/15 11:33*	*1*
Phenol-d5 (Surr)	*78*		*10 - 110*	*10/22/15 05:45*	*10/29/15 11:33*	*1*
Terphenyl-d14 (Surr)	*57*		*31 - 115*	*10/22/15 05:45*	*10/29/15 11:33*	*1*
2,4,6-Tribromophenol (Surr)	*60*		*21 - 128*	*10/22/15 05:45*	*10/29/15 11:33*	*1*

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**36**		10	2.9	ug/L		10/22/15 10:43	10/23/15 17:03	1
Barium	**750**	**B**	200	1.0	ug/L		10/22/15 10:43	10/23/15 17:03	1
Cadmium	**1.6**	**J**	2.0	0.14	ug/L		10/22/15 10:43	10/23/15 17:03	1
Chromium	**570**		5.0	0.55	ug/L		10/22/15 10:43	10/23/15 17:03	1
Lead	**73**		3.0	1.9	ug/L		10/22/15 10:43	10/23/15 17:03	1
Selenium	**4.8**	**J**	5.0	4.0	ug/L		10/22/15 10:43	10/26/15 12:34	1
Silver	5.0	U	5.0	0.92	ug/L		10/22/15 10:43	10/23/15 17:03	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.15**	**J**	0.20	0.090	ug/L		10/22/15 12:00	10/26/15 15:34	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56876-1

Client Sample ID: VAP-10-GW (49-50)
Date Collected: 10/20/15 12:32
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/28/15 02:24	1
Benzene	1.0	U	1.0	0.35	ug/L			10/28/15 02:24	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/28/15 02:24	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/28/15 02:24	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/28/15 02:24	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/28/15 02:24	1
Carbon disulfide	**0.43**	**J**	1.0	0.38	ug/L			10/28/15 02:24	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/28/15 02:24	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/28/15 02:24	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/28/15 02:24	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/28/15 02:24	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/28/15 02:24	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/28/15 02:24	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/28/15 02:24	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/28/15 02:24	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/28/15 02:24	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/28/15 02:24	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/28/15 02:24	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/28/15 02:24	1
2-Hexanone	10	U	10	0.48	ug/L			10/28/15 02:24	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/28/15 02:24	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/28/15 02:24	1
Styrene	1.0	U	1.0	0.45	ug/L			10/28/15 02:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/28/15 02:24	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/28/15 02:24	1
Toluene	1.0	U	1.0	0.23	ug/L			10/28/15 02:24	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/28/15 02:24	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/28/15 02:24	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/28/15 02:24	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/28/15 02:24	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/28/15 02:24	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/28/15 02:24	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/28/15 02:24	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/28/15 02:24	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/28/15 02:24	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/28/15 02:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/28/15 02:24	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/28/15 02:24	1
Methyl acetate	10	U	10	2.3	ug/L			10/28/15 02:24	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/28/15 02:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/28/15 02:24	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/28/15 02:24	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/28/15 02:24	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/28/15 02:24	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/28/15 02:24	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/28/15 02:24	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/28/15 02:24	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/28/15 02:24	1

Client Sample ID: VAP-10-GW (49-50)

Date Collected: 10/20/15 12:32
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-10

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*78 - 125*		*10/28/15 02:24*	*1*
4-Bromofluorobenzene (Surr)	*92*		*61 - 120*		*10/28/15 02:24*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/28/15 02:24*	*1*
Dibromofluoromethane (Surr)	*94*		*79 - 120*		*10/28/15 02:24*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.19	U	0.19	0.041	ug/L		10/22/15 05:45	10/29/15 11:56	1
Acenaphthylene	0.19	U	0.19	0.019	ug/L		10/22/15 05:45	10/29/15 11:56	1
Acetophenone	0.93	U	0.93	0.13	ug/L		10/22/15 05:45	10/29/15 11:56	1
Anthracene	0.19	U	0.19	0.029	ug/L		10/22/15 05:45	10/29/15 11:56	1
Atrazine	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 11:56	1
Benzaldehyde	0.93	U *	0.93	0.27	ug/L		10/22/15 05:45	10/29/15 11:56	1
Benzo[a]anthracene	0.19	U	0.19	0.055	ug/L		10/22/15 05:45	10/29/15 11:56	1
Benzo[a]pyrene	0.19	U	0.19	0.028	ug/L		10/22/15 05:45	10/29/15 11:56	1
Benzo[b]fluoranthene	0.19	U	0.19	0.055	ug/L		10/22/15 05:45	10/29/15 11:56	1
Benzo[g,h,i]perylene	0.19	U	0.19	0.046	ug/L		10/22/15 05:45	10/29/15 11:56	1
Benzo[k]fluoranthene	0.19	U	0.19	0.044	ug/L		10/22/15 05:45	10/29/15 11:56	1
1,1'-Biphenyl	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 11:56	1
Bis(2-chloroethoxy)methane	0.93	U	0.93	0.034	ug/L		10/22/15 05:45	10/29/15 11:56	1
Bis(2-chloroethyl)ether	0.93	U	0.93	0.18	ug/L		10/22/15 05:45	10/29/15 11:56	1
bis (2-chloroisopropyl) ether	0.93	U	0.93	0.17	ug/L		10/22/15 05:45	10/29/15 11:56	1
Bis(2-ethylhexyl) phthalate	**1.5**	**J**	1.9	1.4	ug/L		10/22/15 05:45	10/29/15 11:56	1
4-Bromophenyl phenyl ether	1.9	U	1.9	0.32	ug/L		10/22/15 05:45	10/29/15 11:56	1
Butyl benzyl phthalate	0.93	U	0.93	0.20	ug/L		10/22/15 05:45	10/29/15 11:56	1
Caprolactam	**0.68**	**J**	4.6	0.34	ug/L		10/22/15 05:45	10/29/15 11:56	1
Carbazole	0.93	U	0.93	0.097	ug/L		10/22/15 05:45	10/29/15 11:56	1
4-Chloroaniline	1.9	U *	1.9	0.14	ug/L		10/22/15 05:45	10/29/15 11:56	1
4-Chloro-3-methylphenol	1.9	U	1.9	0.26	ug/L		10/22/15 05:45	10/29/15 11:56	1
2-Chloronaphthalene	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 11:56	1
2-Chlorophenol	0.93	U	0.93	0.12	ug/L		10/22/15 05:45	10/29/15 11:56	1
4-Chlorophenyl phenyl ether	1.9	U	1.9	0.27	ug/L		10/22/15 05:45	10/29/15 11:56	1
Chrysene	0.19	U	0.19	0.032	ug/L		10/22/15 05:45	10/29/15 11:56	1
Dibenz(a,h)anthracene	0.19	U	0.19	0.037	ug/L		10/22/15 05:45	10/29/15 11:56	1
Dibenzofuran	0.93	U	0.93	0.13	ug/L		10/22/15 05:45	10/29/15 11:56	1
3,3'-Dichlorobenzidine	4.6	U *	4.6	0.33	ug/L		10/22/15 05:45	10/29/15 11:56	1
2,4-Dichlorophenol	1.9	U	1.9	0.27	ug/L		10/22/15 05:45	10/29/15 11:56	1
Diethyl phthalate	**0.25**	**J**	0.93	0.12	ug/L		10/22/15 05:45	10/29/15 11:56	1
2,4-Dimethylphenol	1.9	U	1.9	0.29	ug/L		10/22/15 05:45	10/29/15 11:56	1
Dimethyl phthalate	0.93	U	0.93	0.094	ug/L		10/22/15 05:45	10/29/15 11:56	1
Di-n-butyl phthalate	**0.70**	**J**	0.93	0.37	ug/L		10/22/15 05:45	10/29/15 11:56	1
4,6-Dinitro-2-methylphenol	4.6	U	4.6	0.49	ug/L		10/22/15 05:45	10/29/15 11:56	1
2,4-Dinitrophenol	37	U	37	5.7	ug/L		10/22/15 05:45	10/29/15 11:56	1
2,4-Dinitrotoluene	4.6	U	4.6	0.24	ug/L		10/22/15 05:45	10/29/15 11:56	1
2,6-Dinitrotoluene	4.6	U	4.6	0.22	ug/L		10/22/15 05:45	10/29/15 11:56	1
Di-n-octyl phthalate	0.93	U	0.93	0.34	ug/L		10/22/15 05:45	10/29/15 11:56	1
Fluoranthene	0.19	U	0.19	0.025	ug/L		10/22/15 05:45	10/29/15 11:56	1
Fluorene	0.19	U	0.19	0.031	ug/L		10/22/15 05:45	10/29/15 11:56	1
Hexachlorobenzene	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 11:56	1
Hexachlorobutadiene	0.93	U	0.93	0.13	ug/L		10/22/15 05:45	10/29/15 11:56	1

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56876-1

Client Sample ID: VAP-10-GW (49-50)
Date Collected: 10/20/15 12:32
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-10
Matrix: Water

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	9.3	U	9.3	2.3	ug/L		10/22/15 05:45	10/29/15 11:56	1
Hexachloroethane	0.93	U	0.93	0.20	ug/L		10/22/15 05:45	10/29/15 11:56	1
Indeno[1,2,3-cd]pyrene	0.19	U	0.19	0.044	ug/L		10/22/15 05:45	10/29/15 11:56	1
Isophorone	0.93	U	0.93	0.039	ug/L		10/22/15 05:45	10/29/15 11:56	1
2-Methylnaphthalene	0.19	U	0.19	0.034	ug/L		10/22/15 05:45	10/29/15 11:56	1
2-Methylphenol	0.93	U	0.93	0.17	ug/L		10/22/15 05:45	10/29/15 11:56	1
3 & 4 Methylphenol	1.9	U	1.9	0.31	ug/L		10/22/15 05:45	10/29/15 11:56	1
Naphthalene	0.19	U	0.19	0.040	ug/L		10/22/15 05:45	10/29/15 11:56	1
2-Nitroaniline	1.9	U	1.9	0.29	ug/L		10/22/15 05:45	10/29/15 11:56	1
3-Nitroaniline	1.9	U	1.9	0.25	ug/L		10/22/15 05:45	10/29/15 11:56	1
4-Nitroaniline	1.9	U	1.9	0.22	ug/L		10/22/15 05:45	10/29/15 11:56	1
Nitrobenzene	0.93	U	0.93	0.11	ug/L		10/22/15 05:45	10/29/15 11:56	1
2-Nitrophenol	1.9	U	1.9	0.19	ug/L		10/22/15 05:45	10/29/15 11:56	1
4-Nitrophenol	4.6	U	4.6	0.54	ug/L		10/22/15 05:45	10/29/15 11:56	1
N-Nitrosodi-n-propylamine	0.93	U	0.93	0.15	ug/L		10/22/15 05:45	10/29/15 11:56	1
N-Nitrosodiphenylamine	0.93	U	0.93	0.10	ug/L		10/22/15 05:45	10/29/15 11:56	1
Pentachlorophenol	37	U	37	5.1	ug/L		10/22/15 05:45	10/29/15 11:56	1
Phenanthrene	0.19	U	0.19	0.029	ug/L		10/22/15 05:45	10/29/15 11:56	1
Phenol	0.93	U	0.93	0.14	ug/L		10/22/15 05:45	10/29/15 11:56	1
Pyrene	0.19	U	0.19	0.026	ug/L		10/22/15 05:45	10/29/15 11:56	1
2,4,5-Trichlorophenol	4.6	U	4.6	0.34	ug/L		10/22/15 05:45	10/29/15 11:56	1
2,4,6-Trichlorophenol	4.6	U	4.6	0.24	ug/L		10/22/15 05:45	10/29/15 11:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*70*		*29 - 110*	*10/22/15 05:45*	*10/29/15 11:56*	*1*
2-Fluorophenol (Surr)	*72*		*15 - 110*	*10/22/15 05:45*	*10/29/15 11:56*	*1*
Nitrobenzene-d5 (Surr)	*66*		*31 - 110*	*10/22/15 05:45*	*10/29/15 11:56*	*1*
Phenol-d5 (Surr)	*71*		*10 - 110*	*10/22/15 05:45*	*10/29/15 11:56*	*1*
Terphenyl-d14 (Surr)	*31*		*31 - 115*	*10/22/15 05:45*	*10/29/15 11:56*	*1*
2,4,6-Tribromophenol (Surr)	*49*		*21 - 128*	*10/22/15 05:45*	*10/29/15 11:56*	*1*

Surrogate Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56876-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(64-120)	(64-130)	(69-128)	(68-120)
240-56876-1	VAP-10 (0-2)	96	114	101	101
LCS 240-203518/7	Lab Control Sample	93	110	102	104
MB 240-203518/9	Method Blank	91	110	99	100

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(78-125)	(61-120)	(80-120)	(79-120)
240-56876-2	TB-01 (101915)	94	92	94	93
240-56876-3	VAP-10-GW (16-17)	94	88	96	91
240-56876-4	VAP-10-GW (20-21)	94	92	96	91
240-56876-5	VAP-10-GW (25-26)	96	91	95	94
240-56876-6	VAP-10-GW (30-31)	92	91	96	91
240-56876-7	VAP-10-GW (35-36)	93	92	96	92
240-56876-8	VAP-10-GW (40-41)	94	91	96	92
240-56876-9	VAP-10-GW (45-46)	93	92	96	94
240-56876-10	VAP-10-GW (49-50)	94	92	96	94
LCS 240-203948/4	Lab Control Sample	93	96	95	94
LCS 240-204102/4	Lab Control Sample	91	93	97	95
MB 240-203948/6	Method Blank	93	90	94	91
MB 240-204102/6	Method Blank	92	92	98	93

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(24-110)	(24-110)	(10-110)	(20-110)	(26-110)	(36-110)
240-56876-1	VAP-10 (0-2)	76	72	26	73	78	88
LCS 240-203066/16-A	Lab Control Sample	77	78	49	80	78	94
MB 240-203066/15-A	Method Blank	62	55	22	60	60	73

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)

NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPH	TBP
Lab Sample ID	Client Sample ID	(29-110)	(15-110)	(31-110)	(10-110)	(31-115)	(21-128)
240-56876-3	VAP-10-GW (16-17)	76	77	77	74	86	59
240-56876-4	VAP-10-GW (20-21)	74	73	72	71	80	59
240-56876-5	VAP-10-GW (25-26)	69	68	67	66	56	50
240-56876-6	VAP-10-GW (30-31)	59	60	60	62	50	48
240-56876-7	VAP-10-GW (35-36)	79	78	77	79	78	61
240-56876-8	VAP-10-GW (40-41)	63	63	39	64	32	51
240-56876-9	VAP-10-GW (45-46)	77	77	75	78	57	60
240-56876-10	VAP-10-GW (49-50)	70	72	66	71	31	49
LCS 240-203051/10-A	Lab Control Sample	100	102	106	103	107	87
MB 240-203051/9-A	Method Blank	66	54	66	36	74	48

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)
TBP = 2,4,6-Tribromophenol (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-203518/9
Matrix: Solid
Analysis Batch: 203518

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	11.0	J	20	1.6	ug/Kg			10/25/15 03:56	1
Benzene	5.0	U	5.0	0.24	ug/Kg			10/25/15 03:56	1
Dichlorobromomethane	5.0	U	5.0	0.21	ug/Kg			10/25/15 03:56	1
Bromoform	5.0	U	5.0	0.38	ug/Kg			10/25/15 03:56	1
Bromomethane	5.0	U	5.0	0.71	ug/Kg			10/25/15 03:56	1
2-Butanone (MEK)	1.06	J	20	0.48	ug/Kg			10/25/15 03:56	1
Carbon disulfide	5.0	U	5.0	0.34	ug/Kg			10/25/15 03:56	1
Carbon tetrachloride	5.0	U	5.0	0.33	ug/Kg			10/25/15 03:56	1
Chlorobenzene	5.0	U	5.0	0.29	ug/Kg			10/25/15 03:56	1
Chloroethane	5.0	U	5.0	0.34	ug/Kg			10/25/15 03:56	1
Chloroform	5.0	U	5.0	0.21	ug/Kg			10/25/15 03:56	1
Chloromethane	5.0	U	5.0	1.3	ug/Kg			10/25/15 03:56	1
1,1-Dichloroethane	5.0	U	5.0	1.2	ug/Kg			10/25/15 03:56	1
1,2-Dichloroethane	5.0	U	5.0	0.20	ug/Kg			10/25/15 03:56	1
1,1-Dichloroethene	5.0	U	5.0	0.49	ug/Kg			10/25/15 03:56	1
1,2-Dichloropropane	5.0	U	5.0	0.28	ug/Kg			10/25/15 03:56	1
cis-1,3-Dichloropropene	5.0	U	5.0	0.27	ug/Kg			10/25/15 03:56	1
trans-1,3-Dichloropropene	5.0	U	5.0	0.21	ug/Kg			10/25/15 03:56	1
Ethylbenzene	5.0	U	5.0	0.32	ug/Kg			10/25/15 03:56	1
2-Hexanone	20	U	20	0.70	ug/Kg			10/25/15 03:56	1
Methylene Chloride	5.0	U	5.0	1.1	ug/Kg			10/25/15 03:56	1
4-Methyl-2-pentanone (MIBK)	20	U	20	0.29	ug/Kg			10/25/15 03:56	1
Styrene	5.0	U	5.0	0.27	ug/Kg			10/25/15 03:56	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	0.16	ug/Kg			10/25/15 03:56	1
Tetrachloroethene	5.0	U	5.0	0.33	ug/Kg			10/25/15 03:56	1
Toluene	5.0	U	5.0	0.27	ug/Kg			10/25/15 03:56	1
Trichloroethene	5.0	U	5.0	0.26	ug/Kg			10/25/15 03:56	1
Vinyl chloride	5.0	U	5.0	0.39	ug/Kg			10/25/15 03:56	1
Xylenes, Total	10	U	10	0.63	ug/Kg			10/25/15 03:56	1
1,1,1-Trichloroethane	5.0	U	5.0	0.26	ug/Kg			10/25/15 03:56	1
1,1,2-Trichloroethane	5.0	U	5.0	0.49	ug/Kg			10/25/15 03:56	1
Cyclohexane	10	U	10	0.29	ug/Kg			10/25/15 03:56	1
1,2-Dibromo-3-Chloropropane	10	U	10	1.9	ug/Kg			10/25/15 03:56	1
Ethylene Dibromide	5.0	U	5.0	0.25	ug/Kg			10/25/15 03:56	1
Dichlorodifluoromethane	5.0	U	5.0	0.40	ug/Kg			10/25/15 03:56	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.28	ug/Kg			10/25/15 03:56	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.37	ug/Kg			10/25/15 03:56	1
Isopropylbenzene	5.0	U	5.0	0.30	ug/Kg			10/25/15 03:56	1
Methyl acetate	10	U	10	2.3	ug/Kg			10/25/15 03:56	1
Methyl tert-butyl ether	5.0	U	5.0	0.15	ug/Kg			10/25/15 03:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	0.39	ug/Kg			10/25/15 03:56	1
1,2,4-Trichlorobenzene	5.0	U	5.0	0.39	ug/Kg			10/25/15 03:56	1
1,2-Dichlorobenzene	5.0	U	5.0	0.38	ug/Kg			10/25/15 03:56	1
1,3-Dichlorobenzene	5.0	U	5.0	0.40	ug/Kg			10/25/15 03:56	1
1,4-Dichlorobenzene	5.0	U	5.0	0.41	ug/Kg			10/25/15 03:56	1
Trichlorofluoromethane	5.0	U	5.0	0.26	ug/Kg			10/25/15 03:56	1
Chlorodibromomethane	5.0	U	5.0	0.16	ug/Kg			10/25/15 03:56	1
Methylcyclohexane	10	U	10	0.33	ug/Kg			10/25/15 03:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		64 - 120		10/25/15 03:56	1
4-Bromofluorobenzene (Surr)	110		64 - 130		10/25/15 03:56	1
Toluene-d8 (Surr)	99		69 - 128		10/25/15 03:56	1
Dibromofluoromethane (Surr)	100		68 - 120		10/25/15 03:56	1

Lab Sample ID: LCS 240-203518/7
Matrix: Solid
Analysis Batch: 203518

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	61.9		ug/Kg		124	62 - 133
Benzene	25.0	26.8		ug/Kg		107	80 - 121
Dichlorobromomethane	25.0	26.2		ug/Kg		105	80 - 136
Bromoform	25.0	27.1		ug/Kg		108	71 - 135
Bromomethane	25.0	23.4		ug/Kg		93	57 - 120
2-Butanone (MEK)	50.0	48.1		ug/Kg		96	67 - 124
Carbon disulfide	25.0	24.9		ug/Kg		100	80 - 152
Carbon tetrachloride	25.0	28.6		ug/Kg		114	80 - 141
Chlorobenzene	25.0	26.6		ug/Kg		106	80 - 120
Chloroethane	25.0	27.1		ug/Kg		108	66 - 122
Chloroform	25.0	26.4		ug/Kg		106	80 - 120
Chloromethane	25.0	20.7		ug/Kg		83	62 - 120
1,1-Dichloroethane	25.0	25.9		ug/Kg		104	80 - 126
1,2-Dichloroethane	25.0	24.6		ug/Kg		98	76 - 132
1,1-Dichloroethene	25.0	25.7		ug/Kg		103	77 - 130
1,2-Dichloropropane	25.0	24.6		ug/Kg		99	80 - 128
cis-1,3-Dichloropropene	25.0	27.1		ug/Kg		109	73 - 139
trans-1,3-Dichloropropene	25.0	24.9		ug/Kg		100	71 - 151
Ethylbenzene	25.0	27.4		ug/Kg		110	80 - 132
2-Hexanone	50.0	51.1		ug/Kg		102	72 - 143
Methylene Chloride	25.0	27.2		ug/Kg		109	74 - 127
4-Methyl-2-pentanone (MIBK)	50.0	53.1		ug/Kg		106	74 - 139
Styrene	25.0	26.7		ug/Kg		107	80 - 135
1,1,2,2-Tetrachloroethane	25.0	27.9		ug/Kg		112	80 - 123
Tetrachloroethene	25.0	26.7		ug/Kg		107	80 - 128
Toluene	25.0	25.7		ug/Kg		103	80 - 129
Trichloroethene	25.0	27.5		ug/Kg		110	59 - 124
Vinyl chloride	25.0	24.2		ug/Kg		97	65 - 127
Xylenes, Total	50.0	55.7		ug/Kg		111	80 - 131
1,1,1-Trichloroethane	25.0	28.2		ug/Kg		113	80 - 134
1,1,2-Trichloroethane	25.0	24.8		ug/Kg		99	80 - 121
Cyclohexane	25.0	26.1		ug/Kg		104	80 - 138
1,2-Dibromo-3-Chloropropane	25.0	23.8		ug/Kg		95	65 - 132
Ethylene Dibromide	25.0	25.6		ug/Kg		102	47 - 123
Dichlorodifluoromethane	25.0	19.3		ug/Kg		77	30 - 149
cis-1,2-Dichloroethene	25.0	27.3		ug/Kg		109	80 - 123
trans-1,2-Dichloroethene	25.0	27.1		ug/Kg		108	80 - 125
Isopropylbenzene	25.0	28.5		ug/Kg		114	80 - 132
Methyl acetate	125	150		ug/Kg		120	61 - 135
Methyl tert-butyl ether	25.0	26.5		ug/Kg		106	75 - 125
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.0		ug/Kg		108	80 - 142
1,2,4-Trichlorobenzene	25.0	25.3		ug/Kg		101	70 - 125
1,2-Dichlorobenzene	25.0	26.2		ug/Kg		105	80 - 121

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-203518/7
Matrix: Solid
Analysis Batch: 203518

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	25.0	26.6		ug/Kg		106	80 - 127
1,4-Dichlorobenzene	25.0	25.7		ug/Kg		103	79 - 120
Trichlorofluoromethane	25.0	26.8		ug/Kg		107	72 - 142
Methylcyclohexane	25.0	27.8		ug/Kg		111	80 - 137
m-Xylene & p-Xylene	25.0	27.7		ug/Kg		111	80 - 133
o-Xylene	25.0	28.0		ug/Kg		112	80 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*64 - 120*
4-Bromofluorobenzene (Surr)	*110*		*64 - 130*
Toluene-d8 (Surr)	*102*		*69 - 128*
Dibromofluoromethane (Surr)	*104*		*68 - 120*

Lab Sample ID: MB 240-203948/6
Matrix: Water
Analysis Batch: 203948

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/27/15 22:14	1
Benzene	1.0	U	1.0	0.35	ug/L			10/27/15 22:14	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/27/15 22:14	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/27/15 22:14	1
Bromomethane	1.0	U	1.0	0.44	ug/L			10/27/15 22:14	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/27/15 22:14	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/27/15 22:14	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/27/15 22:14	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/27/15 22:14	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/27/15 22:14	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/27/15 22:14	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/27/15 22:14	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/27/15 22:14	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/27/15 22:14	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/27/15 22:14	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/27/15 22:14	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/27/15 22:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/27/15 22:14	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/27/15 22:14	1
2-Hexanone	10	U	10	0.48	ug/L			10/27/15 22:14	1
Methylene Chloride	1.0	U	1.0	0.33	ug/L			10/27/15 22:14	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/27/15 22:14	1
Styrene	1.0	U	1.0	0.45	ug/L			10/27/15 22:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/27/15 22:14	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/27/15 22:14	1
Toluene	1.0	U	1.0	0.23	ug/L			10/27/15 22:14	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/27/15 22:14	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/27/15 22:14	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/27/15 22:14	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/27/15 22:14	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-203948/6
Matrix: Water
Analysis Batch: 203948

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/27/15 22:14	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/27/15 22:14	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/27/15 22:14	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/27/15 22:14	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/27/15 22:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/27/15 22:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/27/15 22:14	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/27/15 22:14	1
Methyl acetate	10	U	10	2.3	ug/L			10/27/15 22:14	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/27/15 22:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/27/15 22:14	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/27/15 22:14	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/27/15 22:14	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/27/15 22:14	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/27/15 22:14	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/27/15 22:14	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/27/15 22:14	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/27/15 22:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*78 - 125*		*10/27/15 22:14*	*1*
4-Bromofluorobenzene (Surr)	*90*		*61 - 120*		*10/27/15 22:14*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/27/15 22:14*	*1*
Dibromofluoromethane (Surr)	*91*		*79 - 120*		*10/27/15 22:14*	*1*

Lab Sample ID: LCS 240-203948/4
Matrix: Water
Analysis Batch: 203948

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	16.5		ug/L		83	34 - 148
Benzene	10.0	9.47		ug/L		95	80 - 120
Dichlorobromomethane	10.0	8.96		ug/L		90	80 - 120
Bromoform	10.0	8.33		ug/L		83	56 - 122
Bromomethane	10.0	10.1		ug/L		101	38 - 132
2-Butanone (MEK)	20.0	16.9		ug/L		85	56 - 138
Carbon disulfide	10.0	7.82		ug/L		78	65 - 144
Carbon tetrachloride	10.0	9.83		ug/L		98	77 - 131
Chlorobenzene	10.0	9.54		ug/L		95	80 - 120
Chloroethane	10.0	8.42		ug/L		84	36 - 126
Chloroform	10.0	9.44		ug/L		94	80 - 120
Chloromethane	10.0	9.79		ug/L		98	48 - 133
1,1-Dichloroethane	10.0	9.40		ug/L		94	79 - 125
1,2-Dichloroethane	10.0	10.2		ug/L		102	80 - 120
1,1-Dichloroethene	10.0	9.23		ug/L		92	76 - 124
1,2-Dichloropropane	10.0	9.60		ug/L		96	78 - 124
cis-1,3-Dichloropropene	10.0	8.69		ug/L		87	74 - 126
trans-1,3-Dichloropropene	10.0	9.31		ug/L		93	75 - 131

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-203948/4
Matrix: Water
Analysis Batch: 203948

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	10.0	9.10		ug/L		91	80 - 120
2-Hexanone	20.0	17.8		ug/L		89	55 - 141
Methylene Chloride	10.0	9.91		ug/L		99	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	18.4		ug/L		92	64 - 135
Styrene	10.0	8.71		ug/L		87	76 - 122
1,1,2,2-Tetrachloroethane	10.0	9.51		ug/L		95	71 - 123
Tetrachloroethene	10.0	9.43		ug/L		94	78 - 121
Toluene	10.0	9.43		ug/L		94	80 - 120
Trichloroethene	10.0	9.92		ug/L		99	80 - 121
Vinyl chloride	10.0	9.02		ug/L		90	52 - 121
Xylenes, Total	20.0	18.5		ug/L		93	80 - 120
1,1,1-Trichloroethane	10.0	9.48		ug/L		95	77 - 123
1,1,2-Trichloroethane	10.0	9.75		ug/L		98	80 - 120
Cyclohexane	10.0	8.58		ug/L		86	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	8.51		ug/L		85	50 - 132
Ethylene Dibromide	10.0	9.81		ug/L		98	80 - 120
Dichlorodifluoromethane	10.0	10.1		ug/L		101	23 - 136
cis-1,2-Dichloroethene	10.0	9.43		ug/L		94	79 - 120
trans-1,2-Dichloroethene	10.0	8.94		ug/L		89	80 - 124
Isopropylbenzene	10.0	8.98		ug/L		90	77 - 120
Methyl acetate	50.0	49.1		ug/L		98	67 - 131
Methyl tert-butyl ether	10.0	9.19		ug/L		92	69 - 121
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.0		ug/L		100	67 - 138
1,2,4-Trichlorobenzene	10.0	9.01		ug/L		90	61 - 120
1,2-Dichlorobenzene	10.0	9.45		ug/L		95	79 - 120
1,3-Dichlorobenzene	10.0	9.13		ug/L		91	79 - 120
1,4-Dichlorobenzene	10.0	9.34		ug/L		93	79 - 120
Trichlorofluoromethane	10.0	10.5		ug/L		105	61 - 133
Methylcyclohexane	10.0	8.67		ug/L		87	61 - 134
m-Xylene & p-Xylene	10.0	9.36		ug/L		94	80 - 120
o-Xylene	10.0	9.15		ug/L		91	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*78 - 125*
4-Bromofluorobenzene (Surr)	*96*		*61 - 120*
Toluene-d8 (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*94*		*79 - 120*

Lab Sample ID: MB 240-204102/6
Matrix: Water
Analysis Batch: 204102

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	0.94	ug/L			10/28/15 13:26	1
Benzene	1.0	U	1.0	0.35	ug/L			10/28/15 13:26	1
Dichlorobromomethane	1.0	U	1.0	0.29	ug/L			10/28/15 13:26	1
Bromoform	1.0	U	1.0	0.56	ug/L			10/28/15 13:26	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-204102/6
Matrix: Water
Analysis Batch: 204102

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	1.0	U	1.0	0.44	ug/L			10/28/15 13:26	1
2-Butanone (MEK)	10	U	10	0.53	ug/L			10/28/15 13:26	1
Carbon disulfide	1.0	U	1.0	0.38	ug/L			10/28/15 13:26	1
Carbon tetrachloride	1.0	U	1.0	0.43	ug/L			10/28/15 13:26	1
Chlorobenzene	1.0	U	1.0	0.25	ug/L			10/28/15 13:26	1
Chloroethane	1.0	U	1.0	0.32	ug/L			10/28/15 13:26	1
Chloroform	1.0	U	1.0	0.25	ug/L			10/28/15 13:26	1
Chloromethane	1.0	U	1.0	0.44	ug/L			10/28/15 13:26	1
1,1-Dichloroethane	1.0	U	1.0	0.30	ug/L			10/28/15 13:26	1
1,2-Dichloroethane	1.0	U	1.0	0.23	ug/L			10/28/15 13:26	1
1,1-Dichloroethene	1.0	U	1.0	0.45	ug/L			10/28/15 13:26	1
1,2-Dichloropropane	1.0	U	1.0	0.25	ug/L			10/28/15 13:26	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			10/28/15 13:26	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.56	ug/L			10/28/15 13:26	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			10/28/15 13:26	1
2-Hexanone	10	U	10	0.48	ug/L			10/28/15 13:26	1
Methylene Chloride	0.356	J	1.0	0.33	ug/L			10/28/15 13:26	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.99	ug/L			10/28/15 13:26	1
Styrene	1.0	U	1.0	0.45	ug/L			10/28/15 13:26	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.22	ug/L			10/28/15 13:26	1
Tetrachloroethene	1.0	U	1.0	0.31	ug/L			10/28/15 13:26	1
Toluene	1.0	U	1.0	0.23	ug/L			10/28/15 13:26	1
Trichloroethene	1.0	U	1.0	0.22	ug/L			10/28/15 13:26	1
Vinyl chloride	1.0	U	1.0	0.29	ug/L			10/28/15 13:26	1
Xylenes, Total	2.0	U	2.0	0.52	ug/L			10/28/15 13:26	1
1,1,1-Trichloroethane	1.0	U	1.0	0.44	ug/L			10/28/15 13:26	1
1,1,2-Trichloroethane	1.0	U	1.0	0.24	ug/L			10/28/15 13:26	1
Cyclohexane	1.0	U	1.0	0.45	ug/L			10/28/15 13:26	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.82	ug/L			10/28/15 13:26	1
Ethylene Dibromide	1.0	U	1.0	0.32	ug/L			10/28/15 13:26	1
Dichlorodifluoromethane	1.0	U	1.0	0.32	ug/L			10/28/15 13:26	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.26	ug/L			10/28/15 13:26	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			10/28/15 13:26	1
Isopropylbenzene	1.0	U	1.0	0.35	ug/L			10/28/15 13:26	1
Methyl acetate	10	U	10	2.3	ug/L			10/28/15 13:26	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			10/28/15 13:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.45	ug/L			10/28/15 13:26	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.32	ug/L			10/28/15 13:26	1
1,2-Dichlorobenzene	1.0	U	1.0	0.25	ug/L			10/28/15 13:26	1
1,3-Dichlorobenzene	1.0	U	1.0	0.19	ug/L			10/28/15 13:26	1
1,4-Dichlorobenzene	1.0	U	1.0	0.27	ug/L			10/28/15 13:26	1
Trichlorofluoromethane	1.0	U	1.0	0.49	ug/L			10/28/15 13:26	1
Chlorodibromomethane	1.0	U	1.0	0.43	ug/L			10/28/15 13:26	1
Methylcyclohexane	1.0	U	1.0	0.43	ug/L			10/28/15 13:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*78 - 125*		*10/28/15 13:26*	*1*
4-Bromofluorobenzene (Surr)	*92*		*61 - 120*		*10/28/15 13:26*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-204102/6
Matrix: Water
Analysis Batch: 204102

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		10/28/15 13:26	1
Dibromofluoromethane (Surr)	93		79 - 120		10/28/15 13:26	1

Lab Sample ID: LCS 240-204102/4
Matrix: Water
Analysis Batch: 204102

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	14.2		ug/L		71	34 - 148
Benzene	10.0	10.2		ug/L		102	80 - 120
Dichlorobromomethane	10.0	9.60		ug/L		96	80 - 120
Bromoform	10.0	8.89		ug/L		89	56 - 122
Bromomethane	10.0	6.54		ug/L		65	38 - 132
2-Butanone (MEK)	20.0	17.0		ug/L		85	56 - 138
Carbon disulfide	10.0	8.13		ug/L		81	65 - 144
Carbon tetrachloride	10.0	10.2		ug/L		102	77 - 131
Chlorobenzene	10.0	10.6		ug/L		106	80 - 120
Chloroethane	10.0	4.83		ug/L		48	36 - 126
Chloroform	10.0	10.1		ug/L		101	80 - 120
Chloromethane	10.0	9.05		ug/L		90	48 - 133
1,1-Dichloroethane	10.0	9.90		ug/L		99	79 - 125
1,2-Dichloroethane	10.0	10.3		ug/L		103	80 - 120
1,1-Dichloroethene	10.0	9.43		ug/L		94	76 - 124
1,2-Dichloropropane	10.0	9.90		ug/L		99	78 - 124
cis-1,3-Dichloropropene	10.0	9.57		ug/L		96	74 - 126
trans-1,3-Dichloropropene	10.0	10.1		ug/L		101	75 - 131
Ethylbenzene	10.0	10.3		ug/L		103	80 - 120
2-Hexanone	20.0	17.1		ug/L		85	55 - 141
Methylene Chloride	10.0	10.4		ug/L		104	77 - 129
4-Methyl-2-pentanone (MIBK)	20.0	17.9		ug/L		90	64 - 135
Styrene	10.0	9.79		ug/L		98	76 - 122
1,1,2,2-Tetrachloroethane	10.0	10.2		ug/L		102	71 - 123
Tetrachloroethene	10.0	10.7		ug/L		107	78 - 121
Toluene	10.0	10.5		ug/L		105	80 - 120
Trichloroethene	10.0	10.6		ug/L		106	80 - 121
Vinyl chloride	10.0	8.38		ug/L		84	52 - 121
Xylenes, Total	20.0	20.8		ug/L		104	80 - 120
1,1,1-Trichloroethane	10.0	9.86		ug/L		99	77 - 123
1,1,2-Trichloroethane	10.0	10.2		ug/L		102	80 - 120
Cyclohexane	10.0	8.63		ug/L		86	60 - 140
1,2-Dibromo-3-Chloropropane	10.0	8.79		ug/L		88	50 - 132
Ethylene Dibromide	10.0	10.4		ug/L		104	80 - 120
Dichlorodifluoromethane	10.0	9.27		ug/L		93	23 - 136
cis-1,2-Dichloroethene	10.0	10.1		ug/L		101	79 - 120
trans-1,2-Dichloroethene	10.0	9.73		ug/L		97	80 - 124
Isopropylbenzene	10.0	10.3		ug/L		103	77 - 120
Methyl acetate	50.0	46.7		ug/L		93	67 - 131
Methyl tert-butyl ether	10.0	9.39		ug/L		94	69 - 121

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-204102/4
Matrix: Water
Analysis Batch: 204102

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.1		ug/L		101	67 - 138
1,2,4-Trichlorobenzene	10.0	10.1		ug/L		101	61 - 120
1,2-Dichlorobenzene	10.0	10.7		ug/L		107	79 - 120
1,3-Dichlorobenzene	10.0	10.6		ug/L		106	79 - 120
1,4-Dichlorobenzene	10.0	10.5		ug/L		105	79 - 120
Trichlorofluoromethane	10.0	9.56		ug/L		96	61 - 133
Methylcyclohexane	10.0	9.15		ug/L		92	61 - 134
m-Xylene & p-Xylene	10.0	10.4		ug/L		104	80 - 120
o-Xylene	10.0	10.4		ug/L		104	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*78 - 125*
4-Bromofluorobenzene (Surr)	*93*		*61 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*95*		*79 - 120*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-203051/9-A
Matrix: Water
Analysis Batch: 204232

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 203051

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1.0	U	1.0	0.12	ug/L		10/22/15 05:45	10/29/15 08:26	1
bis (2-chloroisopropyl) ether	1.0	U	1.0	0.18	ug/L		10/22/15 05:45	10/29/15 08:26	1
2-Chloronaphthalene	1.0	U	1.0	0.12	ug/L		10/22/15 05:45	10/29/15 08:26	1
2-Chlorophenol	1.0	U	1.0	0.13	ug/L		10/22/15 05:45	10/29/15 08:26	1
4-Bromophenyl phenyl ether	2.0	U	2.0	0.35	ug/L		10/22/15 05:45	10/29/15 08:26	1
4-Chloro-3-methylphenol	2.0	U	2.0	0.28	ug/L		10/22/15 05:45	10/29/15 08:26	1
4-Chloroaniline	2.0	U	2.0	0.15	ug/L		10/22/15 05:45	10/29/15 08:26	1
4-Chlorophenyl phenyl ether	2.0	U	2.0	0.29	ug/L		10/22/15 05:45	10/29/15 08:26	1
3,3'-Dichlorobenzidine	5.0	U	5.0	0.35	ug/L		10/22/15 05:45	10/29/15 08:26	1
2,4-Dichlorophenol	2.0	U	2.0	0.29	ug/L		10/22/15 05:45	10/29/15 08:26	1
Acenaphthene	0.20	U	0.20	0.044	ug/L		10/22/15 05:45	10/29/15 08:26	1
2,4-Dimethylphenol	2.0	U	2.0	0.31	ug/L		10/22/15 05:45	10/29/15 08:26	1
Acenaphthylene	0.20	U	0.20	0.020	ug/L		10/22/15 05:45	10/29/15 08:26	1
Acetophenone	1.0	U	1.0	0.14	ug/L		10/22/15 05:45	10/29/15 08:26	1
Anthracene	0.20	U	0.20	0.031	ug/L		10/22/15 05:45	10/29/15 08:26	1
4,6-Dinitro-2-methylphenol	5.0	U	5.0	0.53	ug/L		10/22/15 05:45	10/29/15 08:26	1
Atrazine	1.0	U	1.0	0.12	ug/L		10/22/15 05:45	10/29/15 08:26	1
2,4-Dinitrophenol	40	U	40	6.1	ug/L		10/22/15 05:45	10/29/15 08:26	1
Benzaldehyde	1.0	U	1.0	0.30	ug/L		10/22/15 05:45	10/29/15 08:26	1
2,4-Dinitrotoluene	5.0	U	5.0	0.26	ug/L		10/22/15 05:45	10/29/15 08:26	1
Benzo[a]anthracene	0.20	U	0.20	0.059	ug/L		10/22/15 05:45	10/29/15 08:26	1
2,6-Dinitrotoluene	5.0	U	5.0	0.24	ug/L		10/22/15 05:45	10/29/15 08:26	1
Benzo[a]pyrene	0.20	U	0.20	0.030	ug/L		10/22/15 05:45	10/29/15 08:26	1
Benzo[b]fluoranthene	0.20	U	0.20	0.059	ug/L		10/22/15 05:45	10/29/15 08:26	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-203051/9-A
Matrix: Water
Analysis Batch: 204232

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 203051

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	0.20	U	0.20	0.050	ug/L		10/22/15 05:45	10/29/15 08:26	1
Benzo[k]fluoranthene	0.20	U	0.20	0.048	ug/L		10/22/15 05:45	10/29/15 08:26	1
Bis(2-chloroethoxy)methane	1.0	U	1.0	0.037	ug/L		10/22/15 05:45	10/29/15 08:26	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.19	ug/L		10/22/15 05:45	10/29/15 08:26	1
Bis(2-ethylhexyl) phthalate	2.0	U	2.0	1.5	ug/L		10/22/15 05:45	10/29/15 08:26	1
Butyl benzyl phthalate	1.0	U	1.0	0.22	ug/L		10/22/15 05:45	10/29/15 08:26	1
Caprolactam	5.0	U	5.0	0.37	ug/L		10/22/15 05:45	10/29/15 08:26	1
Carbazole	1.0	U	1.0	0.11	ug/L		10/22/15 05:45	10/29/15 08:26	1
Chrysene	0.20	U	0.20	0.035	ug/L		10/22/15 05:45	10/29/15 08:26	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.040	ug/L		10/22/15 05:45	10/29/15 08:26	1
2-Methylnaphthalene	0.20	U	0.20	0.037	ug/L		10/22/15 05:45	10/29/15 08:26	1
Dibenzofuran	1.0	U	1.0	0.14	ug/L		10/22/15 05:45	10/29/15 08:26	1
2-Methylphenol	1.0	U	1.0	0.19	ug/L		10/22/15 05:45	10/29/15 08:26	1
Diethyl phthalate	1.0	U	1.0	0.13	ug/L		10/22/15 05:45	10/29/15 08:26	1
Dimethyl phthalate	1.0	U	1.0	0.10	ug/L		10/22/15 05:45	10/29/15 08:26	1
Di-n-butyl phthalate	1.0	U	1.0	0.40	ug/L		10/22/15 05:45	10/29/15 08:26	1
2-Nitroaniline	2.0	U	2.0	0.31	ug/L		10/22/15 05:45	10/29/15 08:26	1
Di-n-octyl phthalate	1.0	U	1.0	0.37	ug/L		10/22/15 05:45	10/29/15 08:26	1
3-Nitroaniline	2.0	U	2.0	0.27	ug/L		10/22/15 05:45	10/29/15 08:26	1
Fluoranthene	0.20	U	0.20	0.027	ug/L		10/22/15 05:45	10/29/15 08:26	1
4-Nitroaniline	2.0	U	2.0	0.24	ug/L		10/22/15 05:45	10/29/15 08:26	1
Fluorene	0.20	U	0.20	0.034	ug/L		10/22/15 05:45	10/29/15 08:26	1
Hexachlorobenzene	1.0	U	1.0	0.12	ug/L		10/22/15 05:45	10/29/15 08:26	1
Hexachlorobutadiene	1.0	U	1.0	0.14	ug/L		10/22/15 05:45	10/29/15 08:26	1
2-Nitrophenol	2.0	U	2.0	0.21	ug/L		10/22/15 05:45	10/29/15 08:26	1
Hexachlorocyclopentadiene	10	U	10	2.5	ug/L		10/22/15 05:45	10/29/15 08:26	1
4-Nitrophenol	5.0	U	5.0	0.59	ug/L		10/22/15 05:45	10/29/15 08:26	1
Hexachloroethane	1.0	U	1.0	0.22	ug/L		10/22/15 05:45	10/29/15 08:26	1
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.048	ug/L		10/22/15 05:45	10/29/15 08:26	1
Isophorone	1.0	U	1.0	0.042	ug/L		10/22/15 05:45	10/29/15 08:26	1
Naphthalene	0.20	U	0.20	0.043	ug/L		10/22/15 05:45	10/29/15 08:26	1
Nitrobenzene	1.0	U	1.0	0.12	ug/L		10/22/15 05:45	10/29/15 08:26	1
N-Nitrosodi-n-propylamine	1.0	U	1.0	0.16	ug/L		10/22/15 05:45	10/29/15 08:26	1
N-Nitrosodiphenylamine	1.0	U	1.0	0.11	ug/L		10/22/15 05:45	10/29/15 08:26	1
Pentachlorophenol	40	U	40	5.5	ug/L		10/22/15 05:45	10/29/15 08:26	1
Phenol	1.0	U	1.0	0.15	ug/L		10/22/15 05:45	10/29/15 08:26	1
Phenanthrene	0.20	U	0.20	0.031	ug/L		10/22/15 05:45	10/29/15 08:26	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.37	ug/L		10/22/15 05:45	10/29/15 08:26	1
Pyrene	0.20	U	0.20	0.028	ug/L		10/22/15 05:45	10/29/15 08:26	1
2,4,6-Trichlorophenol	5.0	U	5.0	0.26	ug/L		10/22/15 05:45	10/29/15 08:26	1
3 & 4 Methylphenol	2.0	U	2.0	0.34	ug/L		10/22/15 05:45	10/29/15 08:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*66*		*29 - 110*	*10/22/15 05:45*	*10/29/15 08:26*	*1*
2-Fluorophenol (Surr)	*54*		*15 - 110*	*10/22/15 05:45*	*10/29/15 08:26*	*1*
Nitrobenzene-d5 (Surr)	*66*		*31 - 110*	*10/22/15 05:45*	*10/29/15 08:26*	*1*
Phenol-d5 (Surr)	*36*		*10 - 110*	*10/22/15 05:45*	*10/29/15 08:26*	*1*
Terphenyl-d14 (Surr)	*74*		*31 - 115*	*10/22/15 05:45*	*10/29/15 08:26*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-203051/9-A
Matrix: Water
Analysis Batch: 204232

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 203051

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	48		21 - 128	10/22/15 05:45	10/29/15 08:26	1

Lab Sample ID: LCS 240-203051/10-A
Matrix: Water
Analysis Batch: 204232

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 203051

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	32.0	30.9		ug/L		97	43 - 120
bis (2-chloroisopropyl) ether	32.0	32.8		ug/L		102	45 - 112
2-Chloronaphthalene	32.0	30.7		ug/L		96	43 - 120
2-Chlorophenol	32.0	31.6		ug/L		99	53 - 120
4-Bromophenyl phenyl ether	32.0	30.9		ug/L		97	49 - 120
4-Chloro-3-methylphenol	32.0	31.0		ug/L		97	55 - 120
4-Chloroaniline	32.0	4.73	*	ug/L		15	20 - 136
4-Chlorophenyl phenyl ether	32.0	30.3		ug/L		95	48 - 120
3,3'-Dichlorobenzidine	64.0	3.55	J *	ug/L		6	30 - 120
2,4-Dichlorophenol	32.0	30.3		ug/L		95	54 - 120
Acenaphthene	32.0	31.4		ug/L		98	48 - 120
2,4-Dimethylphenol	32.0	26.3		ug/L		82	40 - 125
Acenaphthylene	32.0	31.3		ug/L		98	47 - 120
Acetophenone	32.0	34.7		ug/L		108	53 - 120
Anthracene	32.0	29.8		ug/L		93	50 - 120
4,6-Dinitro-2-methylphenol	64.0	55.2		ug/L		86	40 - 120
Atrazine	64.0	60.5		ug/L		95	49 - 120
2,4-Dinitrophenol	64.0	51.8		ug/L		81	30 - 120
Benzaldehyde	64.0	117	E *	ug/L		183	40 - 160
2,4-Dinitrotoluene	32.0	34.8		ug/L		109	50 - 120
Benzo[a]anthracene	32.0	30.0		ug/L		94	46 - 120
2,6-Dinitrotoluene	32.0	33.4		ug/L		104	52 - 120
Benzo[a]pyrene	32.0	30.3		ug/L		95	49 - 120
Benzo[b]fluoranthene	32.0	34.1		ug/L		107	49 - 120
Benzo[g,h,i]perylene	32.0	35.6		ug/L		111	48 - 120
Benzo[k]fluoranthene	32.0	34.8		ug/L		109	50 - 120
Bis(2-chloroethoxy)methane	32.0	34.1		ug/L		107	54 - 120
Bis(2-chloroethyl)ether	32.0	34.5		ug/L		108	51 - 120
Bis(2-ethylhexyl) phthalate	32.0	37.2		ug/L		116	30 - 156
Butyl benzyl phthalate	32.0	35.7		ug/L		112	40 - 125
Caprolactam	64.0	64.1		ug/L		100	10 - 120
Carbazole	32.0	26.3		ug/L		82	46 - 127
Chrysene	32.0	32.4		ug/L		101	45 - 120
Dibenz(a,h)anthracene	32.0	31.3	E	ug/L		98	49 - 120
2-Methylnaphthalene	32.0	30.9		ug/L		96	46 - 120
Dibenzofuran	32.0	31.1		ug/L		97	45 - 120
2-Methylphenol	32.0	36.7		ug/L		115	52 - 120
Diethyl phthalate	32.0	33.2		ug/L		104	48 - 121
Dimethyl phthalate	32.0	33.3		ug/L		104	50 - 120
Di-n-butyl phthalate	32.0	35.7		ug/L		111	40 - 160
2-Nitroaniline	32.0	34.1		ug/L		107	47 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-203051/10-A
Matrix: Water
Analysis Batch: 204232

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 203051

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Di-n-octyl phthalate	32.0	40.6		ug/L		127	40 - 128
3-Nitroaniline	32.0	19.6		ug/L		61	40 - 144
Fluoranthene	32.0	31.0		ug/L		97	50 - 120
4-Nitroaniline	32.0	22.1		ug/L		69	40 - 135
Fluorene	32.0	31.0		ug/L		97	50 - 120
Hexachlorobenzene	32.0	28.5		ug/L		89	46 - 120
Hexachlorobutadiene	32.0	26.0		ug/L		81	30 - 120
2-Nitrophenol	32.0	33.6		ug/L		105	53 - 120
Hexachlorocyclopentadiene	32.0	4.64	J	ug/L		14	4 - 120
4-Nitrophenol	64.0	62.5		ug/L		98	30 - 120
Hexachloroethane	32.0	28.9		ug/L		90	30 - 120
Indeno[1,2,3-cd]pyrene	32.0	36.0		ug/L		113	48 - 140
Isophorone	32.0	37.2		ug/L		116	52 - 120
Naphthalene	32.0	31.4		ug/L		98	45 - 120
Nitrobenzene	32.0	34.1		ug/L		107	54 - 120
N-Nitrosodi-n-propylamine	32.0	33.9		ug/L		106	52 - 117
N-Nitrosodiphenylamine	64.0	57.2		ug/L		89	47 - 109
Pentachlorophenol	64.0	45.5		ug/L		71	30 - 120
Phenol	32.0	31.1		ug/L		97	40 - 120
Phenanthrene	32.0	31.1		ug/L		97	50 - 120
2,4,5-Trichlorophenol	32.0	28.6		ug/L		89	49 - 120
Pyrene	32.0	33.2		ug/L		104	49 - 114
2,4,6-Trichlorophenol	32.0	28.7		ug/L		90	50 - 120
3 & 4 Methylphenol	32.0	33.2		ug/L		104	50 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*100*		*29 - 110*
2-Fluorophenol (Surr)	*102*		*15 - 110*
Nitrobenzene-d5 (Surr)	*106*		*31 - 110*
Phenol-d5 (Surr)	*103*		*10 - 110*
Terphenyl-d14 (Surr)	*107*		*31 - 115*
2,4,6-Tribromophenol (Surr)	*87*		*21 - 128*

Lab Sample ID: MB 240-203066/15-A
Matrix: Solid
Analysis Batch: 203599

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 203066

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	50	U	50	3.5	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
bis (2-chloroisopropyl) ether	100	U	100	9.5	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
2-Chloronaphthalene	50	U	50	0.45	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
2-Chlorophenol	50	U	50	8.2	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
4-Bromophenyl phenyl ether	50	U	50	13	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
4-Chloro-3-methylphenol	150	U	150	21	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
4-Chloroaniline	150	U	150	17	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
4-Chlorophenyl phenyl ether	50	U	50	13	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
3,3'-Dichlorobenzidine	100	U	100	18	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
2,4-Dichlorophenol	150	U	150	20	ug/Kg		10/22/15 07:03	10/26/15 07:51	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-203066/15-A
Matrix: Solid
Analysis Batch: 203599

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 203066

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	6.7	U	6.7	0.76	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
2,4-Dimethylphenol	150	U	150	20	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Acenaphthylene	6.7	U	6.7	0.35	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Acetophenone	100	U	100	9.2	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Anthracene	6.7	U	6.7	0.78	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
4,6-Dinitro-2-methylphenol	150	U	150	9.2	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Atrazine	200	U	200	9.1	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
2,4-Dinitrophenol	330	U	330	21	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Benzaldehyde	100	U	100	12	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
2,4-Dinitrotoluene	200	U	200	17	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Benzo[a]anthracene	6.7	U	6.7	0.63	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
2,6-Dinitrotoluene	200	U	200	21	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Benzo[a]pyrene	6.7	U	6.7	0.64	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Benzo[b]fluoranthene	6.7	U	6.7	0.59	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Benzo[g,h,i]perylene	6.7	U	6.7	0.35	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Benzo[k]fluoranthene	6.7	U	6.7	0.68	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Bis(2-chloroethoxy)methane	100	U	100	22	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Bis(2-chloroethyl)ether	100	U	100	2.0	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Bis(2-ethylhexyl) phthalate	70	U	70	19	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Butyl benzyl phthalate	70	U	70	10	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Caprolactam	330	U	330	37	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Carbazole	50	U	50	27	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Chrysene	6.7	U	6.7	1.1	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Dibenz(a,h)anthracene	6.7	U	6.7	0.66	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
2-Methylnaphthalene	6.7	U	6.7	0.50	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Dibenzofuran	50	U	50	0.66	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
2-Methylphenol	200	U	200	11	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Diethyl phthalate	70	U	70	16	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Dimethyl phthalate	70	U	70	17	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Di-n-butyl phthalate	70	U	70	15	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
2-Nitroaniline	200	U	200	9.1	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Di-n-octyl phthalate	70	U	70	7.9	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
3-Nitroaniline	200	U	200	16	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Fluoranthene	6.7	U	6.7	0.55	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
4-Nitroaniline	200	U	200	26	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Fluorene	6.7	U	6.7	0.53	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Hexachlorobenzene	6.7	U	6.7	2.1	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Hexachlorobutadiene	50	U	50	5.6	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
2-Nitrophenol	50	U	50	8.3	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Hexachlorocyclopentadiene	330	U	330	8.1	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
4-Nitrophenol	330	U	330	17	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Hexachloroethane	50	U	50	9.0	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Indeno[1,2,3-cd]pyrene	6.7	U	6.7	0.35	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Isophorone	50	U	50	13	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Naphthalene	6.7	U	6.7	0.82	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Nitrobenzene	100	U	100	2.2	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
N-Nitrosodi-n-propylamine	50	U	50	6.3	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
N-Nitrosodiphenylamine	50	U	50	21	ug/Kg		10/22/15 07:03	10/26/15 07:51	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-203066/15-A
Matrix: Solid
Analysis Batch: 203599

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 203066

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	150	U	150	9.1	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Phenol	50	U	50	7.3	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Phenanthrene	6.7	U	6.7	0.73	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
2,4,5-Trichlorophenol	150	U	150	25	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
Pyrene	6.7	U	6.7	0.44	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
2,4,6-Trichlorophenol	150	U	150	8.9	ug/Kg		10/22/15 07:03	10/26/15 07:51	1
3 & 4 Methylphenol	400	U	400	20	ug/Kg		10/22/15 07:03	10/26/15 07:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*62*		*24 - 110*	*10/22/15 07:03*	*10/26/15 07:51*	*1*
2-Fluorophenol (Surr)	*55*		*24 - 110*	*10/22/15 07:03*	*10/26/15 07:51*	*1*
Nitrobenzene-d5 (Surr)	*60*		*20 - 110*	*10/22/15 07:03*	*10/26/15 07:51*	*1*
Phenol-d5 (Surr)	*60*		*26 - 110*	*10/22/15 07:03*	*10/26/15 07:51*	*1*
Terphenyl-d14 (Surr)	*73*		*36 - 110*	*10/22/15 07:03*	*10/26/15 07:51*	*1*
2,4,6-Tribromophenol (Surr)	*22*		*10 - 110*	*10/22/15 07:03*	*10/26/15 07:51*	*1*

Lab Sample ID: LCS 240-203066/16-A
Matrix: Solid
Analysis Batch: 203599

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 203066

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	667	509		ug/Kg		76	35 - 110
bis (2-chloroisopropyl) ether	667	508		ug/Kg		76	29 - 110
2-Chloronaphthalene	667	503		ug/Kg		75	32 - 110
2-Chlorophenol	667	504		ug/Kg		76	37 - 110
4-Bromophenyl phenyl ether	667	528		ug/Kg		79	39 - 110
4-Chloro-3-methylphenol	667	507		ug/Kg		76	48 - 110
4-Chloroaniline	667	423		ug/Kg		63	30 - 110
4-Chlorophenyl phenyl ether	667	528		ug/Kg		79	40 - 110
3,3'-Dichlorobenzidine	1330	1060		ug/Kg		79	28 - 110
2,4-Dichlorophenol	667	466		ug/Kg		70	39 - 110
Acenaphthene	667	527		ug/Kg		79	38 - 110
2,4-Dimethylphenol	667	442		ug/Kg		66	29 - 110
Acenaphthylene	667	523		ug/Kg		79	40 - 110
Acetophenone	667	516		ug/Kg		77	40 - 110
Anthracene	667	551		ug/Kg		83	48 - 110
4,6-Dinitro-2-methylphenol	1330	952		ug/Kg		71	10 - 110
Atrazine	1330	1190		ug/Kg		89	54 - 120
2,4-Dinitrophenol	1330	632		ug/Kg		47	10 - 110
Benzaldehyde	1330	1120		ug/Kg		84	32 - 110
2,4-Dinitrotoluene	667	580		ug/Kg		87	48 - 110
Benzo[a]anthracene	667	553		ug/Kg		83	50 - 110
2,6-Dinitrotoluene	667	571		ug/Kg		86	45 - 110
Benzo[a]pyrene	667	572		ug/Kg		86	44 - 110
Benzo[b]fluoranthene	667	568		ug/Kg		85	43 - 110
Benzo[g,h,i]perylene	667	613		ug/Kg		92	51 - 110
Benzo[k]fluoranthene	667	585		ug/Kg		88	38 - 105
Bis(2-chloroethoxy)methane	667	546		ug/Kg		82	32 - 110

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-203066/16-A
Matrix: Solid
Analysis Batch: 203599

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 203066

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethyl)ether	667	515		ug/Kg		77	34 - 110
Bis(2-ethylhexyl) phthalate	667	601		ug/Kg		90	50 - 110
Butyl benzyl phthalate	667	585		ug/Kg		88	51 - 110
Caprolactam	1330	1170		ug/Kg		88	44 - 114
Carbazole	667	615		ug/Kg		92	50 - 110
Chrysene	667	594		ug/Kg		89	50 - 110
Dibenz(a,h)anthracene	667	595		ug/Kg		89	51 - 110
2-Methylnaphthalene	667	499		ug/Kg		75	36 - 110
Dibenzofuran	667	518		ug/Kg		78	43 - 110
2-Methylphenol	667	506		ug/Kg		76	41 - 110
Diethyl phthalate	667	536		ug/Kg		80	52 - 110
Dimethyl phthalate	667	547		ug/Kg		82	50 - 110
Di-n-butyl phthalate	667	597		ug/Kg		90	51 - 110
2-Nitroaniline	667	619		ug/Kg		93	45 - 110
Di-n-octyl phthalate	667	568		ug/Kg		85	48 - 110
3-Nitroaniline	667	584		ug/Kg		88	44 - 110
Fluoranthene	667	569		ug/Kg		85	51 - 110
4-Nitroaniline	667	632		ug/Kg		95	48 - 110
Fluorene	667	523		ug/Kg		78	46 - 110
Hexachlorobenzene	667	516		ug/Kg		77	43 - 110
Hexachlorobutadiene	667	471		ug/Kg		71	29 - 110
2-Nitrophenol	667	567		ug/Kg		85	34 - 110
Hexachlorocyclopentadiene	667	354		ug/Kg		53	12 - 110
4-Nitrophenol	1330	1090		ug/Kg		82	28 - 110
Hexachloroethane	667	484		ug/Kg		73	30 - 110
Indeno[1,2,3-cd]pyrene	667	610		ug/Kg		92	50 - 110
Isophorone	667	535		ug/Kg		80	36 - 110
Naphthalene	667	492		ug/Kg		74	36 - 110
Nitrobenzene	667	536		ug/Kg		80	32 - 110
N-Nitrosodi-n-propylamine	667	515		ug/Kg		77	38 - 110
N-Nitrosodiphenylamine	1330	1100		ug/Kg		82	46 - 110
Pentachlorophenol	1330	673		ug/Kg		50	10 - 110
Phenol	667	512		ug/Kg		77	38 - 110
Phenanthrene	667	559		ug/Kg		84	49 - 110
2,4,5-Trichlorophenol	667	468		ug/Kg		70	25 - 110
Pyrene	667	622		ug/Kg		93	49 - 110
2,4,6-Trichlorophenol	667	405		ug/Kg		61	12 - 110
3 & 4 Methylphenol	667	491		ug/Kg		74	40 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*77*		*24 - 110*
2-Fluorophenol (Surr)	*78*		*24 - 110*
Nitrobenzene-d5 (Surr)	*80*		*20 - 110*
Phenol-d5 (Surr)	*78*		*26 - 110*
Terphenyl-d14 (Surr)	*94*		*36 - 110*
2,4,6-Tribromophenol (Surr)	*49*		*10 - 110*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-203384/1-A
Matrix: Solid
Analysis Batch: 203677

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 203384

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	1.0	U	1.0	0.41	mg/Kg		10/23/15 12:49	10/26/15 14:56	1
Barium	20	U	20	0.41	mg/Kg		10/23/15 12:49	10/26/15 14:56	1
Cadmium	0.20	U	0.20	0.021	mg/Kg		10/23/15 12:49	10/26/15 14:56	1
Chromium	0.50	U	0.50	0.075	mg/Kg		10/23/15 12:49	10/26/15 14:56	1
Lead	0.30	U	0.30	0.20	mg/Kg		10/23/15 12:49	10/26/15 14:56	1
Selenium	0.50	U	0.50	0.34	mg/Kg		10/23/15 12:49	10/26/15 14:56	1
Silver	0.50	U	0.50	0.063	mg/Kg		10/23/15 12:49	10/26/15 14:56	1

Lab Sample ID: LCS 240-203384/2-A
Matrix: Solid
Analysis Batch: 203677

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 203384

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	200	190		mg/Kg		95	80 - 120
Barium	200	186		mg/Kg		93	80 - 120
Cadmium	5.00	4.68		mg/Kg		94	80 - 120
Chromium	20.0	19.3		mg/Kg		96	80 - 120
Lead	50.0	46.1		mg/Kg		92	80 - 120
Selenium	200	192		mg/Kg		96	80 - 120
Silver	5.00	4.85		mg/Kg		97	80 - 120

Lab Sample ID: MB 240-203125/1-A
Matrix: Water
Analysis Batch: 203385

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 203125

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10	U	10	2.9	ug/L		10/22/15 10:43	10/23/15 12:19	1
Barium	1.23	J	200	1.0	ug/L		10/22/15 10:43	10/23/15 12:19	1
Cadmium	2.0	U	2.0	0.14	ug/L		10/22/15 10:43	10/23/15 12:19	1
Chromium	5.0	U	5.0	0.55	ug/L		10/22/15 10:43	10/23/15 12:19	1
Lead	3.0	U	3.0	1.9	ug/L		10/22/15 10:43	10/23/15 12:19	1
Selenium	5.0	U	5.0	4.0	ug/L		10/22/15 10:43	10/23/15 12:19	1
Silver	5.0	U	5.0	0.92	ug/L		10/22/15 10:43	10/23/15 12:19	1

Lab Sample ID: LCS 240-203125/2-A
Matrix: Water
Analysis Batch: 203385

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 203125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2000	2110		ug/L		106	80 - 120
Barium	2000	2010		ug/L		100	80 - 120
Cadmium	50.0	52.2		ug/L		104	80 - 120
Chromium	200	206		ug/L		103	80 - 120
Lead	500	506		ug/L		101	80 - 120
Selenium	2000	2160		ug/L		108	80 - 120
Silver	50.0	54.9		ug/L		110	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 240-56876-4 MS
Matrix: Water
Analysis Batch: 203385

Client Sample ID: VAP-10-GW (20-21)
Prep Type: Dissolved
Prep Batch: 203125

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	4.2	J	2000	2000		ug/L		100	75 - 125
Barium	43	J B	2000	1970		ug/L		97	75 - 125
Cadmium	0.18	J	50.0	48.6		ug/L		97	75 - 125
Chromium	5.0		200	200		ug/L		97	75 - 125
Lead	3.0	U	500	473		ug/L		95	75 - 125
Selenium	5.0	U	2000	2040		ug/L		102	75 - 125
Silver	5.0	U	50.0	53.4		ug/L		107	75 - 125

Lab Sample ID: 240-56876-4 MSD
Matrix: Water
Analysis Batch: 203385

Client Sample ID: VAP-10-GW (20-21)
Prep Type: Dissolved
Prep Batch: 203125

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.2	J	2000	2140		ug/L		107	75 - 125	7	20
Barium	43	J B	2000	2120		ug/L		104	75 - 125	7	20
Cadmium	0.18	J	50.0	51.9		ug/L		103	75 - 125	6	20
Chromium	5.0		200	213		ug/L		104	75 - 125	6	20
Lead	3.0	U	500	503		ug/L		101	75 - 125	6	20
Selenium	5.0	U	2000	2180		ug/L		109	75 - 125	6	20
Silver	5.0	U	50.0	57.3		ug/L		115	75 - 125	7	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-203122/1-A
Matrix: Water
Analysis Batch: 203845

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 203122

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.090	ug/L		10/22/15 12:00	10/26/15 15:21	1

Lab Sample ID: LCS 240-203122/2-A
Matrix: Water
Analysis Batch: 203845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 203122

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.02		ug/L		100	80 - 120

Lab Sample ID: 240-56876-4 MS
Matrix: Water
Analysis Batch: 203845

Client Sample ID: VAP-10-GW (20-21)
Prep Type: Dissolved
Prep Batch: 203122

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.20	U	1.00	1.03		ug/L		103	80 - 120

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 240-56876-4 MSD
Matrix: Water
Analysis Batch: 203845

Client Sample ID: VAP-10-GW (20-21)
Prep Type: Dissolved
Prep Batch: 203122

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.20	U	1.00	1.04		ug/L		104	80 - 120	1	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 240-203406/1-A
Matrix: Solid
Analysis Batch: 203727

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 203406

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10	U	0.10	0.014	mg/Kg		10/23/15 16:55	10/26/15 15:17	1

Lab Sample ID: LCS 240-203406/2-A
Matrix: Solid
Analysis Batch: 203727

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 203406

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.760		mg/Kg		91	80 - 120

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 240-203319/43-A
Matrix: Solid
Analysis Batch: 203976

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 203319

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.80	U ^	0.80	0.26	mg/Kg		10/27/15 09:47	10/27/15 00:00	1

Lab Sample ID: LCSI 240-203319/45-A
Matrix: Solid
Analysis Batch: 203976

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 203319

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	643	541	^	mg/Kg		84	75 - 125

Lab Sample ID: LCSS 240-203319/44-A
Matrix: Solid
Analysis Batch: 203976

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 203319

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	20.0	19.8	^	mg/Kg		99	90 - 110

GC/MS VOA

Prep Batch: 202984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56876-1	VAP-10 (0-2)	Total/NA	Solid	5035	

Analysis Batch: 203518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56876-1	VAP-10 (0-2)	Total/NA	Solid	8260B	202984
LCS 240-203518/7	Lab Control Sample	Total/NA	Solid	8260B	
MB 240-203518/9	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 203948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56876-2	TB-01 (101915)	Total/NA	Water	8260B	
240-56876-7	VAP-10-GW (35-36)	Total/NA	Water	8260B	
240-56876-9	VAP-10-GW (45-46)	Total/NA	Water	8260B	
240-56876-10	VAP-10-GW (49-50)	Total/NA	Water	8260B	
LCS 240-203948/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-203948/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 204102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56876-3	VAP-10-GW (16-17)	Total/NA	Water	8260B	
240-56876-4	VAP-10-GW (20-21)	Total/NA	Water	8260B	
240-56876-5	VAP-10-GW (25-26)	Total/NA	Water	8260B	
240-56876-6	VAP-10-GW (30-31)	Total/NA	Water	8260B	
240-56876-8	VAP-10-GW (40-41)	Total/NA	Water	8260B	
LCS 240-204102/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-204102/6	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 203051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56876-3	VAP-10-GW (16-17)	Total/NA	Water	3520C	
240-56876-4	VAP-10-GW (20-21)	Total/NA	Water	3520C	
240-56876-5	VAP-10-GW (25-26)	Total/NA	Water	3520C	
240-56876-6	VAP-10-GW (30-31)	Total/NA	Water	3520C	
240-56876-7	VAP-10-GW (35-36)	Total/NA	Water	3520C	
240-56876-8	VAP-10-GW (40-41)	Total/NA	Water	3520C	
240-56876-9	VAP-10-GW (45-46)	Total/NA	Water	3520C	
240-56876-10	VAP-10-GW (49-50)	Total/NA	Water	3520C	
LCS 240-203051/10-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-203051/9-A	Method Blank	Total/NA	Water	3520C	

Prep Batch: 203066

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56876-1	VAP-10 (0-2)	Total/NA	Solid	3540C	
LCS 240-203066/16-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-203066/15-A	Method Blank	Total/NA	Solid	3540C	

GC/MS Semi VOA (Continued)

Analysis Batch: 203599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56876-1	VAP-10 (0-2)	Total/NA	Solid	8270C	203066
LCS 240-203066/16-A	Lab Control Sample	Total/NA	Solid	8270C	203066
MB 240-203066/15-A	Method Blank	Total/NA	Solid	8270C	203066

Analysis Batch: 204232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56876-3	VAP-10-GW (16-17)	Total/NA	Water	8270C	203051
240-56876-4	VAP-10-GW (20-21)	Total/NA	Water	8270C	203051
240-56876-5	VAP-10-GW (25-26)	Total/NA	Water	8270C	203051
240-56876-6	VAP-10-GW (30-31)	Total/NA	Water	8270C	203051
240-56876-7	VAP-10-GW (35-36)	Total/NA	Water	8270C	203051
240-56876-8	VAP-10-GW (40-41)	Total/NA	Water	8270C	203051
240-56876-9	VAP-10-GW (45-46)	Total/NA	Water	8270C	203051
240-56876-10	VAP-10-GW (49-50)	Total/NA	Water	8270C	203051
LCS 240-203051/10-A	Lab Control Sample	Total/NA	Water	8270C	203051
MB 240-203051/9-A	Method Blank	Total/NA	Water	8270C	203051

Metals

Prep Batch: 203122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56876-3	VAP-10-GW (16-17)	Dissolved	Water	7470A	
240-56876-4	VAP-10-GW (20-21)	Dissolved	Water	7470A	
240-56876-4 MS	VAP-10-GW (20-21)	Dissolved	Water	7470A	
240-56876-4 MSD	VAP-10-GW (20-21)	Dissolved	Water	7470A	
240-56876-5	VAP-10-GW (25-26)	Dissolved	Water	7470A	
240-56876-6	VAP-10-GW (30-31)	Dissolved	Water	7470A	
240-56876-7	VAP-10-GW (35-36)	Dissolved	Water	7470A	
240-56876-9	VAP-10-GW (45-46)	Dissolved	Water	7470A	
LCS 240-203122/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 240-203122/1-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 203125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56876-3	VAP-10-GW (16-17)	Dissolved	Water	3005A	
240-56876-4	VAP-10-GW (20-21)	Dissolved	Water	3005A	
240-56876-4 MS	VAP-10-GW (20-21)	Dissolved	Water	3005A	
240-56876-4 MSD	VAP-10-GW (20-21)	Dissolved	Water	3005A	
240-56876-5	VAP-10-GW (25-26)	Dissolved	Water	3005A	
240-56876-6	VAP-10-GW (30-31)	Dissolved	Water	3005A	
240-56876-7	VAP-10-GW (35-36)	Dissolved	Water	3005A	
240-56876-9	VAP-10-GW (45-46)	Dissolved	Water	3005A	
LCS 240-203125/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-203125/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 203384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56876-1	VAP-10 (0-2)	Total/NA	Solid	3050B	
LCS 240-203384/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 240-203384/1-A	Method Blank	Total/NA	Solid	3050B	

Metals (Continued)

Analysis Batch: 203385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56876-3	VAP-10-GW (16-17)	Dissolved	Water	6010B	203125
240-56876-4	VAP-10-GW (20-21)	Dissolved	Water	6010B	203125
240-56876-4 MS	VAP-10-GW (20-21)	Dissolved	Water	6010B	203125
240-56876-4 MSD	VAP-10-GW (20-21)	Dissolved	Water	6010B	203125
240-56876-5	VAP-10-GW (25-26)	Dissolved	Water	6010B	203125
240-56876-6	VAP-10-GW (30-31)	Dissolved	Water	6010B	203125
240-56876-6	VAP-10-GW (30-31)	Dissolved	Water	6010B	203125
240-56876-7	VAP-10-GW (35-36)	Dissolved	Water	6010B	203125
240-56876-9	VAP-10-GW (45-46)	Dissolved	Water	6010B	203125
LCS 240-203125/2-A	Lab Control Sample	Total Recoverable	Water	6010B	203125
MB 240-203125/1-A	Method Blank	Total Recoverable	Water	6010B	203125

Prep Batch: 203406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56876-1	VAP-10 (0-2)	Total/NA	Solid	7471A	
LCS 240-203406/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 240-203406/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 203677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56876-1	VAP-10 (0-2)	Total/NA	Solid	6010B	203384
240-56876-9	VAP-10-GW (45-46)	Dissolved	Water	6010B	203125
LCS 240-203384/2-A	Lab Control Sample	Total/NA	Solid	6010B	203384
MB 240-203384/1-A	Method Blank	Total/NA	Solid	6010B	203384

Analysis Batch: 203727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56876-1	VAP-10 (0-2)	Total/NA	Solid	7471A	203406
LCS 240-203406/2-A	Lab Control Sample	Total/NA	Solid	7471A	203406
MB 240-203406/1-A	Method Blank	Total/NA	Solid	7471A	203406

Analysis Batch: 203845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56876-3	VAP-10-GW (16-17)	Dissolved	Water	7470A	203122
240-56876-4	VAP-10-GW (20-21)	Dissolved	Water	7470A	203122
240-56876-4 MS	VAP-10-GW (20-21)	Dissolved	Water	7470A	203122
240-56876-4 MSD	VAP-10-GW (20-21)	Dissolved	Water	7470A	203122
240-56876-5	VAP-10-GW (25-26)	Dissolved	Water	7470A	203122
240-56876-6	VAP-10-GW (30-31)	Dissolved	Water	7470A	203122
240-56876-7	VAP-10-GW (35-36)	Dissolved	Water	7470A	203122
240-56876-9	VAP-10-GW (45-46)	Dissolved	Water	7470A	203122
LCS 240-203122/2-A	Lab Control Sample	Total/NA	Water	7470A	203122
MB 240-203122/1-A	Method Blank	Total/NA	Water	7470A	203122

Analysis Batch: 203904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56876-1	VAP-10 (0-2)	Total/NA	Solid	6010B	203384

General Chemistry

Analysis Batch: 203201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56876-1	VAP-10 (0-2)	Total/NA	Solid	Moisture	

Prep Batch: 203319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56876-1	VAP-10 (0-2)	Total/NA	Solid	3060A	
LCSI 240-203319/45-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 240-203319/44-A	Lab Control Sample	Total/NA	Solid	3060A	
MB 240-203319/43-A	Method Blank	Total/NA	Solid	3060A	

Analysis Batch: 203976

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-56876-1	VAP-10 (0-2)	Total/NA	Solid	7196A	203319
LCSI 240-203319/45-A	Lab Control Sample	Total/NA	Solid	7196A	203319
LCSS 240-203319/44-A	Lab Control Sample	Total/NA	Solid	7196A	203319
MB 240-203319/43-A	Method Blank	Total/NA	Solid	7196A	203319

Lab Chronicle

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56876-1

Client Sample ID: VAP-10 (0-2)
Date Collected: 10/19/15 16:20
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	203201	10/22/15 14:13	DTN	TAL CAN

Client Sample ID: VAP-10 (0-2)
Date Collected: 10/19/15 16:20
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-1
Matrix: Solid
Percent Solids: 90.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			202984	10/21/15 20:30	LAM	TAL CAN
Total/NA	Analysis	8260B		1	203518	10/25/15 06:47	TJL2	TAL CAN
Total/NA	Prep	3540C			203066	10/22/15 07:03	YDN	TAL CAN
Total/NA	Analysis	8270C		1	203599	10/26/15 12:49	MRU	TAL CAN
Total/NA	Prep	3050B			203384	10/23/15 12:49	DEE	TAL CAN
Total/NA	Analysis	6010B		1	203677	10/27/15 04:16	KLC	TAL CAN
Total/NA	Prep	3050B			203384	10/23/15 12:49	DEE	TAL CAN
Total/NA	Analysis	6010B		1	203904	10/27/15 18:00	KLC	TAL CAN
Total/NA	Prep	7471A			203406	10/23/15 16:55	DEE	TAL CAN
Total/NA	Analysis	7471A		1	203727	10/26/15 15:50	WAL	TAL CAN
Total/NA	Prep	3060A			203319	10/23/15 10:00	GNR	TAL CAN
Total/NA	Analysis	7196A		2	203976	10/27/15 15:59	GNR	TAL CAN

Client Sample ID: TB-01 (101915)
Date Collected: 10/19/15 00:00
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	203948	10/28/15 01:16	RJQ	TAL CAN

Client Sample ID: VAP-10-GW (16-17)
Date Collected: 10/20/15 08:10
Date Received: 10/21/15 10:30

Lab Sample ID: 240-56876-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	204102	10/28/15 14:39	RJQ	TAL CAN
Total/NA	Prep	3520C			203051	10/22/15 05:45	CSC	TAL CAN
Total/NA	Analysis	8270C		1	204232	10/29/15 09:13	TMH	TAL CAN
Dissolved	Prep	3005A			203125	10/22/15 10:43	WKD	TAL CAN
Dissolved	Analysis	6010B		1	203385	10/23/15 16:47	KLC	TAL CAN
Dissolved	Prep	7470A			203122	10/22/15 12:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	203845	10/26/15 15:38	WAL	TAL CAN

Client Sample ID: VAP-10-GW (20-21)

Lab Sample ID: 240-56876-4

Date Collected: 10/20/15 09:00

Matrix: Water

Date Received: 10/21/15 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	204102	10/28/15 15:01	RJQ	TAL CAN
Total/NA	Prep	3520C			203051	10/22/15 05:45	CSC	TAL CAN
Total/NA	Analysis	8270C		1	204232	10/29/15 09:36	TMH	TAL CAN
Dissolved	Prep	3005A			203125	10/22/15 10:43	WKD	TAL CAN
Dissolved	Analysis	6010B		1	203385	10/23/15 16:13	KLC	TAL CAN
Dissolved	Prep	7470A			203122	10/22/15 12:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	203845	10/26/15 15:27	WAL	TAL CAN

Client Sample ID: VAP-10-GW (25-26)

Lab Sample ID: 240-56876-5

Date Collected: 10/20/15 09:41

Matrix: Water

Date Received: 10/21/15 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	204102	10/28/15 15:24	RJQ	TAL CAN
Total/NA	Prep	3520C			203051	10/22/15 05:45	CSC	TAL CAN
Total/NA	Analysis	8270C		1	204232	10/29/15 09:59	TMH	TAL CAN
Dissolved	Prep	3005A			203125	10/22/15 10:43	WKD	TAL CAN
Dissolved	Analysis	6010B		1	203385	10/23/15 16:51	KLC	TAL CAN
Dissolved	Prep	7470A			203122	10/22/15 12:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	203845	10/26/15 15:40	WAL	TAL CAN

Client Sample ID: VAP-10-GW (30-31)

Lab Sample ID: 240-56876-6

Date Collected: 10/20/15 10:00

Matrix: Water

Date Received: 10/21/15 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	204102	10/28/15 15:47	RJQ	TAL CAN
Total/NA	Prep	3520C			203051	10/22/15 05:45	CSC	TAL CAN
Total/NA	Analysis	8270C		1	204232	10/29/15 10:23	TMH	TAL CAN
Dissolved	Prep	3005A			203125	10/22/15 10:43	WKD	TAL CAN
Dissolved	Analysis	6010B		1	203385	10/23/15 16:55	KLC	TAL CAN
Dissolved	Prep	3005A			203125	10/22/15 10:43	WKD	TAL CAN
Dissolved	Analysis	6010B		1	203385	10/23/15 21:11	KLC	TAL CAN
Dissolved	Prep	7470A			203122	10/22/15 12:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	203845	10/26/15 15:36	WAL	TAL CAN

Client Sample ID: VAP-10-GW (35-36)

Lab Sample ID: 240-56876-7

Date Collected: 10/20/15 10:34

Matrix: Water

Date Received: 10/21/15 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	203948	10/28/15 01:39	RJQ	TAL CAN
Total/NA	Prep	3520C			203051	10/22/15 05:45	CSC	TAL CAN

Client Sample ID: VAP-10-GW (35-36)

Lab Sample ID: 240-56876-7

Date Collected: 10/20/15 10:34

Matrix: Water

Date Received: 10/21/15 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270C		1	204232	10/29/15 10:46	TMH	TAL CAN
Dissolved	Prep	3005A			203125	10/22/15 10:43	WKD	TAL CAN
Dissolved	Analysis	6010B		1	203385	10/23/15 16:59	KLC	TAL CAN
Dissolved	Prep	7470A			203122	10/22/15 12:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	203845	10/26/15 15:37	WAL	TAL CAN

Client Sample ID: VAP-10-GW (40-41)

Lab Sample ID: 240-56876-8

Date Collected: 10/20/15 11:09

Matrix: Water

Date Received: 10/21/15 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	204102	10/28/15 16:10	RJQ	TAL CAN
Total/NA	Prep	3520C			203051	10/22/15 05:45	CSC	TAL CAN
Total/NA	Analysis	8270C		1	204232	10/29/15 11:09	TMH	TAL CAN

Client Sample ID: VAP-10-GW (45-46)

Lab Sample ID: 240-56876-9

Date Collected: 10/20/15 12:01

Matrix: Water

Date Received: 10/21/15 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	203948	10/28/15 02:01	RJQ	TAL CAN
Total/NA	Prep	3520C			203051	10/22/15 05:45	CSC	TAL CAN
Total/NA	Analysis	8270C		1	204232	10/29/15 11:33	TMH	TAL CAN
Dissolved	Prep	3005A			203125	10/22/15 10:43	WKD	TAL CAN
Dissolved	Analysis	6010B		1	203385	10/23/15 17:03	KLC	TAL CAN
Dissolved	Prep	3005A			203125	10/22/15 10:43	WKD	TAL CAN
Dissolved	Analysis	6010B		1	203677	10/26/15 12:34	KLC	TAL CAN
Dissolved	Prep	7470A			203122	10/22/15 12:00	WKD	TAL CAN
Dissolved	Analysis	7470A		1	203845	10/26/15 15:34	WAL	TAL CAN

Client Sample ID: VAP-10-GW (49-50)

Lab Sample ID: 240-56876-10

Date Collected: 10/20/15 12:32

Matrix: Water

Date Received: 10/21/15 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	203948	10/28/15 02:24	RJQ	TAL CAN
Total/NA	Prep	3520C			203051	10/22/15 05:45	CSC	TAL CAN
Total/NA	Analysis	8270C		1	204232	10/29/15 11:56	TMH	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: ARCADIS U.S., Inc.
Project/Site: Grenada Manufacturing

TestAmerica Job ID: 240-56876-1

Laboratory: TestAmerica Canton

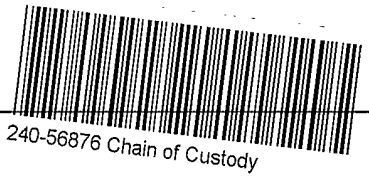
All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-15
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-26-16
Kentucky (WW)	State Program	4	98016	12-31-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-15
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	10-30-15 *
New York	NELAP	2	10975	03-31-16
Ohio VAP	State Program	5	CL0024	10-31-15 *
Oregon	NELAP	10	4062	02-23-16
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-16
West Virginia DEP	State Program	3	210	12-31-15
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS



TestAmerica Canton
4101 Shuffel Street, N. W.
North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

2.41C 1.9
2.6/2.1

Chain of Custody Record

089277

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: John Ellis	Site Contact: George Cook	Date:	COC No:
Company Name: Arcadis	Tel/Fax: John.Ellis@Arcadis.com	Lab Contact:	Carrier:	____ of ____ COCs
Address: 10352 Plaza Americana Dr.	Analysis Turnaround Time			Sampler:
City/State/Zip: Baton Rouge, La 70816	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 225-292-1004	TAT if different from Below ____			Walk-in Client:
Fax:	☒ 2 weeks			Lab Sampling:
Project Name: Grenada Manufacturing	☐ 1 week			
Site: Grenada MS	☐ 2 days			Job / SDG No.:
PO# LA00 33 07 0001 0004	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	Moisture, 8270C, 6010B	7471A, 7196A, 8260B	Terra Core Kit	VOC 8260B TCL or M3 1/2	SVOC 8270C or M3 1/2	PCPA metals 6010B/Mercury 7470	Sample Specific Notes:
VAP-10 (0-2)	10-19-15	1620	G	S	3	N	N	1	1	1	—	—	—	
TB-01 (1019 15)	"	—	G	W	2	N	N	—	—	—	2	—	—	
VAP-10 6W (16-17)	10-20-15	0810	G	W	6	Y	N	—	—	—	3	2	1	
VAP-10-6W (20-21)	"	0900	G	W	6	Y	N	—	—	—	3	2	1	
VAP-10-6W (25-26)	"	0941	G	W	6	Y	N	—	—	—	3	2	1	
VAP-10-6W (30-31)	10-20-15	1000	G	W	6	Y	N	—	—	—	3	2	1	
VAP-10-6W (35-36)	"	1034	G	W	6	Y	N	—	—	—	3	2	1	
VAP-10-6W (40-41)	"	1109	G	W	6	Y	N	—	—	—	3	2	X	No Metals Collected 40-41
VAP-10-6W (45-46)	10-20-15	1201	G	W	6	Y	N	—	—	—	3	2	X	~~X no metals collected~~
VAP-10-6W (49-50)	"	1232	G	W	6	Y	N	—	—	—	3	2	—	no meta

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:
Metals were filtered in Field X no metals collected 40-41 or 49-50

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: ____ Corr'd: ____ Therm ID No.: ____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
George E Cook	Arcadis	10-20-15 1400	Alex Cook	TA	10/21/15 1030
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 56876
Canton Facility

Client ARCADIS Site Name _____ Cooler unpacked by: Alex Colen

Cooler Received on 10/21/15 Opened on 10/21/15

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# 53 (CF **+0.1** °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

IR GUN# 48 (CF **-0.3** °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C ☑ See Multiple Cooler Form

~~IR GUN# 5 (CF **+0.4** °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C~~

IR GUN# 8 (CF **-0.5** °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2.	Were custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
	-Were custody seals on the outside of the cooler(s) signed & dated?	Yes	No NA
	-Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	~~No~~
3.	Shippers' packing slip attached to the cooler(s)?	Yes	No
4.	Did custody papers accompany the sample(s)?	Yes	No
5.	Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6.	Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No NA
7.	Did all bottles arrive in good condition (Unbroken)?	Yes	No
8.	Could all bottle labels be reconciled with the COC?	Yes	No
9.	Were correct bottle(s) used for the test(s) indicated?	Yes	No
10.	Sufficient quantity received to perform indicated analyses?	Yes	No
11.	Were sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# HC554612
12.	Were VOAs on the COC?	Yes	No
13.	Were air bubbles >6 mm in any VOA vials?	Yes	No NA
14.	Was a trip blank present in the cooler(s)? Trip Blank Lot# R516701WB	Yes	No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

Ref: SOP NC-SC-0005, Sample Receiving
X:\X-Drive Document Control\SOPs\Work Instructions\Word Version Work Instructions\WI-NC-099V-102115 Cooler Receipt Form.doc djl

TestAmerica Multiple Cooler Receipt Form/Narrative **Login # :** 56876
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
C.C.1	8	2.4	1.9	wet ice
C.C.2	↓	2.6	2.1	↓

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
VAP-10-GW (16-17)	240-56876-D-3	Plastic 500ml - with Nitric Acid	<2		
VAP-10-GW (20-21)	240-56876-D-4	Plastic 500ml - with Nitric Acid	<2		
VAP-10-GW (25-26)	240-56876-D-5	Plastic 500ml - with Nitric Acid	<2		
VAP-10-GW (30-31)	240-56876-D-6	Plastic 500ml - with Nitric Acid	<2		
VAP-10-GW (35-36)	240-56876-D-7	Plastic 500ml - with Nitric Acid	<2		
VAP-10-GW (45-46)	240-56876-D-9	Plastic 500ml - with Nitric Acid	<2		